

ThinkPad® Laptops

W.E.

Product Specifications Reference

PREVIEW

Type-model	Processor	Memory	Display	Weight	OS	Storage	Ports	Wireless	Security	Other
20A10000UUS	Intel Core i7-4600U	4GB	14.0" FHD	7.20lb	Windows 8.1	500GB HDD	USB 3.0, FireWire, VGA	Intel Wireless-N 7260	Smart Card Reader	Intel vPro
20A10000UUS	Intel Core i7-4600U	4GB	14.0" FHD	7.20lb	Windows 8.1	500GB HDD	USB 3.0, FireWire, VGA	Intel Wireless-N 7260	Smart Card Reader	Intel vPro
20A10000UUS	Intel Core i7-4600U	4GB	14.0" FHD	7.20lb	Windows 8.1	500GB HDD	USB 3.0, FireWire, VGA	Intel Wireless-N 7260	Smart Card Reader	Intel vPro
20A10000UUS	Intel Core i7-4600U	4GB	14.0" FHD	7.20lb	Windows 8.1	500GB HDD	USB 3.0, FireWire, VGA	Intel Wireless-N 7260	Smart Card Reader	Intel vPro
20A10000UUS	Intel Core i7-4600U	4GB	14.0" FHD	7.20lb	Windows 8.1	500GB HDD	USB 3.0, FireWire, VGA	Intel Wireless-N 7260	Smart Card Reader	Intel vPro

Version 468, February 2015

ThinkPad® Laptops

Including:

- L Series
- T Series
- W Series
- X Series
- E Series
- S Series

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Summary of Changes

This section describes the technical changes made in this edition.

This edition might also include minor corrections and editorial changes which are not identified.

February 11, 2015 - Version 468

Additions in this update

► **New product(s)**

None

► **New model(s)**

ThinkPad E540 new models announced February 2015

► **Others**

None

Changes in this update

► **None**

Withdrawals in this update

► **Withdrawn product(s)**

None



Lenovo® ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440

ThinkPad L440 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream value performance; two spindles								WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none">• ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card	
Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor								WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none">• Wireless WAN upgradable• Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics			
	Cel 2950M	2	4	2 GHz	-	2MB	DDR3L-1600	Intel HD Graphics			
	i3-4000M			2.4 GHz	-	3MB					
	i5-4200M			2.5 GHz	3.1 GHz	3MB					
	i5-4210M			2.6 GHz	3.2 GHz	3MB					
	i5-4300M			2.6 GHz	3.3 GHz	3MB					
	i5-4330M			2.8 GHz	3.5 GHz	3MB					
i7-4600M	2.9 GHz	3.6 GHz	4MB	Intel HD Graphics 4600							
i7-4702MQ	4	8	2.2 GHz		3.2 GHz	6MB					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none">• AT&T® or Verizon® LTE (4G), contract required with service provider (US models)• Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)• User selectable, contract required with service provider	
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)	
M.2 SSD									Security chip vPro (optional)	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology	
Widescreen display	Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 500:1 contrast ratio								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Limited warranty ¹² One of the following, configurable by model: <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)		
Graphics	Intel HD Graphics 4600 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports dual independent display; Max resolution: 3840x2160 @ 30Hz (DP via mDP cable); 1920x1200 @ 60Hz (VGA)								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• ThinkVantage Product Recovery• Rescue and Recovery™• ThinkVantage System Update• Lenovo Cloud Storage by SugarSync• PC Device Stage• Nitro Pro• Evernote®• Skype™• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions)• Cyberlink PowerDVD• Cyberlink Power2Go• Cyberlink PowerProducer	
Keyboard	6-row, spill-resistant, multimedia Fn keys								Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo Support• Lenovo Companion• ThinkVantage System Update• Lenovo Reach (Windows 8.1 model)• Hightail - Metro (Windows 8.1 model)• Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)• Lenovo Cloud Storage by SugarSync (Windows 8 model)• PC Device Stage• AccuWeather• Amazon Kindle• Nitro Pro• Evernote• Skype• Rara Streaming• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)• Cyberlink PowerDVD• Cyberlink Power2Go• Cyberlink PowerProducer		
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch										
ThinkLight™	None										
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm										
Weight ²	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh					
	Weight	4.96 lb / 2.25kg		5.0 lb / 2.27kg		5.36 lb / 2.43kg					
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh					
	Win7 (MobileMark® 2007)	10 hr		11 hr		21 hr					
	Win8 (MobileMark 2012)	6.2 hr		7.5 hr		13 hr					
AC adapter	65-watt AC adapter										
Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset										
ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)										
Smart card reader	Optional: Smart card reader										
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector										
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack										
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant										

ThinkPad L440 20AT (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AT004J++	i5-4300M	No	HD 4600	HM86	4GBx1	14" HD+	500G 5400 SSHD	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AT004K++	i5-4300M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AT004L++	i5-4300M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AT004M++	i5-4300M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AT004S++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004T++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	500G 5400 SSHD	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004U++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004V++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004W++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004X++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT004Y++	i5-4210M	No	HD 4600	HM86	4GBx1	14" HD+	500G 5400 SSHD	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT0050++	i5-4210M	No	HD 4600	HM86	8GBx1	14" HD+	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AT002Y++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0030++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0032++	i3-4000M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0034++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD+	180G SSD Opal	7260 b/g/n+BT	N5321	Select	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	10/13
20AT0035++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0038++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT004N++	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 5400 SSHD	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14

• For detailed platform specifications, please see [ThinkPad L440 Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard	6-row, spill-resistant, multimedia Fn keys	
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
	i3-4000M		2.4 GHz	-	3MB		ThinkLight™	None	
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)	
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader	Optional: Smart card reader	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	i7-4600M	2.9 GHz	3.6 GHz	4MB	Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
M.2 SSD							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) , 200 nits, 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 500:1 contrast ratio						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet	HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)	
Graphics	Intel HD Graphics 4600 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Weight ²	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh			vPro (optional)	Intel vPro Technology	
Case material	Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
	Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr			Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
	Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr				Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Battery type	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
Max battery life ¹⁰	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh					
AC adapter	Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr					
	Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr					

See footnotes for more detailed information

(G-OS1-1) © Lenovo

ThinkPad L440 20AS

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	ExpressCard	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AS0063++	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	1-depot	Yes	04/14
20AS0061++	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AS0062++	i7-4600M	vPro	HD 4600	QM87	8GBx1	14" HD+	256G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AS0064++	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AS0065++	i5-4300M	vPro	HD 4600	QM87	8GBx1	14" HD+	256G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AS0066++	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L440 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack													
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys													
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch													
	i3-4000M		2.4 GHz	-	3MB		ThinkLight™		None													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset		Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset													
	i5-4210M		2.6 GHz	3.2 GHz	3MB		ExpressCard		HM86 model: One slot (ExpressCard/34, ExpressCard/54)													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader		Optional: Smart card reader													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i7-4600M	2.9 GHz	3.6 GHz	4MB	Ports		One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector															
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB	WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card															
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS													
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider													
M.2 SSD							Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 500:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 500:1 contrast ratio						Ethernet		HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)													
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security		Power-on password, hard disk password, supervisor password, security keyhole													
Graphics	Intel HD Graphics 4600 in processor						Security chip		Trusted Platform Module, TCG 1.2-compliant													
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm						vPro (optional)		Intel vPro Technology													
Weight ²	<table><tr><td>Models</td><td>6-cell 48Wh</td><td>6-cell 56Wh</td><td>9-cell 99.9Wh</td></tr><tr><td>Weight</td><td>4.96 lb / 2.25kg</td><td>5.0 lb / 2.27kg</td><td>5.36 lb / 2.43kg</td></tr></table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg	Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																			
Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg																			
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit													
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication								Win8 / 8.1 64: Windows 8 / 8.1 64-bit													
Max battery life ¹⁰	<table><tr><td>Models</td><td>6-cell 48Wh</td><td>6-cell 56Wh</td><td>9-cell 99.9Wh</td></tr><tr><td>Win7 (MobileMark® 2007)</td><td>10 hr</td><td>11 hr</td><td>21 hr</td></tr><tr><td>Win8 (MobileMark 2012)</td><td>6.2 hr</td><td>7.5 hr</td><td>13 hr</td></tr></table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr	Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																			
Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr																			
Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr																			
AC adapter	65-watt AC adapter						Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite													

See footnotes for more detailed information

(G-OS1-2) © Lenovo

ThinkPad L440 20AS (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AS0012++	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	None	6(48wh)	65W	Win8 P64	3-depot	Yes	09/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L440 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack													
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys													
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch													
	i3-4000M		2.4 GHz	-	3MB		ThinkLight™		None													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset		Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset													
	i5-4210M		2.6 GHz	3.2 GHz	3MB		ExpressCard		HM86 model: One slot (ExpressCard/34, ExpressCard/54)													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader		Optional: Smart card reader													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i7-4600M	2.9 GHz	3.6 GHz	4MB	Ports		One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector															
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB	WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card															
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS													
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider													
M.2 SSD							Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Widescreen display	Some: 14.0" (355mm) HD (1366x768) , 200 nits, 500:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 500:1 contrast ratio						Ethernet		HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)													
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security		Power-on password, hard disk password, supervisor password, security keyhole													
Graphics	Intel HD Graphics 4600 in processor						Security chip		Trusted Platform Module, TCG 1.2-compliant													
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm						vPro (optional)		Intel vPro Technology													
Weight ²	<table><tr><td>Models</td><td>6-cell 48Wh</td><td>6-cell 56Wh</td><td>9-cell 99.9Wh</td></tr><tr><td>Weight</td><td>4.96 lb / 2.25kg</td><td>5.0 lb / 2.27kg</td><td>5.36 lb / 2.43kg</td></tr></table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg	Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																			
Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg																			
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit													
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication								Win8 / 8.1 64: Windows 8 / 8.1 64-bit													
Max battery life ¹⁰	<table><tr><td>Models</td><td>6-cell 48Wh</td><td>6-cell 56Wh</td><td>9-cell 99.9Wh</td></tr><tr><td>Win7 (MobileMark® 2007)</td><td>10 hr</td><td>11 hr</td><td>21 hr</td></tr><tr><td>Win8 (MobileMark 2012)</td><td>6.2 hr</td><td>7.5 hr</td><td>13 hr</td></tr></table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr	Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																			
Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr																			
Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr																			
AC adapter	65-watt AC adapter						Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite													

See footnotes for more detailed information

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Lenovo® ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450

ThinkPad L450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor								Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm														
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics		Models	3-cell	6-cell												
	i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400		Integrated	4.25 lb / 1.93 kg	4.43 lb / 2.01 kg												
	i3-5005U			2 GHz	-	3MB		Intel HD Graphics 5500		Discrete	4.30 lb / 1.95 kg	4.50 lb / 2.04 kg												
	i5-5200U			2.2 GHz	2.7 GHz	3MB																		
	i5-5300U			2.3 GHz	2.9 GHz	3MB																		
i7-5500U			2.4 GHz	3 GHz	4MB																			
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic														
Chipset	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Smart card reader	Optional: Smart card reader														
									Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
Memory	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory								Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)														
Display									Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								Camera (optional)	HD720p resolution, low light sensitive, fixed focus						
Multi-touch	None								Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack														
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory								Keyboard	6-row, spill-resistant, multimedia Fn keys														
M.2 SSD (opt)									M.2 Solid State Drive (SSD), via M.2 card slot								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch						
Optical	None								Security	Power-on password, hard disk password, supervisor password, security keyhole														
Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)								Security chip	Trusted Platform Module, TCG 1.2-compliant														
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures														
WLAN ⁴	One of the following, configurable by model: • 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card • 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card								vPro (optional)	Intel vPro Technology														
WWAN (optional)	One of the following, configurable by model: • Wireless WAN upgradable • Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor														
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider								Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)														
									Max battery life ¹⁰	<table><tr><td>Models</td><td>3-cell 23Wh</td><td>6-cell 48Wh</td><td>6-cell 72Wh</td></tr><tr><td>Integrated</td><td>5.2 hr</td><td>10.7 hr</td><td>16 hr</td></tr><tr><td>Discrete</td><td>5.1 hr</td><td>10.6 hr</td><td>15.9 hr</td></tr></table>			Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh	Integrated	5.2 hr	10.7 hr	16 hr	Discrete	5.1 hr	10.6 hr	15.9 hr
Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh																					
Integrated	5.2 hr	10.7 hr	16 hr																					
Discrete	5.1 hr	10.6 hr	15.9 hr																					
									AC adapter	45W AC adapter or 65W AC adapter														
									Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Evernote® • Skype™ • Maxthon Cloud Browser • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions)														
										Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • PC Device Stage • Weather Channel • Evernote • Maxthon Cloud Browser • Bing Translator • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)														
									Limited warranty ¹²	One of the following, configurable by model: • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, IWS (International Warranty Service ¹⁷)														
									Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant														

ThinkPad L450 20DT (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DT0004++	i3-5005U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	Smart	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000W++	i3-5005U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0000++	i5-5200U	No	HD 5500	8GBx1	14" FHD IPS	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0001++	i5-5200U	No	HD 5500	8GBx1	14" FHD IPS	256G SSD Opal2	None	7265 ac+BT	N5321	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0002++	i5-5200U	No	HD 5500	4GBx1	14" FHD IPS	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0003++	i5-5200U	No	HD 5500	4GBx1	14" FHD IPS	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0005++	i5-5200U	No	HD 5500	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	Smart	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000Q++	i5-5200U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell		6-cell	
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600		Integrated	4.25 lb / 1.93 kg		4.43 lb / 2.01 kg	
	i3-5005U		2 GHz	-	3MB			Discrete	4.30 lb / 1.95 kg		4.50 lb / 2.04 kg	
	i5-5200U		2.2 GHz	2.7 GHz	3MB							
	i5-5300U		2.3 GHz	2.9 GHz	3MB							
	i7-5500U		2.4 GHz	3 GHz	4MB							
							Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic				
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory						Smart card reader	Optional: Smart card reader				
Chipset	Intel SoC (System on Chip) platform						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Display	<i>Some:</i> 14.0" (355mm) HD (1366x768), 220 nits, 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080), 220 nits, 700:1 contrast ratio, IPS						Camera (<i>optional</i>)	HD720p resolution, low light sensitive, fixed focus				
Multi-touch	None						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack				
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory						Keyboard	6-row, spill-resistant, multimedia Fn keys				
M.2 SSD (<i>opt</i>)	M.2 Solid State Drive (SSD), via M.2 card slot						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Optical	None						Security	Power-on password, hard disk password, supervisor password, security keyhole				
Ethernet	Intel Ethernet Connection I218-V (<i>Non-vPro model</i>) or I218-LM (<i>vPro model</i>)						Security chip	Trusted Platform Module, TCG 1.2-compliant				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						vPro (<i>optional</i>)	Intel vPro Technology				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
WWAN (<i>optional</i>)	Upg: Wireless WAN upgradeable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)				
SIM card (<i>opt</i>)	AT&T® or Verizon® LTE (4G), contract required with service provider						Max battery life ¹⁰	Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh	
								Integrated	5.2 hr	10.7 hr	16 hr	
								Discrete	5.1 hr	10.6 hr	15.9 hr	
							AC adapter	45W AC adapter or 65W AC adapter				
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit				
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-LR1-1) © Lenovo

ThinkPad L450 20DS

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DS001Q++	i5-4300U	vPro	HD 4400	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DS0000++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	None	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DS0001++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DS0005++	i5-5300U	vPro	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	3(23wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell		6-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600		Integrated	4.25 lb / 1.93 kg		4.43 lb / 2.01 kg
	i3-5005U		2 GHz	-	3MB			Discrete	4.30 lb / 1.95 kg		4.50 lb / 2.04 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB						
	i5-5300U		2.3 GHz	2.9 GHz	3MB						
	i7-5500U	2.4 GHz	3 GHz	4MB							
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory						Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 14.0" (355mm) HD (1366x768), 220 nits, 500:1 contrast ratio						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch	Some: 14.0" (355mm) FHD (1920x1080), 220 nits, 700:1 contrast ratio, IPS						Camera (optional)	HD720p resolution, low light sensitive, fixed focus			
Storage	None						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack			
Keyboard	Some: SSD with 8GB NAND flash memory						Keyboard	6-row, spill-resistant, multimedia Fn keys			
UltraNav™	M.2 Solid State Drive (SSD), via M.2 card slot						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Optical	None						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						vPro (optional)	Intel vPro Technology			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
	7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						Max battery life ¹⁰	Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh
	7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card							Integrated	5.2 hr	10.7 hr	16 hr
WWAN (optional)	Upg: Wireless WAN upgradeable						AC adapter	45W AC adapter or 65W AC adapter			
	N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
	EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card							Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-LR1-2) © Lenovo

ThinkPad L450 20DS (Discrete)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DS0004++	i5-5200U	No	R5 M240	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	Smart	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DS0003++	i7-5500U	No	R5 M240	8GBx1	14" FHD IPS	256G SSD Opal2	None	7265 a/b/g/n+BT	EM7345	None	Smart	720p	Finger	6(72wh)	65W	Win8.1 DG Win7	1-depot	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell		6-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600		Integrated	4.25 lb / 1.93 kg		4.43 lb / 2.01 kg
	i3-5005U		2 GHz	-	3MB			Discrete	4.30 lb / 1.95 kg		4.50 lb / 2.04 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB						
	i5-5300U		2.3 GHz	2.9 GHz	3MB						
	i7-5500U		2.4 GHz	3 GHz	4MB						
							Case material PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic				
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory						Smart card reader Optional: Smart card reader				
Chipset	Intel SoC (System on Chip) platform						Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Ports Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Display	Some: 14.0" (355mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 220 nits, 700:1 contrast ratio, IPS						Camera (optional) HD720p resolution, low light sensitive, fixed focus				
Multi-touch	None						Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory M.2 Solid State Drive (SSD), via M.2 card slot						Keyboard 6-row, spill-resistant, multimedia Fn keys				
M.2 SSD (opt)	None						UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Optical							Security Power-on password, hard disk password, supervisor password, security keyhole				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security chip Trusted Platform Module, TCG 1.2-compliant				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						vPro (optional) Intel vPro Technology				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Fingerprint reader Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Battery type Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Max battery life ¹⁰				
							Models	3-cell 23Wh		6-cell 48Wh	6-cell 72Wh
							Integrated	5.2 hr		10.7 hr	16 hr
							Discrete	5.1 hr		10.6 hr	15.9 hr
							AC adapter 45W AC adapter or 65W AC adapter				
							Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit				
							Win8.1 64: Windows 8.1 64-bit				
							Win8.1 P64: Windows 8.1 Pro 64-bit				
							Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-LR1-3) © Lenovo

ThinkPad L450 20DS (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DS000X++	i5-5200U	No	HD 5500	8GBx1	14" HD	128G SSD	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS000Y++	i5-5200U	No	HD 5500	4GBx1	14" HD	128G SSD	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS0017++	i5-5200U	No	HD 5500	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001J++	i5-5200U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS000U++	i5-5300U	vPro	HD 5500	4GBx1	14" HD	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Finger	3(23wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS000W++	i5-5300U	vPro	HD 5500	8GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS0010++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS0015++	i5-5300U	vPro	HD 5500	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001B++	i5-5300U	vPro	HD 5500	8GBx1	14" HD	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Finger	3(23wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001E++	i5-5300U	vPro	HD 5500	8GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001F++	i5-5300U	vPro	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001K++	i5-5300U	vPro	HD 5500	4GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	None	6(48wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001L++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	3(23wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20DS001N++	i5-5300U	vPro	HD 5500	8GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	3(23wh)	45W	Win8.1 DG Win7	3-onsite	Yes	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell		6-cell	
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600		Integrated	4.25 lb / 1.93 kg		4.43 lb / 2.01 kg	
	i3-5005U		2 GHz	-	3MB			Discrete	4.30 lb / 1.95 kg		4.50 lb / 2.04 kg	
	i5-5200U		2.2 GHz	2.7 GHz	3MB							
	i5-5300U		2.3 GHz	2.9 GHz	3MB							
i7-5500U	2.4 GHz		3 GHz	4MB								
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory						Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic				
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Display	Some: 14.0" (355mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 220 nits, 700:1 contrast ratio, IPS None						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Multi-touch							Camera (optional)	HD720p resolution, low light sensitive, fixed focus				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory M.2 Solid State Drive (SSD), via M.2 card slot None						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack				
M.2 SSD (opt)							Keyboard	6-row, spill-resistant, multimedia Fn keys				
Optical							UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology				
WWAN (optional)	Upg: Wireless WAN upgradeable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)				
							Max battery life ¹⁰	Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh	
								Integrated	5.2 hr		10.7 hr	16 hr
								Discrete	5.1 hr		10.6 hr	15.9 hr
							AC adapter	45W AC adapter or 65W AC adapter				
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit				
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

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Lenovo® ThinkPad L540



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ThinkPad L540 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream business performance; two spindles							WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none">• ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card
Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor								WWAN (optional) One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none">• Wireless WAN upgradable• Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	
	Cel 2950M	2	4	2 GHz	-	2MB	DDR3L-1600	Intel HD Graphics	
	i3-4000M			2.4 GHz	-	3MB		Intel HD Graphics 4600	
	i5-4200M			2.5 GHz	3.1 GHz	3MB			
	i5-4210M			2.6 GHz	3.2 GHz	3MB			
	i5-4300M			2.6 GHz	3.3 GHz	3MB			
	i5-4330M			2.8 GHz	3.5 GHz	3MB			
i7-4600M	2.9 GHz	3.6 GHz	4MB						
i7-4702MQ	4	8	2.2 GHz	3.2 GHz	6MB				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								SIM card (optional) One of the following, configurable by model: <ul style="list-style-type: none">• AT&T® or Verizon® LTE (4G), contract required with service provider (US models)• Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)• User selectable, contract required with service provider
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Bluetooth™ Ethernet Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)
M.2 SSD									Security Security chip vPro (optional) Intel vPro Technology Fingerprint reader Optional: Fingerprint reader on the palm rest, swipe sensor
Widescreen display	Some: 15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio								Limited warranty ¹² One of the following, configurable by model: <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								
Graphics	Intel HD Graphics 4600 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports dual independent display; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch								Preload Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• ThinkVantage Product Recovery• Rescue and Recovery™• ThinkVantage System Update• Lenovo Cloud Storage by SugarSync• PC Device Stage• Nitro Pro• Evernote®• Skype™• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions)• Cyberlink PowerDVD• Cyberlink Power2Go• Cyberlink PowerProducer
ThinkLight™	None								Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo Support• Lenovo Companion• ThinkVantage System Update• Lenovo Reach (Windows 8.1 model)• Hightail - Metro (Windows 8.1 model)• Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)• Lenovo Cloud Storage by SugarSync (Windows 8 model)• PC Device Stage• AccuWeather• Amazon Kindle• Nitro Pro• Evernote• Skype• Rara Streaming• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)• Cyberlink PowerDVD• Cyberlink Power2Go• Cyberlink PowerProducer
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm								
Weight ²	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh			
	HD	5.54lb / 2.52kg		5.60lb / 2.54kg		5.95lb / 2.70kg			
	FHD	5.68lb / 2.58kg		5.73lb / 2.60kg		6.08lb / 2.76kg			
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication								
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh			
	Win7 (MobileMark® 2007)	9 hr		11 hr		19 hr			
	Win8 (MobileMark 2012)	6 hr		7 hr		12 hr			
AC adapter	65-watt AC adapter								
Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset								
ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)								
Smart card reader	Optional: Smart card reader								
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)								
Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector								
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack								
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant								

ThinkPad L540 20AV (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AV004V++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AV005E++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AV005F++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AV005G++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AV005H++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 5400 SSHD	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AV0069++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 5400 SSHD	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AV006A++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AV006B++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AV006C++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" FHD	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	09/14
20AV006H++	i5-4210M	No	HD 4600	HM86	8GBx1	15.6" FHD	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	11/14
20AV006J++	i5-4210M	No	HD 4600	HM86	4GBx1	15.6" FHD	256G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	11/14
20AV002W++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV002Y++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0031++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0033++	i3-4000M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0035++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	10/13
20AV005J++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 5400 SSHD	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	05/14
20AV002PUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	1T 5400	7260 ac+BT	16GB	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AV002QUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13

• For detailed platform specifications, please see [ThinkPad L540 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad			
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
	i3-4000M		2.4 GHz	-	3MB		ThinkLight™	None			
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset			
	i5-4210M		2.6 GHz	3.2 GHz	3MB		ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)			
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader	Optional: Smart card reader			
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
	i7-4600M		2.9 GHz	3.6 GHz	4MB		Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB							
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradeable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
M.2 SSD							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet	HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)			
Graphics	Intel HD Graphics 4600 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Weight ²	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh		vPro (optional)	Intel vPro Technology		
	HD	5.54lb / 2.52kg		5.60lb / 2.54kg		5.95lb / 2.70kg		Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor		
	FHD	5.68lb / 2.58kg		5.73lb / 2.60kg		6.08lb / 2.76kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
									Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh					
	Win7 (MobileMark® 2007)	9 hr		11 hr		19 hr					
	Win8 (MobileMark 2012)	6 hr		7 hr		12 hr					
AC adapter	65-watt AC adapter										

ThinkPad L540 20AU

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)	
20AU002N++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" FHD	128G SSD	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002P++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002Q++	i5-4330M	No	HD 4600	HM86	4GBx1	15.6" HD	128G SSD	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002R++	i5-4330M	No	HD 4600	HM86	4GBx1	15.6" HD	1T 5400	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002S++	i5-4330M	No	HD 4600	HM86	4GBx1	15.6" HD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002T++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" HD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002V++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002W++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU002X++	i3-4000M	No	HD 4600	HM86	2GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0030++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" FHD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0032++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0033++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0034++	i5-4330M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0036++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0037++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU0039++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" FHD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU003B++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" HD	1T 5400	6235 a/b/g/n+BT	16GB	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU003C++	i5-4300M	No	HD 4600	HM86	4GBx1	15.6" HD	128G SSD	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU003E++	i3-4000M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
20AU003F++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13	
• For detailed platform specifications, please see ThinkPad L540 Platform Specifications sheet																					
Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor							Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack												
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch												
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	ThinkLight™	None													
	i3-4000M		2.4 GHz	-	3MB		Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)													
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Smart card reader	Optional: Smart card reader													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector													
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card													
	i7-4702MQ		2.2 GHz	3.2 GHz	6MB	WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS														
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider												
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter												
M.2 SSD	Some: 15.6" (396mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio							Ethernet	HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)												
Widescreen display	Some: 15.6" (396mm) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							Security	Power-on password, hard disk password, supervisor password, security keyhole												
Camera (optional)	Intel HD Graphics 4600 in processor							Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology												
Graphics	Intel HD Graphics 4600 in processor							Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor												
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm							Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit												
Weight ²	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite													
	HD	5.54lb / 2.52kg		5.60lb / 2.54kg		5.95lb / 2.70kg															
	FHD	5.68lb / 2.58kg		5.73lb / 2.60kg		6.08lb / 2.76kg															
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																				
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication																				
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh															
	Win7 (MobileMark® 2007)	9 hr		11 hr		19 hr															
	Win8 (MobileMark 2012)	6 hr		7 hr		12 hr															
AC adapter	65-watt AC adapter																				

See footnotes for more detailed information

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ThinkPad L540 20AU - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AU003J++	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	128G SSD	6235 a/b/g/n+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	09/13
20AU003L++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" FHD	256G SSD Opal	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	09/13
20AU003M++	i7-4702MQ	No	HD 4600	HM86	8GBx1	15.6" FHD	1T 5400	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	09/13
20AU005Y++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AU0060++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AU0061++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	256G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AU0062++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AU0063++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AU000Y++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU001E++	i5-4330M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU002U++	i5-4330M	vPro	HD 4600	QM87	4GBx1	15.6" HD	128G SSD	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU002Y++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	16GB	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU0031++	i5-4330M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	16GB	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU0038++	i5-4330M	vPro	HD 4600	QM87	8GBx1	15.6" HD	128G SSD	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU003A++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU003D++	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	None	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU003G++	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU003H++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	128G SSD	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	Yes	11/13
20AU003K++	i7-4600M	vPro	HD 4600	QM87	8GBx1	15.6" FHD	128G SSD	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	Yes	11/13

• For detailed platform specifications, please see [ThinkPad L540 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys, numeric keypad		
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4000M		2.4 GHz	-	3MB		ThinkLight™		None		
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset		Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset		
	i5-4210M		2.6 GHz	3.2 GHz	3MB		ExpressCard		HM86 model: One slot (ExpressCard/34, ExpressCard/54)		
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader		Optional: Smart card reader		
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)		
	i7-4600M	2.9 GHz	3.6 GHz	4MB	Ports		One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector				
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB							
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD							SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , 220 nits, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio						Bluetooth™ Ethernet		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security		Power-on password, hard disk password, supervisor password, security keyhole		
Graphics	Intel HD Graphics 4600 in processor						Security chip vPro (optional)		Trusted Platform Module, TCG 1.2-compliant		
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm						Fingerprint reader		Optional: Fingerprint reader on the palm rest, swipe sensor		
Weight ²	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh		Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
	HD	5.54lb / 2.52kg		5.60lb / 2.54kg		5.95lb / 2.70kg				Win8 / 8.1 64: Windows 8 / 8.1 64-bit	
	FHD	5.68lb / 2.58kg		5.73lb / 2.60kg		6.08lb / 2.76kg				Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh					
	Win7 (MobileMark® 2007)	9 hr		11 hr		19 hr					
	Win8 (MobileMark 2012)	6 hr		7 hr		12 hr					
AC adapter	65-watt AC adapter										

See footnotes for more detailed information

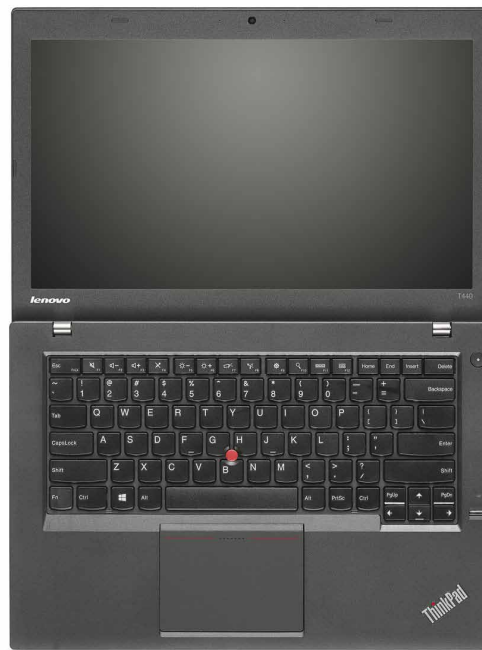
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Lenovo® ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440

ThinkPad T440 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream Ultrabook™ or Thinbook; one spindle								Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight	
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor								UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	ThinkLight™	None	
	i3-4010U	2	4	1.7 GHz	-	3MB	DDR3L-1600	Intel HD graphics 4400	WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card	
	i3-4030U			1.9 GHz	-	3MB					
	i5-4200U			1.6 GHz	2.6 GHz	3MB					
	i5-4210U			1.7 GHz	2.7 GHz	3MB					
	i5-4300U			1.9 GHz	2.9 GHz	3MB					
	i7-4500U			1.8 GHz	3 GHz	4MB					
i7-4600U	2.1 GHz			3.3 GHz	4MB						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)										
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory								SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• AT&T® or Verizon® LTE (4G), contract required with service provider (US models)• Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)• User selectable, contract required with service provider	
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card										
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)	
Camera									NFC	<i>Optional:</i> Near Field Communication	
Graphics	Intel HD Graphics 4400 in processor only, or Intel HD Graphics 4400 in processor and NVIDIA GeForce® GT 720M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max external resolution:</i> 1920x1200@60Hz (VGA); 3840x2160@30Hz (DisplayPort via Mini DisplayPort cable on integrated models); 2560x1600@60Hz (DisplayPort via Mini DisplayPort cable on optimus models)								Security chip	Power-on password, hard disk password, supervisor password, security keyhole	
									Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant	
									Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor	
									Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)	
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• ThinkVantage Product Recovery• Rescue and Recovery™• ThinkVantage System Update• Lenovo Cloud Storage by SugarSync• PC Device Stage• Adobe® Reader®• Nitro Pro• Evernote®• Skype™• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions)	
Weight ²	Models		3-cell + 3-cell		3-cell + 6-cell						
	Integrated Non-MultiTouch		3.79 lb / 1.72kg		4.10 lb / 1.86kg						
	Integrated MultiTouch		4.03 lb / 1.83kg		4.33 lb / 1.97kg						
	Optimus Non-MultiTouch		3.73 lb / 1.69kg		4.04 lb / 1.83kg						
	Optimus MultiTouch		3.97 lb / 1.80kg		4.33 lb / 1.97kg						
Case material	Glass-Fiber Reinforced Plastic									Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo Support• Lenovo Companion• ThinkVantage System Update• Lenovo Reach (Windows 8.1 model)• Hightail - Metro (Windows 8.1 model)• Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)• Lenovo Cloud Storage by SugarSync (Windows 8 model)• PC Device Stage• AccuWeather• Amazon Kindle• Nitro Pro• Evernote• Skype• Rara Streaming• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)	
Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication										
External battery									Models		3-cell + 3-cell
Max battery life ¹⁰	Integrated		8.6 hr		12.9 hr		17.2 hr				
	Optimus		7.7 hr		11.6 hr		15.4 hr				
AC adapter	Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter										
Chipset	Intel SoC (System on Chip) platform										
Smart card reader	<i>Optional:</i> Smart card reader, exclusive with M.2 SSD										
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)										
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	

ThinkPad T440 20B6 (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam- era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B60065++	i3-4010U	No	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6009G++	i3-4030U	No	HD 4400	0+4GB	14" HD+	No	500G 5400 SSHD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	06/14
20B6007T++	i5-4200U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 DG Win7	3-depot	No	02/14
20B6007V++	i7-4600U	No	HD 4400	4+0GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 DG Win7	3-depot	No	02/14
20B6007W++	i7-4600U	No	HD 4400	4+4GB	14" HD	No	1T 5400	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 DG Win7	3-depot	No	02/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Keyboard			
	i7-4500U		1.8 GHz	3 GHz	4MB			UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
i7-4600U	2.1 GHz		3.3 GHz	4MB	ThinkLight™ None						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform				
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Smart card reader	Optional: Smart card reader				
						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Multi-touch	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Camera						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security chip	Trusted Platform Module, TCG 1.2-compliant				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		vPro (optional)	Intel vPro Technology				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

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ThinkPad T440 20B6 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B6007X++	i3-4010U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 P64	3-depot	No	02/14
20B6007R++	i7-4600U	No	HD 4400	4+0GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 P64	3-depot	No	02/14
20B6007U++	i7-4600U	No	HD 4400	4+4GB	14" HD	No	1T 5400	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8.1 P64	3-depot	No	02/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Keyboard			
	i7-4500U		1.8 GHz	3 GHz	4MB			UltraNav™			
	i7-4600U		2.1 GHz	3.3 GHz	4MB			ThinkLight™			
						None					
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform				
Optical Storage	None					Smart card reader	Optional: Smart card reader				
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD						Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm					Security chip	Trusted Platform Module, TCG 1.2-compliant				
	14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					vPro (optional)	Intel vPro Technology				
	Models	3-cell + 3-cell		3-cell + 6-cell		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		Win8 / 8.1 64:	Windows 8 / 8.1 64-bit				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit				
Weight ²	Optimus MultiTouch		3.97 lb / 1.80kg		4.33 lb / 1.97kg						
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

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ThinkPad T440 20B6 (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B60061++	i5-4200U	No	HD 4400	0+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB 720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	09/13
20B6007C++	i5-4200U	No	HD 4400	0+4GB 14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	16GB 720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	01/14
20B6008M++	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	04/14
20B6008P++	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	16GB 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	04/14
20B6008R++	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	04/14
20B6009E++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	Upg	None	None 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	06/14
20B6009F++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	EM7345	Select	None 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	06/14
20B6009J++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	N5321	Select	None 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	06/14
20B6009L++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	06/14
20B6009S++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	Upg	None	Smart 720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	09/14
20B60063++	i5-4300U vPro	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB 720p	Backlit	Finger	None	None	3+3	45W	Win8 DG Win7	3-onsite	No	09/13
20B6007F++	i5-4300U vPro	HD 4400	0+4GB 14" HD+	No	500G 7200	7260 ac+BT	EM7345	Select	16GB 720p	Backlit	Finger	None	None	3+3	45W	Win8 DG Win7	3-onsite	No	01/14
20B60081++	i5-4300U vPro	HD 4400	0+4GB 14" HD+	No	500G 7200	7260 ac+BT	EM7345	Select	16GB 720p	Backlit	Finger	None	None	3+3	45W	Win8 DG Win7	3-onsite	No	03/14
20B6008N++	i5-4300U vPro	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB 720p	Backlit	Finger	None	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	04/14
20B6007H++	i7-4600U vPro	HD 4400	4+4GB 14" HD+	No	500G 7200	7260 ac+BT	EM7345	Select	16GB 720p	Backlit	Finger	None	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/14
20B6007J++	i7-4600U vPro	HD 4400	4+4GB 14" HD+	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/14
20B6005W++	i7-4600U vPro	HD 4400	4+4GB 14" HD+	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	10/13

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
	i7-4500U		1.8 GHz	3 GHz	4MB						
	i7-4600U		2.1 GHz	3.3 GHz	4MB						
8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform					
Memory						Smart card reader	Optional: Smart card reader				
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD						Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Multi-touch						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Camera						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security chip	Trusted Platform Module, TCG 1.2-compliant				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		vPro (optional)	Intel vPro Technology				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

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ThinkPad T440 20B6 (TopSeller) - Onsite - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B6005Y++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	10/13
20B6007E++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	01/14
20B60083++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	03/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Keyboard			
	i7-4500U		1.8 GHz	3 GHz	4MB			UltraNav™			
i7-4600U	2.1 GHz		3.3 GHz	4MB	ThinkLight™						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform				
Optical Storage	None					Smart card reader	Optional: Smart card reader				
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD						Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Multi-touch						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Camera						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					Security chip vPro (optional)	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg							
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg							
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

(G-CB1-4) © Lenovo

ThinkPad T440 20B6 (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B60051++	i5-4200U	No	HD 4400	0+4GB	14" HD+	MT	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	10/13
20B6007G++	i5-4200U	No	HD 4400	0+4GB	14" HD+	MT	500G 7200	7260 ac+BT	EM7345	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	01/14
20B6008L++	i5-4200U	No	HD 4400	4+0GB	14" HD+	MT	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	04/14
20B6008Q++	i5-4200U	No	HD 4400	4+0GB	14" HD+	MT	500G 7200	7260 ac+BT	EM7345	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	04/14
20B6009H++	i5-4210U	No	HD 4400	4+0GB	14" HD+	MT	500G 5400 SSHD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	06/14
20B6009K++	i5-4210U	No	HD 4400	4+0GB	14" HD+	MT	500G 5400 SSHD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	06/14
20B6007D++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+6(72wh)	45W	Win8 P64	3-onsite	No	01/14
20B60082++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+6(72wh)	45W	Win8 P64	3-onsite	No	03/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed				
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	Models			
	i3-4030U		1.9 GHz	-	3MB		3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh	
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Integrated	8.6 hr	12.9 hr	17.2 hr
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4300U		1.9 GHz	2.9 GHz	3MB		AC adapter			
	i7-4500U		1.8 GHz	3 GHz	4MB		Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Keyboard UltraNav™			
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch				
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					ThinkLight™ None				
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Chipset Smart card reader Multicard reader Ports				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					Intel SoC (System on Chip) platform Optional: Smart card reader				
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					4-in-1 reader (MMC, SD, SDHC, SDXC)				
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					WLAN ⁴				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Weight ²						WWAN (optional)				
	Models	3-cell + 3-cell		3-cell + 6-cell		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		SIM card (optional)				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Audio support				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Case material	Glass-Fiber Reinforced Plastic					Security				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Power-on password, hard disk password, supervisor password, security keyhole				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					Trusted Platform Module, TCG 1.2-compliant				
NFC	Optional: Near Field Communication					vPro (optional) Intel vPro Technology				
						Fingerprint reader				
						Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
						Preload				
						Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				

See footnotes for more detailed information

(G-CB1-5) © Lenovo

ThinkPad T440 20B6 (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B6007Q++	i5-4200U	No	GT 720M	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	16GB	None	None	720p	None	Finger	None	3+6(47.5wh)	65W	Win8.1 DG Win7	3-depot	No	02/14
20B6007Y++	i5-4200U	No	GT 720M	0+8GB	14" HD	No	1T 5400	7260 b/g/n+BT	16GB	None	None	720p	None	Finger	None	3+6(47.5wh)	65W	Win8.1 DG Win7	3-depot	No	02/14
20B6007S++	i7-4500U	No	GT 720M	0+8GB	14" HD	No	1T 5400	7260 b/g/n+BT	16GB	None	None	720p	None	Finger	None	3+6(47.5wh)	65W	Win8.1 DG Win7	3-depot	No	02/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Keyboard			
	i7-4500U		1.8 GHz	3 GHz	4MB			UltraNav™			
i7-4600U	2.1 GHz		3.3 GHz	4MB	ThinkLight™						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform				
Optical Storage	None					Smart card reader	Optional: Smart card reader				
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm					Security chip	Trusted Platform Module, TCG 1.2-compliant				
	14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					vPro (optional)	Intel vPro Technology				
	Models	3-cell + 3-cell		3-cell + 6-cell		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit				
Weight ²	Optimus Non-MultiTouch		3.73 lb / 1.69kg		4.04 lb / 1.83kg			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
	Optimus MultiTouch		3.97 lb / 1.80kg		4.33 lb / 1.97kg		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Case material	Glass-Fiber Reinforced Plastic										
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

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ThinkPad T440 20B7

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B70044++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-depot	Yes	11/13
20B70047++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004C++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004F++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004H++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004J++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004M++	i5-4300U	vPro	HD 4400	0+8GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7008U++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	04/14
20B7008W++	i5-4300U	vPro	HD 4400	4+0GB	14" HD	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	04/14
20B7008Y++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	04/14
20B7008V++	i7-4600U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	04/14
20B7008X++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	04/14
20B7004B++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004D++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004G++	i7-4600U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13
20B7004Q++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	11/13

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600		Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
	i7-4500U		1.8 GHz	3 GHz	4MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						Chipset	Intel SoC (System on Chip) platform			
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Smart card reader	Optional: Smart card reader			
							Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
							WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Multi-touch Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell							
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg							
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg							
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg							
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg							
Case material	Glass-Fiber Reinforced Plastic						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						vPro (optional)	Intel vPro Technology			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
NFC	Optional: Near Field Communication						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Limited warranty ¹²							1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				

See footnotes for more detailed information

(G-CB1-7) © Lenovo

ThinkPad T440 20B7 (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B7005K++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	01/14
20B7005M++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	01/14
20B70005++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 P64	3-depot	Yes	09/13
20B70009++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000B++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ MT	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000F++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000J++	i5-4300U vPro	HD 4400	0+4GB	14" HD No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000N++	i5-4300U vPro	HD 4400	0+4GB	14" HD No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000Q++	i5-4300U vPro	HD 4400	0+4GB	14" HD No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 P64	3-depot	Yes	09/13
20B7000T++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000U++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000V++	i5-4300U vPro	HD 4400	0+4GB	14" HD+ MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000W++	i5-4300U vPro	HD 4400	0+4GB	14" HD No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B70061++	i5-4300U vPro	HD 4400	4+0GB	14" HD+ No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14
20B70062++	i5-4300U vPro	HD 4400	4+0GB	14" HD+ No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14
20B70065++	i5-4300U vPro	HD 4400	4+0GB	14" HD+ No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14
20B70066++	i5-4300U vPro	HD 4400	4+0GB	14" HD No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
	i7-4500U		1.8 GHz	3 GHz	4MB						
	i7-4600U		2.1 GHz	3.3 GHz	4MB						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset		Intel SoC (System on Chip) platform			
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Smart card reader	Optional: Smart card reader				
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security	Power-on password, hard disk password, supervisor password, security keyhole				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		Security chip	Trusted Platform Module, TCG 1.2-compliant				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		vPro (optional)	Intel vPro Technology				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

(G-CB1-8) © Lenovo

ThinkPad T440 20B7 (Windows 8) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit keyboard	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B70068++	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14
20B70069++	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	03/14
20B7005L++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	01/14
20B7005N++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	01/14
20B70006++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B70008++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000G++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13
20B7000R++	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	09/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600		Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
	i7-4500U		1.8 GHz	3 GHz	4MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						Chipset	Intel SoC (System on Chip) platform			
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Smart card reader	Optional: Smart card reader			
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell							
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg							
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg							
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg							
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg							
Case material	Glass-Fiber Reinforced Plastic						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						vPro (optional)	Intel vPro Technology			
NFC	Optional: Near Field Communication						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
							Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-CB1-9) © Lenovo

ThinkPad T440 20B7 (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20B7003Y++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 a/b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8 DG Win7	3-onsite	No	09/13
20B70048++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B70049++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004E++	i5-4300U	vPro	HD 4400	0+8GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004L++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004N++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004P++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004R++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7008S++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	500G 5400 SSHD	7260 a/b/g/n+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	04/14
20B70045++	i7-4600U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B70046++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004A++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7004K++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	11/13
20B7008T++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	500G 5400 SSHD	7260 a/b/g/n+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	04/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600		Integrated	8.6 hr	12.9 hr	17.2 hr
	i3-4030U		1.9 GHz	-	3MB			Optimus	7.7 hr	11.6 hr	15.4 hr
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter			
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
	i7-4500U		1.8 GHz	3 GHz	4MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						Chipset	Intel SoC (System on Chip) platform			
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Smart card reader	Optional: Smart card reader			
M.2 SSD							Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Widescreen display							Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch							WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell							
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg							
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg							
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg							
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg							
Case material	Glass-Fiber Reinforced Plastic						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						vPro (optional)	Intel vPro Technology			
NFC	Optional: Near Field Communication						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
							Preload	Win8 / 8.1 DG Win7:		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
								Win8 / 8.1 64:		Windows 8 / 8.1 64-bit	
								Win8 / 8.1 P64:		Windows 8 / 8.1 Pro 64-bit	
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-CB1-10) © Lenovo

ThinkPad T440 20B7 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B70007++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7000D++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7000H++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 P64	3-onsite	Yes	09/13
20B7000L++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7000M++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 P64	3-onsite	Yes	09/13
20B7000P++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7000S++	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7000X++	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B7003X++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	MT	128G SSD	7260 a/b/g/n+BT	N5321	Select	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	No	10/13
20B70042++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	11/13
20B70043++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	128G SSD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	11/13
20B7005W++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	MT	128G SSD	7260 a/b/g/n+BT	EM7345	Select	None	720p	None	Finger	None	3+6(47.5wh)	45W	Win8 P64	3-onsite	No	01/14
20B7006B++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	MT	128G SSD	7260 a/b/g/n+BT	EM7345	Select	None	720p	None	Finger	None	3+6(47.5wh)	45W	Win8 P64	3-onsite	No	03/14
20B70063++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	03/14
20B70064++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	03/14
20B70067++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	03/14
20B7006A++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	03/14

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache			Memory Speed
	i3-4010U	2	1.7 GHz	-	3MB			DDR3L-1600
	i3-4030U		1.9 GHz	-	3MB			
	i5-4200U		1.6 GHz	2.6 GHz	3MB			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
	i7-4500U		1.8 GHz	3 GHz	4MB			
	i7-4600U		2.1 GHz	3.3 GHz	4MB			
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Smart card reader	Optional: Smart card reader	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)	
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg				
Case material	Glass-Fiber Reinforced Plastic					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)							
NFC	Optional: Near Field Communication							

See footnotes for more detailed information

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ThinkPad T440 20B7 (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B7000C++	i7-4600U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	09/13
20B70040++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	No	11/13
20B70041++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	No	11/13
20B7005P++	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	128G SSD	7260 ac+BT	N5321	Select	Smart	720p	Backlit	None	None	3+3	45W	Win8 P64	3-onsite IWS	No	01/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh	
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	Integrated	8.6 hr	12.9 hr	17.2 hr	
	i3-4030U		1.9 GHz	-	3MB		Optimus	7.7 hr	11.6 hr	15.4 hr	
	i5-4200U		1.6 GHz	2.6 GHz	3MB		AC adapter				
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter				
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Keyboard				
	i7-4500U		1.8 GHz	3 GHz	4MB		UltraNav™				
	i7-4600U		2.1 GHz	3.3 GHz	4MB		ThinkLight™				
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)					Chipset	Intel SoC (System on Chip) platform				
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Smart card reader	Optional: Smart card reader				
M.2 SSD						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Multi-touch						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Camera						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS				
Graphics	Intel HD Graphics 4400, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 720M, 1GB memory (Optimus)					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider				
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security	Power-on password, hard disk password, supervisor password, security keyhole				
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		Security chip	Trusted Platform Module, TCG 1.2-compliant				
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		vPro (optional)	Intel vPro Technology				
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg		Preload	Win8 / 8.1 DG Win7:		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Case material	Glass-Fiber Reinforced Plastic						Win8 / 8.1 64:		Windows 8 / 8.1 64-bit		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Win8 / 8.1 P64:		Windows 8 / 8.1 Pro 64-bit		
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

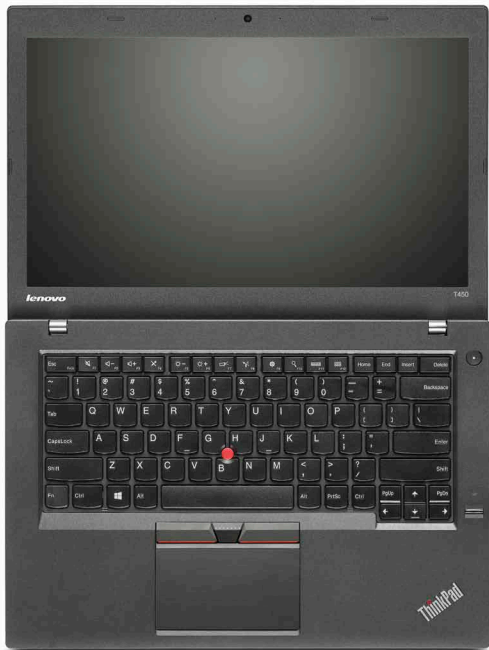
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Lenovo® ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450

ThinkPad T450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor								Smart card reader	Optional: Smart card reader	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)	
	i3-5010U			2.1 GHz	-	3MB		Intel HD Graphics 5500			
	i5-5200U			2.2 GHz	2.7 GHz	3MB					
	i5-5300U			2.3 GHz	2.9 GHz	3MB					
	i7-5500U			2.4 GHz	3 GHz	4MB					
	i7-5600U			2.6 GHz	3.2 GHz	4MB					
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)									Camera	HD720p resolution, low light sensitive, fixed focus
Chipset	Intel SoC (System on Chip) platform									Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack
Memory	16GB max / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets									Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight
Display	Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio									UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits									Security	Power-on password, hard disk password, supervisor password, security keyhole
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™									Security chip	Trusted Platform Module, TCG 1.2-compliant
M.2 SSD (opt)	Some: SSHD with 8GB NAND flash memory									ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures
Optical	Single-sided M.2 SSD, via M.2 card slot									vPro (optional)	Intel vPro Technology
Ethernet	None									Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor
Bluetooth™	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)									Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)
WLAN⁴	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)
	One of the following, configurable by model:									Max battery life¹⁰	
	• 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card										
	• 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card										
	• 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card										
	• 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card									AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter
WWAN (optional)	One of the following, configurable by model:									Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
	• Wireless WAN upgradable										Some: Windows 8.1 64-bit
	• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card										Some: Windows 8.1 Pro 64-bit
	• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card										• Lenovo Solution Center
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider										• Lenovo SHAREit
Dimensions³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm										• ThinkVantage Product Recovery
	14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm										• Rescue and Recovery™
Weight²											• ThinkVantage System Update
	Models	No + 3-cell		3-cell + 3-cell		3-cell + 6-cell			• PC Device Stage		
	Integrated Non-touch	3.58 lb / 1.63 kg		3.81 lb / 1.73 kg		4.21 lb / 1.91 kg			• Weather Channel		
	Integrated Multi-touch	3.89 lb / 1.76 kg		4.11 lb / 1.87 kg		4.52 lb / 2.05 kg			• Evernote		
	Discrete Non-touch	3.60 lb / 1.63 kg		3.82 lb / 1.73 kg		4.22 lb / 1.92 kg			• Maxthon Cloud Browser		
	Discrete Multi-touch	3.90 lb / 1.77 kg		4.12 lb / 1.87 kg		4.53 lb / 2.05 kg			• Bing Translator		
Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic										• Norton Studio
										Limited warranty¹²	One of the following, configurable by model:
											• 1-year depot repair service
											• 3-year/1-yr battery depot repair service
											• 3-year/1-yr battery limited onsite service²⁴
											• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)
										Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant

ThinkPad T450 20BV (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Ann date (m/y)		
20BV001V++	i5-5200U	No	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 3-cell	3-cell + 3-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Integrated Non-touch		3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg
	i3-5010U		2.1 GHz	-	3MB		Integrated Multi-touch		3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB		Discrete Non-touch		3.60 lb / 1.63 kg	3.82 lb / 1.73 kg	4.22 lb / 1.92 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB		Discrete Multi-touch		3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg
	i7-5500U		2.4 GHz	3 GHz	4MB						
	i7-5600U		2.6 GHz	3.2 GHz	4MB						
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material		Display cover: GFRP (non-touch model) or CFRP (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic		
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT:		ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card				vPro (optional)	Intel vPro Technology			
	7265 b/g/n+BT:		Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card				Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
	7265 a/b/g/n+BT:		Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card				Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
	7265 ac+BT:		Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card				External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Integrated	10.08 hr	14.78 hr	19.78 hr
								Discrete	9.51 hr	13.94 hr	18.66 hr
WWAN (optional)	Upg:	Wireless WAN upgradable					AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

ThinkPad T450 20BV (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload		Base warranty (year)	Global	Ann date (m/y)
20BV001K++	i3-5010U	No	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001W++	i3-5010U	No	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001C++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001D++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001E++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001F++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001G++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001J++	i5-5200U	No	HD 5500	4GBx1	14" HD+	No	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001H++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001X++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001Y++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001A++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	
20BV001B++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15	

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor					Dimensions ³ Weight ²	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB		DDR3L-1600	Integrated Non-touch	3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg
	i3-5010U		2.1 GHz	-	3MB			Integrated Multi-touch	3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB			Discrete Non-touch	3.60 lb / 1.63 kg	3.82 lb / 1.73 kg	4.22 lb / 1.92 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Discrete Multi-touch	3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg
	i7-5500U		2.4 GHz	3 GHz	4MB						
	i7-5600U		2.6 GHz	3.2 GHz	4MB						
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory					Case material	Display cover: GFRP (non-touch model) or CFRP (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic				
Chipset	Intel SoC (System on Chip) platform					Smart card reader	Optional: Smart card reader				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio					Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)				
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits					Camera	HD720p resolution, low light sensitive, fixed focus				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot					Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight				
Optical	None					UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Security chip	Trusted Platform Module, TCG 1.2-compliant				
WLAN ⁴	11b/g/n+BT:		ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card			vPro (optional)	Intel vPro Technology				
	7265 b/g/n+BT:		Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor				
	7265 a/b/g/n+BT:		Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card			Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)				
	7265 ac+BT:		Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card			External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)				
WWAN (optional)	Upg:	Wireless WAN upgradable				Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					Integrated	10.08 hr	14.78 hr	19.78 hr	
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					Discrete	9.51 hr	13.94 hr	18.66 hr	
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter				
						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit				
							Win8.1 64: Windows 8.1 64-bit				
							Win8.1 P64: Windows 8.1 Pro 64-bit				
						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-CB2-2) © Lenovo

ThinkPad T450 20BU (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Multi-touch	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20BU000P++	i3-5010U	No	HD 5500	4GBx1	14" HD	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BU000L++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	MT	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(48wh)	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BU000N++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	500G 7200	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BU000K++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	MT	240G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BU0002++	i5-5300U	vPro	HD 5500	4GBx1	14" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU0003++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU0005++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU000B++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU000E++	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU000F++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU0001++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BU0007++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 3-cell	3-cell + 3-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Integrated Non-touch		3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg
	i3-5010U		2.1 GHz	-	3MB		Integrated Multi-touch		3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB		Discrete Non-touch		3.60 lb / 1.63 kg	3.82 lb / 1.73 kg	4.22 lb / 1.92 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB		Discrete Multi-touch		3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg
	i7-5500U		2.4 GHz	3 GHz	4MB						
	i7-5600U		2.6 GHz	3.2 GHz	4MB						
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material		Display cover: GFRP (non-touch model) or CFRP (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic		
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology			
	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
	7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
	7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Integrated	10.08 hr	14.78 hr	19.78 hr
								Discrete	9.51 hr	13.94 hr	18.66 hr
WWAN (optional)	Upg:	Wireless WAN upgradable					AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

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ThinkPad T450 20BU (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Multi-Display touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam- era	Backlit keyboard	Finger- print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BU002C++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+ MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15
20BU002B++	i7-5600U	vPro	HD 5500	8GBx1	14" HD+ MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15
20BU0004++	i5-5300U	vPro	HD 5500	8GBx1	14" HD+ MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite IWS	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 3-cell	3-cell + 3-cell
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Integrated Non-touch		3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg
	i3-5010U		2.1 GHz	-	3MB		Integrated Multi-touch		3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB		Discrete Non-touch		3.60 lb / 1.63 kg	3.82 lb / 1.73 kg	4.22 lb / 1.92 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB		Discrete Multi-touch		3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg
	i7-5500U		2.4 GHz	3 GHz	4MB		Case material		Display cover: GFRP (non-touch model) or CFRP (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic		
i7-5600U	2.6 GHz		3.2 GHz	4MB	Smart card reader			Optional: Smart card reader			
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Chipset	Intel SoC (System on Chip) platform						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Camera	HD720p resolution, low light sensitive, fixed focus			
Display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio							Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Optical	None						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						vPro (optional)	Intel vPro Technology			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
	7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card						Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
	7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card							Integrated	10.08 hr	14.78 hr	19.78 hr
								Discrete	9.51 hr	13.94 hr	18.66 hr
WWAN (optional)	Upg:	Wireless WAN upgradable					AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

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Lenovo® ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p

ThinkPad T440p Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream performance; two spindles								Chipset	Mobile Intel QM87 Express Chipset	
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor								Smart card reader	Optional: Smart card reader	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	i3-4000M	2	4	2.4 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4600	Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector	
	i3-4100M			2.5 GHz	-	3MB			WLAN ⁴	One of the following, configurable by model:	
	i5-4200M			2.5 GHz	3.1 GHz	3MB				<ul style="list-style-type: none">ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 cardIntel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 cardIntel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 cardIntel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card	
	i5-4210M			2.6 GHz	3.2 GHz	3MB			WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD):	
	i5-4300M			2.6 GHz	3.3 GHz	3MB				<ul style="list-style-type: none">Wireless WAN upgradableWireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)	
	i5-4330M			2.8 GHz	3.5 GHz	3MB					
	i7-4600M	4	8	2.9 GHz	3.6 GHz	4MB			SIM card (optional)	One of the following, configurable by model:	
	i7-4700MQ			2.4 GHz	3.4 GHz	6MB				<ul style="list-style-type: none">AT&T® or Verizon® LTE (4G), contract required with service provider (US models)Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)User selectable, contract required with service provider	
	i7-4710MQ			2.5 GHz	3.5 GHz	6MB			Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
	i7-4800MQ			2.7 GHz	3.7 GHz	6MB			Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
	i7-4900MQ			2.8 GHz	3.8 GHz	8MB			NFC	Optional: Near Field Communication	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Security chip	Power-on password, hard disk password, supervisor password, security keyhole	
Optical Ultrabay	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology	
Storage	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
M.2 SSD	All: removable, upgradable, supports the second disk, Shock Mounted Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Limited warranty ¹²	One of the following, configurable by model:	
Widescreen display	Some: 14.0" (355mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS									<ul style="list-style-type: none">1-year depot repair service3-year/1-yr battery depot repair service3-year/1-yr battery limited onsite service²⁴3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
Graphics	Intel HD Graphics 4600 in processor only, or Intel HD Graphics 4600 in processor and NVIDIA GeForce® GT 730M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 1920x1200@60Hz (VGA); 3840x2160@60Hz (DP via mDP cable)									Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit	
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch									<ul style="list-style-type: none">Lenovo Solution CenterLenovo SupportLenovo CompanionThinkVantage System UpdateLenovo Reach (Windows 8.1 model)Hightail - Metro (Windows 8.1 model)Lenovo Cloud Storage by SugarSyncLenovo Cloud Storage by SugarSync - Metro (Windows 8 model)Lenovo Cloud Storage by SugarSync (Windows 8 model)PC Device StageAccuWeatherAmazon KindleNitro ProEvernoteSkypeRara StreamingNorton StudioMicrosoft Office preloaded; purchase a product key to activateNorton Internet Security (30 days of virus definitions)Cyberlink PowerDVD (DVD±RW)Cyberlink Power2Go (DVD±RW)Cyberlink PowerProducer (DVD±RW)	
ThinkLight™	None										
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm										
Weight ²	Models	6-cell		9-cell							
	Integrated	4.70 lb / 2.14kg		4.92 lb / 2.23kg							
	Optimus	4.77 lb / 2.16kg		5.10 lb / 2.31kg							
Case material	Display cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic										
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	Models	6-cell		9-cell							
	Integrated	7.4 hr		13.2 hr							
	Optimus	7.2 hr		12.7 hr							
AC adapter	Models	dual-core		quad-core							
	Integrated	65-watt		90-watt							
	Optimus	90-watt		135-watt							
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack								Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	

ThinkPad T440p 20AN (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN00C0++	i3-4100M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	No	06/14
20AN0074++	i3-4000M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN009B++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	01/14
20AN00A3++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	03/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB		DDR3L-1600	Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			Chipset Mobile Intel QM87 Express Chipset		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Smart card reader <i>Optional:</i> Smart card reader		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	WLAN ⁴ <i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		<i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	<i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	<i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					WWAN (optional)	Upg:	Wireless WAN upgradable		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						EM7345:	Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS		
M.2 SSD							N5321:	Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) , 200 nits, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 or 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080) , 300 nits, 700:1 contrast ratio, IPS					SIM card (optional)	Lenovo:	Lenovo SIM, out-of-box service, pay-as-you-go, no contract required		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Select:	User selectable, contract required with service provider		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M , 1GB memory (Optimus)					Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) <i>Optional:</i> Near Field Communication			
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm					Security chip vPro (optional)	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology			
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic					Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor			
						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
							Win8 / 8.1 64: Win8 / 8.1 P64:	Windows 8 / 8.1 64-bit Windows 8 / 8.1 Pro 64-bit		
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-OA1-1) © Lenovo

ThinkPad T440p 20AN (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN009E++	i7-4600M	vPro	HD 4600	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	01/14
20AN009G++	i5-4200M	No	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	01/14
20AN009X++	i5-4210M	No	HD 4600	4GBx1	14" HD+	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00BY++	i5-4210M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00C3++	i5-4210M	No	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CD++	i5-4210M	No	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CF++	i7-4600M	vPro	HD 4600	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CG++	i5-4210M	No	HD 4600	4GBx1	14" HD+	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00D7++	i5-4210M	No	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	09/14
20AN00DD++	i5-4210M	No	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	01/15
20AN006X++	i7-4600M	vPro	HD 4600	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	10/13
20AN0070++	i5-4200M	No	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	10/13
20AN0072++	i5-4200M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	10/13
20AN0076++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	10/13
20AN007G++	i5-4330M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	11/13
20AN008K++	i5-4200M	No	HD 4600	4GBx1	14" HD+	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	12/13
20AN0098++	i7-4600M	vPro	HD 4600	8GBx1	14" HD+	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	01/14
20AN00A5++	i7-4600M	vPro	HD 4600	8GBx1	14" HD+	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	03/14

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			AC adapter 65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard UltraNav™ 6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			Chipset Mobile Intel QM87 Express Chipset		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			Smart card reader Optional: Smart card reader		
	i7-4600M		2.9 GHz	3.6 GHz	4MB			Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)		
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB			Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB			WLAN ⁴ 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB			WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
i7-4900MQ	2.8 GHz		3.8 GHz	8MB	SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Bluetooth™ Intel Ethernet Connection I217-LM (Clarkville) Optional: Near Field Communication			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Security Security chip vPro (optional) Fingerprint reader Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
M.2 SSD							Preload Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus									
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)									
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm									
Case material	Models		6-cell		9-cell					
	Integrated		4.70 lb / 2.14kg		4.92 lb / 2.23kg					
	Optimus		4.77 lb / 2.16kg		5.10 lb / 2.31kg					
	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic									
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack									

See footnotes for more detailed information

(G-OA1-2) © Lenovo

ThinkPad T440p 20AN (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN009D++	i7-4700MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	01/14
20AN009F++	i7-4700MQ	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	01/14
20AN00A9++	i5-4200M	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	6	90W	Win8.1 DG Win7	3-onsite	No	03/14
20AN00C1++	i7-4710MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00C2++	i7-4710MQ	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00C6++	i5-4210M	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	6	90W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CB++	i7-4710MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CC++	i7-4710MQ	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20AN00CE++	i5-4210M	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	6	90W	Win8.1 DG Win7	3-onsite	No	06/14
20AN006V++	i7-4700MQ	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	10/13
20AN0079++	i7-4700MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	10/13
20AN007A++	i7-4700MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	None	None	Smart	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	10/13
20AN007E++	i7-4900MQ	vPro	GT 730M	8GBx1	14" FHD IPS	512G SSD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	11/13
20AN007F++	i7-4800MQ	vPro	GT 730M	8GBx1	14" FHD IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	11/13
20AN0095++	i5-4200M	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	6	90W	Win8 DG Win7	3-onsite	No	01/14
20AN0097++	i7-4900MQ	vPro	GT 730M	8GBx1	14" FHD IPS	512G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14
20AN0099++	i7-4700MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14
20AN009A++	i7-4800MQ	vPro	GT 730M	8GBx1	14" FHD IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰				Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed								
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600								
	i3-4100M		2.5 GHz	-	3MB									
	i5-4200M		2.5 GHz	3.1 GHz	3MB									
	i5-4210M		2.6 GHz	3.2 GHz	3MB									
	i5-4300M		2.6 GHz	3.3 GHz	3MB									
	i5-4330M		2.8 GHz	3.5 GHz	3MB									
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB									
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB									
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB									
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB									
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB									
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						AC adapter				65-watt, 90-watt, or 135-watt AC adapter			
Optical	DVD burner, 9.5mm Ultrabay slim, removable						Keyboard				6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						UltraNav™				TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Chipset				Mobile Intel QM87 Express Chipset			
M.2 SSD							Smart card reader				Optional: Smart card reader			
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Multicard reader				4-in-1 reader (MMC, SD, SDHC, SDXC)			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ports				Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						WLAN ⁴				11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm						WWAN (optional)				Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Weight ²							SIM card (optional)				Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic						Bluetooth™				Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack						Ethernet				Intel Ethernet Connection I217-LM (Clarkville)			
							NFC				Optional: Near Field Communication			
							Security				Power-on password, hard disk password, supervisor password, security keyhole			
							Security chip				Trusted Platform Module, TCG 1.2-compliant			
							vPro (optional)				Intel vPro Technology			
							Fingerprint reader				Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
							Preload				Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹²				1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-OA1-3) © Lenovo

ThinkPad T440p 20AN (Optimus) - TopSeller (Onsite) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN00A1++	i5-4200M	No	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	6	90W	Win8 DG Win7	3-onsite	No	03/14
20AN00A2++	i7-4900MQ	vPro	GT 730M	8GBx1	14" FHD IPS	512G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	03/14
20AN00A4++	i7-4700MQ	No	GT 730M	4GBx2	14" FHD IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	03/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			Keyboard		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			UltraNav™		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			TrackPoint® pointing device and Mylar surface touchpad,		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	integrated five buttons, multi-touch					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	Chipset					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Mobile Intel QM87 Express Chipset				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Smart card reader Multicard reader Ports	Optional: Smart card reader		
	Optical							4-in-1 reader (MMC, SD, SDHC, SDXC)		
	Ultrabay							Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort,		
	Storage							Ethernet (RJ-45), Dock connector		
	M.2 SSD							WLAN ⁴		
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high							11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card		
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS							7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card		
	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card							7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card		
	WideScreen display							7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio							WWAN (optional)		
Camera (optional)	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio						SIM card (optional)	Upg: Wireless WAN upgradable		
	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS		
	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
	Graphics							Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required		
	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)							Select: User selectable, contract required with service provider		
	Dimensions ³							Bluetooth™		
	Weight ²							Intel Ethernet Connection I217-LM (Clarkville)		
								Optional: Near Field Communication		
								Security		
								Power-on password, hard disk password, supervisor password, security keyhole		
Case material							vPro (optional)	Trusted Platform Module, TCG 1.2-compliant		
								Intel vPro Technology		
								Fingerprint reader		
								Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
								Preload		
								Win8 / 8.1 DG Win7:		
								Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
								Win8 / 8.1 64:		
								Windows 8 / 8.1 64-bit		
								Win8 / 8.1 P64:		
Audio support								Windows 8 / 8.1 Pro 64-bit		
	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack						Limited warranty ¹²			
							1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-OA1-4) © Lenovo

ThinkPad T440p 20AW

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0090++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW0091++	i5-4300M	vPro	HD 4600	8GBx1	14" HD+	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW0093++	i7-4600M	vPro	HD 4600	2GBx2	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW004B++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	Yes	11/13
20AW004D++	i5-4300M	vPro	HD 4600	4GBx2	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	Yes	11/13
20AW004H++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	Yes	11/13
20AW004J++	i5-4300M	vPro	HD 4600	4GBx2	14" FHD IPS	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	Yes	11/13
20AW004K++	i5-4300M	vPro	HD 4600	4GBx2	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	Yes	11/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Chipset		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Mobile Intel QM87 Express Chipset		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB			Optional: Smart card reader		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB			Smart card reader		
i7-4900MQ	2.8 GHz		3.8 GHz	8MB	Multicard reader					
					4-in-1 reader (MMC, SD, SDHC, SDXC)					
Ports							Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
WLAN ⁴							11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
WWAN (optional)							Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
SIM card (optional)							Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Bluetooth™							Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Ethernet							Intel Ethernet Connection I217-LM (Clarkville)			
NFC							Optional: Near Field Communication			
Security							Power-on password, hard disk password, supervisor password, security keyhole			
Security chip							Trusted Platform Module, TCG 1.2-compliant			
vPro (optional)							Intel vPro Technology			
Fingerprint reader							Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
Preload							Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Limited warranty ¹²							1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets									
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card									
M.2 SSD										
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS									
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus									
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)									
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm <table><tr><td>Models</td><td>6-cell</td><td>9-cell</td></tr><tr><td>Integrated</td><td>4.70 lb / 2.14kg</td><td>4.92 lb / 2.23kg</td></tr><tr><td>Optimus</td><td>4.77 lb / 2.16kg</td><td>5.10 lb / 2.31kg</td></tr></table>	Models	6-cell	9-cell	Integrated	4.70 lb / 2.14kg	4.92 lb / 2.23kg	Optimus	4.77 lb / 2.16kg	5.10 lb / 2.31kg
Models	6-cell	9-cell								
Integrated	4.70 lb / 2.14kg	4.92 lb / 2.23kg								
Optimus	4.77 lb / 2.16kg	5.10 lb / 2.31kg								
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic									
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack									

See footnotes for more detailed information

(G-OA1-5) © Lenovo

ThinkPad T440p 20AW (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0000++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW0001++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW0005++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW0007++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW0008++	i5-4300M	vPro	HD 4600	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000C++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000D++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000H++	i7-4600M	vPro	HD 4600	4GBx1	14" FHD IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000K++	i7-4600M	vPro	HD 4600	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000M++	i7-4600M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20AW000Q++	i7-4600M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰		Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed				
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600				
	i3-4100M		2.5 GHz	-	3MB					
	i5-4200M		2.5 GHz	3.1 GHz	3MB					
	i5-4210M		2.6 GHz	3.2 GHz	3MB					
	i5-4300M		2.6 GHz	3.3 GHz	3MB					
	i5-4330M		2.8 GHz	3.5 GHz	3MB					
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB					
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB					
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB					
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB					
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						AC adapter		65-watt, 90-watt, or 135-watt AC adapter	
Optical	DVD burner, 9.5mm Ultrabay slim, removable						Keyboard		6-row, spill-resistant, multimedia Fn keys, optional LED backlight	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Chipset		Mobile Intel QM87 Express Chipset	
M.2 SSD							Smart card reader		Optional: Smart card reader	
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector	
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm						WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Weight ²							SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack						Ethernet		Intel Ethernet Connection I217-LM (Clarkville)	
							NFC		Optional: Near Field Communication	
							Security		Power-on password, hard disk password, supervisor password, security keyhole	
							Security chip		Trusted Platform Module, TCG 1.2-compliant	
							vPro (optional)		Intel vPro Technology	
							Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
							Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
							Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-OA1-6) © Lenovo

ThinkPad T440p 20AW (Optimus)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW008Y++	i7-4600M	vPro	GT 730M	8GBx1	14" HD+	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW0092++	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW0094++	i7-4600M	vPro	GT 730M	8GBx1	14" HD+	500G 7200	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	Yes	04/14
20AW004A++	i7-4600M	vPro	GT 730M	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	Yes	11/13
20AW004C++	i7-4600M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	Yes	11/13
20AW004F++	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	Yes	11/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Chipset		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Mobile Intel QM87 Express Chipset		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Smart card reader			
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		Optional: Smart card reader			
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB	Multicard reader				
								4-in-1 reader (MMC, SD, SDHC, SDXC)		
								Ports		
								Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							WLAN ⁴		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card							11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
M.2 SSD								WWAN (optional)		
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS							Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							SIM card (optional)		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)							Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm							Bluetooth™		
	Models	6-cell		9-cell		Ethernet				
	Integrated	4.70 lb / 2.14kg		4.92 lb / 2.23kg		NFC				
	Optimus	4.77 lb / 2.16kg		5.10 lb / 2.31kg		Security				
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic							Power-on password, hard disk password, supervisor password, security keyhole		
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack							Security chip		
								Trusted Platform Module, TCG 1.2-compliant		
								vPro (optional)		
								Intel vPro Technology		
								Fingerprint reader		
								Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
								Preload		
								Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
								Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
								Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
								Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-OA1-7) © Lenovo

ThinkPad T440p 20AW (Optimus) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0006++	i7-4600M	vPro	GT 730M	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20AW0009++	i7-4600M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20AW000A++	i7-4600M	vPro	GT 730M	4GBx1	14" FHD IPS	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20AW000G++	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20AW000R++	i7-4600M	vPro	GT 730M	4GBx1	14" FHD IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			TrackPoint® pointing device and Mylar surface touchpad,		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			integrated five buttons, multi-touch		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Chipset					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	Mobile Intel QM87 Express Chipset					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB	Optional: Smart card reader					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card		
								7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable						WWAN (optional)	7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card		
	One modular bay for removable devices (right side, cold swap), 9.5mm high							7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
M.2 SSD	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high						SIM card (optional)	Upg: Wireless WAN upgradable		
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS		
Widescreen display	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Bluetooth™ Ethernet NFC	N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
								Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required		
Camera (optional)	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio						Preload	Select: User selectable, contract required with service provider		
	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio							Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Graphics	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Security chip vPro (optional)	Intel Ethernet Connection I217-LM (Clarkville)		
	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							Optional: Near Field Communication		
Dimensions ³ Weight ²	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole		
								Trusted Platform Module, TCG 1.2-compliant		
Case material	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm						Limited warranty ¹²	Intel vPro Technology		
								Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
Audio support	Models						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
	Integrated							Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
	Optimus							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		

See footnotes for more detailed information

(G-OA1-8) © Lenovo

ThinkPad T440p 20AW (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0046++	i5-4300M	vPro	HD 4600	4GBx2	14" FHD IPS	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	Yes	11/13
20AW0048++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	Yes	11/13
20AW0049++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	Yes	11/13
20AW004L++	i5-4300M	vPro	HD 4600	4GBx2	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	Yes	11/13
20AW004M++	i5-4300M	vPro	HD 4600	4GBx2	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	Yes	11/13
20AW007Q++	i5-4300M	vPro	HD 4600	8GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	03/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			TrackPoint® pointing device and Mylar surface touchpad,		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			integrated five buttons, multi-touch		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB			Chipset		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB			Mobile Intel QM87 Express Chipset		
i7-4900MQ	2.8 GHz		3.8 GHz	8MB	Smart card reader					
							Optional: Smart card reader			
					Multicard reader					
					4-in-1 reader (MMC, SD, SDHC, SDXC)					
					Ports					
					Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort,					
					Ethernet (RJ-45), Dock connector					
							WLAN ⁴	11b/g/n+BT:	ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card	
								7260 b/g/n+BT:	Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
								7260 a/b/g/n+BT:	Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
								7260 ac+BT:	Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
							WWAN (optional)	Upg:	Wireless WAN upgradable	
								EM7345:	Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS	
								N5321:	Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
							SIM card (optional)	Lenovo:	Lenovo SIM, out-of-box service, pay-as-you-go, no contract required	
								Select:	User selectable, contract required with service provider	
							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
							Ethernet	Intel Ethernet Connection I217-LM (Clarkville)		
							NFC	Optional: Near Field Communication		
							Security	Power-on password, hard disk password, supervisor password, security keyhole		
							Security chip	Trusted Platform Module, TCG 1.2-compliant		
							vPro (optional)	Intel vPro Technology		
							Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
							Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled	
									through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
								Win8 / 8.1 64:	Windows 8 / 8.1 64-bit	
								Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit	
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets									
Optical	DVD burner, 9.5mm Ultrabay slim, removable									
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high									
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high									
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS									
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card									
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio									
	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio									
	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS									
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus									
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)									
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm									
Weight ²										
	Models	6-cell		9-cell						
	Integrated	4.70 lb / 2.14kg		4.92 lb / 2.23kg						
	Optimus	4.77 lb / 2.16kg		5.10 lb / 2.31kg						
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic									
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack									

See footnotes for more detailed information

(G-OA1-9) © Lenovo

ThinkPad T440p 20AW (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0002++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW0003++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW0004++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW000E++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW000J++	i7-4600M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW000L++	i7-4600M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20AW0005A++	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 P64	3-onsite	No	12/13
20AW0005B++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 P64	3-onsite	No	12/13
20AW0005C++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 P64	3-onsite	No	12/13
20AW0005D++	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 P64	3-onsite	No	12/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			AC adapter 65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB					
	i5-4300M		2.6 GHz	3.3 GHz	3MB			Keyboard UltraNav™ 6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4330M		2.8 GHz	3.5 GHz	3MB					
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Chipset Mobile Intel QM87 Express Chipset Smart card reader <i>Optional:</i> Smart card reader Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB					
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB						
i7-4900MQ	2.8 GHz		3.8 GHz	8MB						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴ <i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card									
M.2 SSD										
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) , 200 nits, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 or 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080) , 300 nits, 700:1 contrast ratio, IPS									
Camera (<i>optional</i>)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus									
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (<i>optional</i>) <i>Lenovo:</i> Lenovo SIM, out-of-box service, pay-as-you-go, no contract required <i>Select:</i> User selectable, contract required with service provider Bluetooth™ Ethernet NFC Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) <i>Optional:</i> Near Field Communication			
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm									
	Models	6-cell	9-cell							
	Integrated	4.70 lb / 2.14kg	4.92 lb / 2.23kg							
	Optimus	4.77 lb / 2.16kg	5.10 lb / 2.31kg							
Case material	Top cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic						Preload <i>Win8 / 8.1 64:</i> <i>Win8 / 8.1 P64:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Windows 8 / 8.1 64-bit Windows 8 / 8.1 Pro 64-bit			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack									
Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite										

See footnotes for more detailed information

(G-OA1-10) © Lenovo

ThinkPad T440p 20AW (Optimus) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW0047++	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-onsite	Yes	11/13
20AW004E++	i7-4600M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-onsite	Yes	11/13
20AW004G++	i7-4600M	vPro	GT 730M	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-onsite	Yes	11/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			Chipset		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Mobile Intel QM87 Express Chipset		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Smart card readerOptional: Smart card reader		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Multicard reader4-in-1 reader (MMC, SD, SDHC, SDXC)					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	PortsTwo USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector					
i7-4900MQ	2.8 GHz		3.8 GHz	8MB	WLAN ⁴					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
M.2 SSD							SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Bluetooth™ Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet Intel Ethernet Connection I217-LM (Clarkville) Optional: Near Field Communication			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, TCG 1.2-compliant vPro (optional) Intel vPro Technology Fingerprint reader Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm						Preload Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
Weight ²							Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Case material							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack									

See footnotes for more detailed information

(G-OA1-11) © Lenovo

ThinkPad T440p 20AW (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AW000B++	i7-4600M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20AW000P++	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7.4 hr	13.2 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	7.2 hr	12.7 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, optional LED backlight		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			Chipset Mobile Intel QM87 Express Chipset		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Smart card reader <i>Optional:</i> Smart card reader		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB			Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB			WLAN ⁴ <i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card		
i7-4900MQ	2.8 GHz		3.8 GHz	8MB	<i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card					
					<i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card					
							<i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
							WWAN (optional) <i>Upg:</i> Wireless WAN upgradable			
							<i>EM7345:</i> Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS			
							<i>N5321:</i> Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
							SIM card (optional) <i>Lenovo:</i> Lenovo SIM, out-of-box service, pay-as-you-go, no contract required			
							<i>Select:</i> User selectable, contract required with service provider			
							Bluetooth™ Ethernet NFC Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
							Intel Ethernet Connection I217-LM (Clarkville)			
							<i>Optional:</i> Near Field Communication			
							Security chip vPro (optional) Power-on password, hard disk password, supervisor password, security keyhole			
							Trusted Platform Module, TCG 1.2-compliant			
							Fingerprint reader Intel vPro Technology			
							<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor			
							Preload <i>Win8 / 8.1 DG Win7:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
							<i>Win8 / 8.1 64:</i> Windows 8 / 8.1 64-bit			
							<i>Win8 / 8.1 P64:</i> Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

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Lenovo ThinkPad T440s



Lenovo ThinkPad T440s



Lenovo ThinkPad T440s



Lenovo ThinkPad T440s

ThinkPad T440s Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Premium Ultrabook™ or Thinbook; one spindle								WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none">ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 cardIntel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 cardIntel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 cardIntel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card	
Processor	4th Generation Intel® Core™ i5 / i7 Processor								WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none">Wireless WAN upgradableWireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none">AT&T® or Verizon® LTE (4G), contract required with service provider (US models)Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)User selectable, contract required with service provider	
	i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD graphics 4400	Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication	
	i5-4210U			1.7 GHz	2.7 GHz	3MB			NFC		
	i5-4300U			1.9 GHz	2.9 GHz	3MB			Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	
	i7-4600U			2.1 GHz	3.3 GHz	4MB			vPro (optional)	Intel vPro Technology	
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory								Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none">1-year depot repair service3-year/1-yr battery depot repair service3-year/1-yr battery limited onsite service²⁴3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SupportThinkVantage Product RecoveryRescue and Recovery™ThinkVantage System UpdateLenovo Cloud Storage by SugarSyncPC Device StageAdobe® Reader®Nitro ProEvernote®Skype™Microsoft® Office preloaded; purchase a product key to activateNorton™ Internet Security (30 days of virus definitions)	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS									Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SupportLenovo CompanionThinkVantage System UpdateLenovo Reach (Windows 8.1 model)Hightail - Metro (Windows 8.1 model)Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)Lenovo Cloud Storage by SugarSync (Windows 8 model)PC Device StageAccuWeatherAmazon KindleNitro ProEvernoteSkypeRara StreamingNorton StudioMicrosoft Office preloaded; purchase a product key to activateNorton Internet Security (30 days of virus definitions)	
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture										
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus										
Graphics	Intel HD Graphics 4400 in processor only, or Intel HD Graphics 4400 in processor and NVIDIA GeForce® GT 730M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max external resolution: 1920x1200@60Hz (VGA); 3840x2160@30Hz (DisplayPort via Mini DisplayPort cable on integrated models); 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable on optimus models)										
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch										
ThinkLight™	None										
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm										
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell							
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg							
	MultiTouch	3.9 lb / 1.76		4.2 lb / 1.94kg							
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy										
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication										
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication										
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh					
	Integrated	8.4 hr		12.6 hr		16.8 hr					
	Optimus	8.3 hr		12.4 hr		16.6 hr					
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter										
Chipset	Intel SoC (System on Chip) platform										
Smart card reader	Optional: Smart card reader, exclusive with M.2 SSD										
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector										
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	

ThinkPad T440s 20AQ (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam- era	Backlit key- board	Finger- print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ000R++	i5-4200U	No	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 a/b/g/n+BT	N5321	Select	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ000S++	i5-4200U	No	HD 4400	4+0GB	14" FHD IPS	No	500G 7200	7260 a/b/g/n+BT	Upg	None	24GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ0018++	i5-4200U	No	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	None	Finger	None	3+6(72wh)	45W	Win8 P64	3-depot	No	20/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600		
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
i7-4600U	2.1 GHz		3.3 GHz	4MB				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Smart card reader	Optional: Smart card reader
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture						Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Weight ²	Models		3-cell + 3-cell		3-cell + 6-cell		Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)
	Non-MultiTouch		3.5 lb / 1.59kg		3.9 lb / 1.77kg		NFC	Optional: Near Field Communication
	MultiTouch		3.9 lb / 1.76		4.2 lb / 1.94kg		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack
	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						Security	Power-on password, hard disk password, supervisor password, security keyhole
Case material	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Security chip	Trusted Platform Module, TCG 1.2-compliant
Internal battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						vPro (optional)	Intel vPro Technology
External battery							Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor
Max battery life ¹⁰	Models		3-cell + 3-cell		3-cell + 6-cell 47.5Wh		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
	Integrated		8.4 hr		12.6 hr			Win8 / 8.1 64: Windows 8 / 8.1 64-bit
	Optimus		8.3 hr		12.4 hr			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter							

See footnotes for more detailed information

(G-STG1-1) © Lenovo

ThinkPad T440s 20AQ (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ007U++	i5-4200U	No	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ0062++	i5-4200U	No	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AQ0064++	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/13
20AQ0075++	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14
20AQ0099++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009A++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	500G 5400 SSHD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009B++	i5-4210U	No	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009C++	i5-4210U	No	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009D++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009W++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ009X++	i5-4210U	No	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ0067++	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AQ007S++	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ007T++	i7-4600U	vPro	HD 4400	4+8GB 14" FHD IPS	No	512G SSD	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AQ0066++	i7-4600U	vPro	HD 4400	4+8GB 14" FHD IPS	No	512G SSD	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AQ0069++	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch None	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache			Memory Speed
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB			DDR3L-1600
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
i7-4600U	2.1 GHz		3.3 GHz	4MB				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket					Chipset	Intel SoC (System on Chip) platform	
Optical Storage	None					Smart card reader	Optional: Smart card reader	
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
M.2 SSD						Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Multi-touch						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Camera (optional)						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)					Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication	
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm					NFC		
Weight ²						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	Models	3-cell + 3-cell	3-cell + 6-cell			Security	Power-on password, hard disk password, supervisor password, security keyhole	
	Non-MultiTouch	3.5 lb / 1.59kg	3.9 lb / 1.77kg			Security chip	Trusted Platform Module, TCG 1.2-compliant	
	MultiTouch	3.9 lb / 1.76	4.2 lb / 1.94kg			vPro (optional)	Intel vPro Technology	
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy					Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Win8 / 8.1 64: Windows 8 / 8.1 64-bit	
Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh		Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
	Integrated	8.4 hr	12.6 hr		16.8 hr			
	Optimus	8.3 hr	12.4 hr		16.6 hr			
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter					Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-STG1-2) © Lenovo

ThinkPad T440s 20AQ (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ005A++	i5-4200U	No	HD 4400	4+0GB	14" FHD IPS	MT	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AQ0097++	i5-4210U	No	HD 4400	4+0GB	14" FHD IPS	MT	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AQ0098++	i5-4210U	No	HD 4400	4+0GB	14" FHD IPS	MT	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AQ007Q++	i5-4300U	vPro	HD 4400	4+4GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14
20AQ007R++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AQ0057++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	None		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Chipset Intel SoC (System on Chip) platform		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Smart card reader <i>Optional:</i> Smart card reader		
i7-4600U	2.1 GHz		3.3 GHz	4MB	Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory						WLAN ⁴	<i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						WWAN (<i>optional</i>)	<i>Upg:</i> Wireless WAN upgradable <i>EM7345:</i> Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS <i>N5321:</i> Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Widescreen display	<i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080) , 300 nits, 700:1 contrast ratio <i>Some:</i> Capacitive-type multi-touch, supports ten-finger gesture						SIM card (<i>optional</i>)	<i>Lenovo:</i> Lenovo SIM, out-of-box service, pay-as-you-go, no contract required <i>Select:</i> User selectable, contract required with service provider	
Multi-touch	<i>Camera (optional)</i> HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter <i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)	
Camera (<i>optional</i>)							<i>Optional:</i> Near Field Communication		
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						NFC		
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Weight ²	Models		3-cell + 3-cell		3-cell + 6-cell		Security Security chip vPro (<i>optional</i>) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology <i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor	
	Non-MultiTouch		3.5 lb / 1.59kg		3.9 lb / 1.77kg				
	MultiTouch		3.9 lb / 1.76		4.2 lb / 1.94kg				
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication								
Max battery life ¹⁰	Models		3-cell + 3-cell		3-cell + 6-cell 47.5Wh 3-cell + 6-cell 72Wh				
	Integrated		8.4 hr		12.6 hr 16.8 hr				
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter								

See footnotes for more detailed information

(G-STG1-3) © Lenovo

ThinkPad T440s 20AQ (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ006C++	i5-4300U	vPro GT 730M	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	65W slim	Win8 DG Win7	3-onsite	No	20/13
20AQ006B++	i7-4600U	vPro GT 730M	4+4GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	65W	Win8 DG Win7	3-onsite	No	20/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None	
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform	
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader	
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
i7-4600U	2.1 GHz		3.3 GHz	4MB	Ports		Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector		
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						WLAN ⁴	11b/g/n+BT:	ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory							7260 b/g/n+BT:	Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card							7260 a/b/g/n+BT:	Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
								7260 ac+BT:	Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture						WWAN (optional)	Upg:	Wireless WAN upgradable
Multi-touch	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							EM7345:	Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS
Camera (optional)								N5321:	Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (optional)	Lenovo:	Lenovo SIM, out-of-box service, pay-as-you-go, no contract required
								Select:	User selectable, contract required with service provider
							Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
								Non-vPro model: Intel Ethernet Connection I218-V (Clarkville)	
								vPro model: Intel Ethernet Connection I218-LM (Clarkville)	
							NFC	Optional: Near Field Communication	
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell			Security	Power-on password, hard disk password, supervisor password, security keyhole	
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg			Security chip	Trusted Platform Module, TCG 1.2-compliant	
	MultiTouch	3.9 lb / 1.76		4.2 lb / 1.94kg			vPro (optional)	Intel vPro Technology	
	Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication							Win8 / 8.1 64:	Windows 8 / 8.1 64-bit
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh		Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit
	Integrated	8.4 hr		12.6 hr		16.8 hr			
	Optimus	8.3 hr		12.4 hr		16.6 hr			
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-STG1-4) © Lenovo

ThinkPad T440s 20AR

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AR006R++	i5-4300U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	20/14
20AR006S++	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	20/14
20AR003X++	i5-4300U	vPro HD 4400	4+4GB 14" FHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0040++	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0042++	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0043++	i5-4300U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0045++	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0049++	i5-4300U	vPro HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR006T++	i7-4600U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	20/14
20AR006U++	i7-4600U	vPro HD 4400	4+4GB 14" FHD IPS	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	Yes	20/14
20AR002T++	i7-4600U	vPro HD 4400	4+4GB 14" FHD IPS	No	500G 7200	7260 ac+BT	Upg	None	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR003Y++	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13
20AR0047++	i7-4600U	vPro HD 4400	4+4GB 14" FHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	Yes	20/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	None		
	i5-4210U		1.7 GHz	2.7 GHz	3MB				
	i5-4300U		1.9 GHz	2.9 GHz	3MB				
i7-4600U	2.1 GHz		3.3 GHz	4MB					
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform	
Optical Storage	None						Smart card reader	Optional: Smart card reader	
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
M.2 SSD	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
	Some: SSHD with 8GB NAND flash memory						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card	
	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader							7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
Widescreen display	Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card							7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
								7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						WWAN (optional)	Upg: Wireless WAN upgradable	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS	
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)							N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required	
Weight ²	14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Select:	User selectable, contract required with service provider	
	Models	3-cell + 3-cell		3-cell + 6-cell		Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg		Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville)		
	MultiTouch	3.9 lb / 1.76		4.2 lb / 1.94kg			vPro model: Intel Ethernet Connection I218-LM (Clarkville)		
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						NFC	Optional: Near Field Communication	
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		Security chip	Trusted Platform Module, TCG 1.2-compliant		
	Integrated	8.4 hr		12.6 hr		vPro (optional)	Intel vPro Technology		
	Optimus	8.3 hr		12.4 hr		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter							Win8 / 8.1 64: Windows 8 / 8.1 64-bit	
								Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-STG1-5) © Lenovo

ThinkPad T440s 20AR (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AR0059++	i5-4300U vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AR005A++	i5-4300U vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AR000V++	i5-4300U vPro	HD 4400	4+4GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	None	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR000W++	i5-4300U vPro	HD 4400	4+0GB	14" FHD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0013++	i5-4300U vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	None	None	None	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0014++	i5-4300U vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	None	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001C++	i5-4300U vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001E++	i5-4300U vPro	HD 4400	4+0GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001F++	i5-4300U vPro	HD 4400	4+0GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	None	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001G++	i5-4300U vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001H++	i5-4300U vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001M++	i5-4300U vPro	HD 4400	4+0GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0057++	i7-4600U vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AR0058++	i7-4600U vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AR000U++	i7-4600U vPro	HD 4400	4+4GB	14" FHD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0015++	i7-4600U vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0017++	i7-4600U vPro	HD 4400	4+0GB	14" FHD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR0018++	i7-4600U vPro	HD 4400	4+4GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001A++	i7-4600U vPro	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AR001Q++	i7-4600U vPro	HD 4400	4+4GB	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch None
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600		
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
i7-4600U	2.1 GHz		3.3 GHz	4MB				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform
Optical Storage	None						Smart card reader	Optional: Smart card reader
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)
M.2 SSD							Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Multi-touch	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Camera (optional)							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell			NFC	
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg			Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack
	MultiTouch	3.9 lb / 1.76		4.2 lb / 1.94kg			Security	Power-on password, hard disk password, supervisor password, security keyhole
							Security chip	Trusted Platform Module, TCG 1.2-compliant
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						vPro (optional)	Intel vPro Technology
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh		Win8 / 8.1 64: Windows 8 / 8.1 64-bit
	Integrated	8.4 hr		12.6 hr		16.8 hr		Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit
	Optimus	8.3 hr		12.4 hr		16.6 hr		
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-STG1-6) © Lenovo

ThinkPad T440s 20AR (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam- era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob- al	Ann date (m/y)	
20AR005D++	i5-4200U	No	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 a/b/g/n+BT	EM7345 Select		16GB	720p	Backlit	Finger	None	3+6(47.5wh)	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR005T++	i5-4200U	No	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 a/b/g/n+BT	EM7345 Select		16GB	720p	Backlit	Finger	None	3+6(47.5wh)	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR003T++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR003U++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR003V++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR0046++	i5-4300U	vPro	HD 4400	4+4GB	14" FHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR0048++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR004A++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR005E++	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345 Select		Smart	720p	Backlit	Finger	NFC	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR005U++	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345 Select		Smart	720p	Backlit	Finger	NFC	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR006P++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	500G 5400 SSHD	7260 a/b/g/n+BT	EM7345 Select		Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR003W++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR0041++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR0044++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	Yes	20/13	
20AR005H++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345 Select		Smart	720p	Backlit	Finger	None	3+6(72wh)	65W slim	Win8 DG Win7	3-onsite	No	20/14	
20AR006Q++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	No	500G 5400 SSHD	7260 a/b/g/n+BT	EM7345 Select		Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AR005S++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	IWS	No	20/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch None	ThinkLight™		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed					
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600					
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform	Smart card reader	Optional: Smart card reader	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
M.2 SSD							WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Multi-touch							Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)	NFC	Optional: Near Field Communication	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	Security	Power-on password, hard disk password, supervisor password, security keyhole	
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Security chip	Trusted Platform Module, TCG 1.2-compliant	vPro (optional)	Intel vPro Technology	
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell			Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg							
	MultiTouch	3.9 lb / 1.76		4.2 lb / 1.94kg							
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy										
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication										
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication										
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh					
	Integrated	8.4 hr		12.6 hr		16.8 hr					
	Optimus	8.3 hr		12.4 hr		16.6 hr					
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter										

See footnotes for more detailed information

(G-STG1-7) © Lenovo

ThinkPad T440s 20AR (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AR000T++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR000X++	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR0010++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR0012++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	None	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR0016++	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR001B++	i5-4300U	vPro	HD 4400	4+4GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	None	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR001D++	i5-4300U	vPro	HD 4400	4+0GB	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR003Q++	i5-4300U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	128G SSD	7260 a/b/g/n+BT	N5321	Select	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AR000Y++	i7-4600U	vPro	HD 4400	4+0GB	14" FHD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR0011++	i7-4600U	vPro	HD 4400	4+4GB	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AR005F++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14
20AR005W++	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14
20AR005B++	i5-4300U	vPro	HD 4400	4+4GB	14" FHD IPS	No	128G SSD	7260 ac+BT	N5321	Select	Smart	720p	Backlit	None	None	3+3	45W	Win8 P64	3-onsite IWS	No	20/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch None
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600		
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
i7-4600U	2.1 GHz		3.3 GHz	4MB				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform
Optical Storage	None						Smart card reader	Optional: Smart card reader
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)
M.2 SSD							Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio Some: Capacitive-type multi-touch, supports ten-finger gesture Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
							WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Multi-touch							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider
Camera (optional)							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						NFC	
Weight ²	Models		3-cell + 3-cell		3-cell + 6-cell		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack
	Non-MultiTouch		3.5 lb / 1.59kg		3.9 lb / 1.77kg		Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the keyboard bezel, swipe sensor
	MultiTouch		3.9 lb / 1.76		4.2 lb / 1.94kg			
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication							
Max battery life ¹⁰	Models		3-cell + 3-cell		3-cell + 6-cell 47.5Wh 3-cell + 6-cell 72Wh			
	Integrated		8.4 hr		12.6 hr 16.8 hr			
	Optimus		8.3 hr		12.4 hr 16.6 hr			
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter							

See footnotes for more detailed information

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ThinkPad T440s 20AR (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AR005G++	i7-4600U	vPro GT 730M	4+4GB	14" FHD IPS	MT	512G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	65W slim	Win8 P64	3-onsite	No	20/14
20AR005V++	i7-4600U	vPro GT 730M	4+4GB	14" FHD IPS	MT	512G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	65W slim	Win8 P64	3-onsite	No	20/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed			ThinkLight™
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600			
	i5-4210U		1.7 GHz	2.7 GHz	3MB				
	i5-4300U		1.9 GHz	2.9 GHz	3MB				
i7-4600U	2.1 GHz		3.3 GHz	4MB					
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform	
Optical Storage	None						Smart card reader	Optional: Smart card reader	
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Ports	Three USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio						WLAN ⁴	11b/g/n+BT:	ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card
	Some: Capacitive-type multi-touch, supports ten-finger gesture							7260 b/g/n+BT:	Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
Multi-touch	Some: HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							7260 a/b/g/n+BT:	Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							7260 ac+BT:	Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Graphics	Intel HD Graphics 4400 in processor, or Intel HD Graphics 4400 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						WWAN (optional)	Upg:	Wireless WAN upgradable
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm						SIM card (optional)	EM7345:	Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS
								N5321:	Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Weight ²	Models						Bluetooth™	Ethernet	vPro model:
	Non-MultiTouch								
	MultiTouch								
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy						NFC	Optional: Near Field Communication	
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Max battery life ¹⁰	Models						Security chip	Trusted Platform Module, TCG 1.2-compliant	
	Integrated						vPro (optional)	Intel vPro Technology	
	Optimus						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
							Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter							Win8 / 8.1 64:	Windows 8 / 8.1 64-bit
								Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

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Lenovo® ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s

ThinkPad T450s Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Smart card reader	Optional: Smart card reader			
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
	i5-5300U			2.3 GHz	2.9 GHz	3MB							
i7-5600U	2.6 GHz			3.2 GHz	4MB								
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Chipset	Intel SoC (System on Chip) platform								UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch			
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket								Security	Power-on password, hard disk password, supervisor password, security keyhole			
Display	Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio								Security chip	Trusted Platform Module, TCG 1.2-compliant			
Multi-touch (opt)	Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures			
	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits								vPro (optional)	Intel vPro Technology			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
M.2 SSD (opt)	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™								Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
	Some: SSHD with 8GB NAND flash memory								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
Optical	Single-sided M.2 SSD, via M.2 card slot								Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
Ethernet	None									Integrated	10.16 hr	14.9 hr	19.9 hr
	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville)								Discrete	10.5 hr	15.4 hr	20.6 hr	
Bluetooth™	vPro model: Intel Ethernet Connection I218-LM (Clarkville)								AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
WLAN ⁴	One of the following, configurable by model:									Some: Windows 8.1 64-bit			
WWAN (optional)	• 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card								Some: Windows 8.1 Pro 64-bit				
	• 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card								• Lenovo Solution Center				
SIM card (opt)	• 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card								• Lenovo SHAREit				
	• 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card								• ThinkVantage Product Recovery				
Dimensions ³	One of the following, configurable by model:								• Rescue and Recovery™				
	• Wireless WAN upgradable								• ThinkVantage System Update				
Weight ²	• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card								• PC Device Stage				
	• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								• Weather Channel				
Case material	AT&T® or Verizon® LTE (4G), contract required with service provider								• Evernote				
	14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm								• Maxthon Cloud Browser				
Weight ²	14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm								• Bing Translator				
	Models	No + 3-cell		3-cell + 3-cell		3-cell + 6-cell		• Norton Studio					
Weight ²	Integrated Non-touch	3.26 lb / 1.48 kg		3.49 lb / 1.59 kg		3.90 lb / 1.77 kg		• Microsoft Office preloaded; purchase a product key to activate					
	Integrated Multi-touch	3.79 lb / 1.72 kg		4.02 lb / 1.82 kg		4.42 lb / 2.01 kg		• Norton™ Internet Security (30 days of virus definitions)					
Weight ²	Discrete Non-touch	3.27 lb / 1.48 kg		3.51 lb / 1.59 kg		3.91 lb / 1.77 kg		Limited warranty ¹² One of the following, configurable by model:					
	Discrete Multi-touch	3.80 lb / 1.72 kg		4.03 lb / 1.83 kg		4.43 lb / 2.01 kg		• 1-year depot repair service					
Case material	Display cover:	Carbon-Fiber Reinforced Plastic;							• 3-year/1-yr battery depot repair service				
	Bottom:	Magnesium/Aluminum							• 3-year/1-yr battery limited onsite service ²⁴				
Case material	Display cover:	Carbon-Fiber Reinforced Plastic;							• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service ¹⁷)				
	Bottom:	Magnesium/Aluminum							Environment				
Case material	Display cover:	Carbon-Fiber Reinforced Plastic;							EPEAT™ Gold (US) or EPEAT Silver (WE);				
	Bottom:	Magnesium/Aluminum							ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant				

Multicard reader Ports 4-in-1 reader (MMC, SD, SDHC, SDXC)
Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)

Camera HD720p resolution, low light sensitive, fixed focus
Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack

Keyboard 6-row, spill-resistant, multimedia Fn keys, optional LED backlight
UltraNav™ TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch

Security Power-on password, hard disk password, supervisor password, security keyhole
chip Trusted Platform Module, TCG 1.2-compliant
ThinkEngine Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures

vPro (optional) Intel vPro Technology
Fingerprint reader Optional: Fingerprint reader on the keyboard bezel, swipe sensor

Internal battery Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)
External battery Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)
Max battery life¹⁰

Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
Integrated	10.16 hr	14.9 hr	19.9 hr
Discrete	10.5 hr	15.4 hr	20.6 hr

AC adapter 45W AC adapter, 65W Slim AC adapter, or 65W AC adapter

Preload Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
• Lenovo Solution Center
• Lenovo SHAREit
• ThinkVantage Product Recovery
• Rescue and Recovery™
• ThinkVantage System Update
• PC Device Stage
• Adobe® Reader®
• Evernote®
• Skype™
• Maxthon Cloud Browser
• Microsoft® Office preloaded; purchase a product key to activate
• Norton™ Internet Security (30 days of virus definitions)
Some: Windows 8.1 64-bit
Some: Windows 8.1 Pro 64-bit
• Lenovo Solution Center
• Lenovo SHAREit
• Lenovo Companion
• ThinkVantage System Update
• PC Device Stage
• Weather Channel
• Evernote
• Maxthon Cloud Browser
• Bing Translator
• Norton Studio
• Microsoft Office preloaded; purchase a product key to activate
• Norton Internet Security (30 days of virus definitions)

Limited warranty¹² One of the following, configurable by model:
• 1-year depot repair service
• 3-year/1-yr battery depot repair service
• 3-year/1-yr battery limited onsite service²⁴
• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)

Environment EPEAT™ Gold (US) or EPEAT Silver (WE);
ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant

ThinkPad T450s 20BX (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20BX000X++	i5-5200U	No	HD 5500	4+0GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX000Y++	i5-5200U	No	HD 5500	4+0GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0013++	i5-5200U	No	HD 5500	4+0GB	14" HD+	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0014++	i5-5200U	No	HD 5500	4+0GB	14" HD+	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX001X++	i5-5200U	No	HD 5500	4+8GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX001Y++	i5-5200U	No	HD 5500	4+8GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0012++	i5-5300U	vPro	HD 5500	4+0GB	14" HD+	No	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0020++	i5-5300U	vPro	HD 5500	4+8GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0024++	i5-5300U	vPro	HD 5500	4+8GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX000T++	i7-5600U	vPro	HD 5500	4+8GB	14" FHD IPS	No	512G SSD	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX000U++	i7-5600U	vPro	HD 5500	4+8GB	14" FHD IPS	No	512G SSD	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX000W++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BX0011++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm			
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Integrated Non-touch	3.26 lb / 1.48 kg	3.49 lb / 1.59 kg	3.90 lb / 1.77 kg
	i7-5600U		2.6 GHz	3.2 GHz	4MB			Integrated Multi-touch	3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg
						Discrete Non-touch	3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg		
						Discrete Multi-touch	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg		
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material	Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum			
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Intel vPro (optional)	Intel vPro Technology			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
							External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Integrated	10.16 hr	14.9 hr	19.9 hr
								Discrete	10.5 hr	15.4 hr	20.6 hr
							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
								Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-STG2-1) © Lenovo

ThinkPad T450s 20BX (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BX000V++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15
20BX0010++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm 14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Integrated Non-touch	3.26 lb / 1.48 kg	3.49 lb / 1.59 kg	3.90 lb / 1.77 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Integrated Multi-touch	3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg
i7-5600U	2.6 GHz		3.2 GHz	4MB	Discrete Non-touch		3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg		
							Discrete Multi-touch	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg	
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material	Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum			
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
							External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Integrated	10.16 hr	14.9 hr	19.9 hr
								Discrete	10.5 hr	15.4 hr	20.6 hr
							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-STG2-2) © Lenovo

ThinkPad T450s 20BW (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20BW0000++	i5-5300U	vPro	HD 5500	4+2GB	14" FHD IPS	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BW0002++	i5-5300U	vPro	HD 5500	4+4GB	14" HD+	No	240G SSD Opal2	None	7265 a/b/g/n+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BW0001++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	No	1T 5400	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(48wh)	45W	Win8.1 DG Win7	3-onsite	No	01/15
20BW0003++	i5-5300U	vPro	HD 5500	4+4GB	14" FHD IPS	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW0005++	i5-5300U	vPro	HD 5500	4+0GB	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW000E++	i5-5300U	vPro	HD 5500	4+4GB	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW000F++	i5-5300U	vPro	HD 5500	4+4GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW000G++	i5-5300U	vPro	HD 5500	4+4GB	14" FHD IPS	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW0008++	i7-5600U	vPro	HD 5500	4+4GB	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW000D++	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20BW000L++	i7-5600U	vPro	HD 5500	4+4GB	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm			
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Integrated Non-touch	3.26 lb / 1.48 kg	3.49 lb / 1.59 kg	3.90 lb / 1.77 kg
i7-5600U	2.6 GHz		3.2 GHz	4MB	Integrated Multi-touch		3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg		
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Weight ²	Discrete Non-touch	3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg
Chipset	Intel SoC (System on Chip) platform							Discrete Multi-touch	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket							Case material	Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum		
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS							Smart card reader	Optional: Smart card reader		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits						Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory							Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Camera	HD720p resolution, low light sensitive, fixed focus			
Optical	None						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card		7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card				Security	Power-on password, hard disk password, supervisor password, security keyhole			
WWAN (optional)	7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card		7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card				Security chip	Trusted Platform Module, TCG 1.2-compliant			
	Upg: Wireless WAN upgradable						vPro (optional)	Intel vPro Technology			
	N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
	EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Integrated	10.16 hr	14.9 hr	19.9 hr
								Discrete	10.5 hr	15.4 hr	20.6 hr
							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
								Win8.1 64: Windows 8.1 64-bit			
								Win8.1 P64: Windows 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-STG2-3) © Lenovo

ThinkPad T450s 20BW (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Ann date Global (m/y)
20BW000K++	i5-5300U	vPro	HD 5500	4+4GB	14" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite IWS	Yes 01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm 14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed					
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Models			
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Integrated Non-touch			
i7-5600U	2.6 GHz		3.2 GHz	4MB	3.26 lb / 1.48 kg						
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						3.49 lb / 1.59 kg				
Chipset	Intel SoC (System on Chip) platform						3-cell + 3-cell				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						3-cell + 6-cell				
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Integrated Multi-touch				
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits						3.27 lb / 1.48 kg				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Discrete Non-touch				
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						3.51 lb / 1.59 kg				
Optical	None						Discrete Multi-touch				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						3.80 lb / 1.72 kg				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Smart card reader Multicard reader Ports				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Camera Audio support				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Keyboard UltraNav™				
							Security				
							Security chip				
							vPro (optional)				
							Fingerprint reader				
							Internal battery				
							External battery				
							Max battery life ¹⁰				
							Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh) Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)				
							Models				
							Integrated				
							Discrete				
							AC adapter				
							Preload				
							Limited warranty ¹²				
							1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-STG2-4) © Lenovo



Lenovo® ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p

ThinkPad T540p Platform Specifications *Product Specifications Reference (PSREF)*

ThinkPad T540p Platform Specifications Product Specifications Reference (PSREF)

Positioning	Premiere performance; two spindles								Chipset	Mobile Intel QM87 Express Chipset										
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor								ExpressCard	One slot (ExpressCard/34)										
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Smart card reader	Optional: Smart card reader										
	i3-4000M	2	4	2.4 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4600	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
	i3-4100M			2.5 GHz	-	3MB			Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector										
	i5-4200M			2.5 GHz	3.1 GHz	3MB			WLAN ⁴	One of the following, configurable by model:										
	i5-4210M			2.6 GHz	3.2 GHz	3MB				<ul style="list-style-type: none">• ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card										
	i5-4300M			2.6 GHz	3.3 GHz	3MB				WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD):									
	i5-4330M	2.8 GHz	3.5 GHz	3MB	<ul style="list-style-type: none">• Wireless WAN upgradable• Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)															
	i7-4600M	2.9 GHz	3.6 GHz	4MB	SIM card (optional)	One of the following, configurable by model:														
	i7-4700MQ	2.4 GHz	3.4 GHz	6MB		<ul style="list-style-type: none">• AT&T® or Verizon® LTE (4G), contract required with service provider (US models)• Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)• User selectable, contract required with service provider														
i7-4710MQ	2.5 GHz	3.5 GHz	6MB	Security chip		Power-on password, hard disk password, supervisor password, security keyhole														
i7-4800MQ	2.7 GHz	3.7 GHz	6MB			Trusted Platform Module, TCG 1.2-compliant														
i7-4900MQ			2.8 GHz	3.8 GHz	8MB			vPro (optional)	Intel vPro Technology											
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor										
Optical Ultrabay	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Limited warranty ¹²											
Storage	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								One of the following, configurable by model:											
M.2 SSD									<ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service)¹⁷											
Widescreen display	Some: 15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Preload											
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit											
Graphics	Intel HD Graphics 4600 in processor only, or Intel HD Graphics 4600 in processor and NVIDIA GeForce® GT 730M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 1920x1200@60Hz (VGA); 3840x2160@60Hz (DP via mDP cable)								Some: Windows 8 / 8.1 Pro 64-bit Some: Windows 8 / 8.1 Pro 64-bit											
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch								<ul style="list-style-type: none">• Lenovo Solution Center• Lenovo Support• Lenovo Companion• ThinkVantage System Update• Lenovo Reach (Windows 8.1 model)• Hightail - Metro (Windows 8.1 model)• Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)• Lenovo Cloud Storage by SugarSync (Windows 8 model)• PC Device Stage• Adobe® Reader®• Nitro Pro• Evernote®• Skype™• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions)• Cyberlink PowerDVD (DVD±RW)• Cyberlink Power2Go (DVD±RW)• Cyberlink PowerProducer (DVD±RW)											
ThinkLight™	None								<ul style="list-style-type: none">• Rara Streaming• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)• Cyberlink PowerDVD (DVD±RW)• Cyberlink Power2Go (DVD±RW)• Cyberlink PowerProducer (DVD±RW)											
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm								Environment											
Weight ²	<table><tr><td>Models</td><td>6-cell</td><td>9-cell</td></tr><tr><td>Integrated</td><td>5.31 lb / 2.41kg</td><td>5.65 lb / 2.56kg</td></tr><tr><td>Optimus</td><td>5.43 lb / 2.46kg</td><td>5.80 lb / 2.63kg</td></tr></table>								Models	6-cell	9-cell	Integrated	5.31 lb / 2.41kg	5.65 lb / 2.56kg	Optimus	5.43 lb / 2.46kg	5.80 lb / 2.63kg	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant		
Models	6-cell	9-cell																		
Integrated	5.31 lb / 2.41kg	5.65 lb / 2.56kg																		
Optimus	5.43 lb / 2.46kg	5.80 lb / 2.63kg																		
Case material	Glass-Fiber Reinforced Plastic																			
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																			
Max battery life ¹⁰	<table><tr><td>Models</td><td>6-cell</td><td>9-cell</td></tr><tr><td>Integrated</td><td>7 hr</td><td>12.5 hr</td></tr><tr><td>Optimus</td><td>6.2 hr</td><td>11 hr</td></tr></table>								Models	6-cell	9-cell	Integrated	7 hr	12.5 hr	Optimus	6.2 hr	11 hr			
Models	6-cell	9-cell																		
Integrated	7 hr	12.5 hr																		
Optimus	6.2 hr	11 hr																		
AC adapter	65-watt, 90-watt, or 135-watt AC adapter																			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)																			
NFC	Optional: Near Field Communication																			

ThinkPad T540p 20BE (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BE00B3++	i3-4100M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	No	06/14
20BE0042++	i3-4000M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE004D++	i5-4330M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	11/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	6-cell	9-cell	
	i3-4000M	2	2.4 GHz	-	3MB		DDR3L-1600	Integrated	7 hr	12.5 hr	
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr	
	i5-4200M		2.5 GHz	3.1 GHz	3MB			AC adapter			65-watt, 90-watt, or 135-watt AC adapter
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard			6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch
	i5-4330M		2.8 GHz	3.5 GHz	3MB			ThinkLight™			None
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			Chipset			Mobile Intel QM87 Express Chipset
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			ExpressCard			One slot (ExpressCard/34)
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Smart card reader			Optional: Smart card reader			
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	Multicard reader			4-in-1 reader (MMC, SD, SDHC, SDXC)			
i7-4900MQ		2.8 GHz	3.8 GHz	8MB	Ports			Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					WLAN ⁴				11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card					WWAN (optional)				Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
M.2 SSD						SIM card (optional)				Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS					Audio support				HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Security chip				Power-on password, hard disk password, supervisor password, security keyhole	
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)					Security chip vPro (optional)				Trusted Platform Module, TCG 1.2-compliant	
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm					Fingerprint reader				Optional: Fingerprint reader on the palm rest, swipe sensor	
Weight ²	Models	6-cell		9-cell		Preload				Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
	Integrated	5.31 lb / 2.41kg		5.65 lb / 2.56kg		Win8 / 8.1 64:				Windows 8 / 8.1 64-bit	
	Optimus	5.43 lb / 2.46kg		5.80 lb / 2.63kg		Win8 / 8.1 P64:				Windows 8 / 8.1 Pro 64-bit	
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)										
NFC	Optional: Near Field Communication										

See footnotes for more detailed information

(G-KM1-1) © Lenovo

ThinkPad T540p 20BE (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BE0088++	i5-4200M	No	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	01/14
20BE0089++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	01/14
20BE00B2++	i5-4210M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00B5++	i5-4210M	No	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00B9++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00BC++	i5-4210M	No	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	N5321	Select	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-onsite	No	06/14
20BE0041++	i5-4200M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	10/13
20BE0060++	i5-4200M	No	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	N5321	Select	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	11/13
20BE0061++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	11/13
20BE0062++	i5-4200M	No	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	None	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	01/14
20BE0064++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	None	None	Smart	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	01/14
20BE0081++	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	01/14
20BE0082++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	01/14
20BE008L++	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	Exp/34	None	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	03/14
20BE008M++	i7-4600M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7345	Select	Smart	Exp/34	None	Backlit	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	03/14

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			ThinkLight™		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Chipset		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Mobile Intel QM87 Express Chipset					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	One slot (ExpressCard/34)					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Smart card readerOptional: Smart card reader				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader4-in-1 reader (MMC, SD, SDHC, SDXC)			
							PortsTwo USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
Optical	DVD burner, 9.5mm Ultrabay slim, removable						WLAN ⁴			
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high						7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card			
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card			
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio						WWAN (optional) Upg: Wireless WAN upgradable			
	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio						EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required			
							Select: User selectable, contract required with service provider			
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm						Audio support			
	FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Weight ²	Models		6-cell		9-cell		Security			
	Integrated		5.31 lb / 2.41kg		5.65 lb / 2.56kg		Power-on password, hard disk password, supervisor password, security keyhole			
	Optimus		5.43 lb / 2.46kg		5.80 lb / 2.63kg		Security chip			
							Trusted Platform Module, TCG 1.2-compliant			
Case material	Glass-Fiber Reinforced Plastic						vPro (optional) Intel vPro Technology			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint readerOptional: Fingerprint reader on the palm rest, swipe sensor			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						Preload			
NFC	Optional: Near Field Communication						Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
							Win8 / 8.1 64: Windows 8 / 8.1 64-bit			
							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-KM1-2) © Lenovo

ThinkPad T540p 20BE (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BE0086++	i7-4700MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	01/14
20BE0087++	i7-4700MQ	No	GT 730M	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	135W	Win8.1 DG Win7	3-onsite	No	01/14
20BE00B1++	i5-4210M	No	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	90W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00B4++	i7-4710MQ	No	GT 730M	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	135W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00B8++	i7-4710MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00BA++	i7-4710MQ	No	GT 730M	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	135W	Win8.1 DG Win7	3-onsite	No	06/14
20BE00BB++	i7-4710MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8.1 DG Win7	3-onsite	No	06/14
20BE003Y++	i5-4200M	No	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	90W	Win8 DG Win7	3-onsite	No	10/13
20BE004B++	i7-4800MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	512G SSD	7260 ac+BT	N5321	Select	None	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	11/13
20BE004C++	i7-4900MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	None	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	11/13
20BE005X++	i7-4700MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	None	None	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	10/13
20BE005Y++	i7-4700MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	10/13
20BE0063++	i7-4700MQ	No	GT 730M	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	None	None	Smart	Exp/34	720p	Backlit	Finger	None	6	135W	Win8 DG Win7	3-onsite	No	01/14
20BE0065++	i7-4700MQ	No	GT 730M	8GBx1	15.6" FHD	500G 7200	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	Finger	None	6	135W	Win8 DG Win7	3-onsite	No	11/13
20BE0080++	i7-4700MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14
20BE0083++	i7-4900MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14
20BE0084++	i7-4800MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	512G SSD	7260 ac+BT	EM7345	Select	None	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	01/14

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			ThinkLight™		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			None		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Chipset					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	Mobile Intel QM87 Express Chipset					
i7-4900MQ	2.8 GHz	3.8 GHz	8MB	ExpressCard						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						One slot (ExpressCard/34)			
	Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable						Smart card reader		
		One modular bay for removable devices (right side, cold swap), 9.5mm high						Optional: Smart card reader		
	M.2 SSD	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high						Multicard reader		
		Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						4-in-1 reader (MMC, SD, SDHC, SDXC)		
	Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio						Ports		
		Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio						Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
	Camera (optional)	Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						WLAN ⁴		
		HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card		
	Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card		
						7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card				
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm						7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
	FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						WWAN (optional)			
Weight ²							Upg: Wireless WAN upgradable			
	Models	6-cell	9-cell				EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS			
Case material	Glass-Fiber Reinforced Plastic						N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
							SIM card (optional)			
Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required			
	Intel Ethernet Connection I217-LM (Clarkville)						Select: User selectable, contract required with service provider			
	Optional: Near Field Communication						Audio support			
							HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
							Security			
							Power-on password, hard disk password, supervisor password, security keyhole			
							Security chip			
							Trusted Platform Module, TCG 1.2-compliant			
							vPro (optional)			
							Intel vPro Technology			
							Fingerprint reader			
							Optional: Fingerprint reader on the palm rest, swipe sensor			
							Preload			
							Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
							Win8 / 8.1 64: Windows 8 / 8.1 64-bit			
							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-KM1-3) © Lenovo

ThinkPad T540p 20BE (Optimus) - TopSeller (Onsite) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BE008K++	i7-4900MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345 Select	None	None	Exp/34	None	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	03/14
20BE008N++	i7-4700MQ	No	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	EM7345 Select	Smart	None	Exp/34	None	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	03/14
20BE008P++	i7-4800MQ	vPro	GT 730M	8GBx1	15.5" 3K IPS	512G SSD	7260 ac+BT	EM7345 Select	None	None	Exp/34	None	Backlit	Finger	None	9	135W	Win8 DG Win7	3-onsite	No	03/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	Integrated	7 hr	12.5 hr	
	i3-4100M		2.5 GHz	-	3MB		Optimus	6.2 hr	11 hr	
	i5-4200M		2.5 GHz	3.1 GHz	3MB		65-watt, 90-watt, or 135-watt AC adapter			
	i5-4210M		2.6 GHz	3.2 GHz	3MB		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
	i5-4300M		2.6 GHz	3.3 GHz	3MB		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
	i5-4330M		2.8 GHz	3.5 GHz	3MB		ThinkLight™ None			
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		Chipset	Mobile Intel QM87 Express Chipset		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		ExpressCard	One slot (ExpressCard/34)		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Smart card reader		Optional: Smart card reader			
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)			
i7-4900MQ		2.8 GHz	3.8 GHz	8MB	Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
M.2 SSD							WWAN (optional)			
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						SIM card (optional)			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						Audio support			
Weight ²							HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
	Models	6-cell		9-cell		Security				
	Integrated	5.31 lb / 2.41kg		5.65 lb / 2.56kg		Power-on password, hard disk password, supervisor password, security keyhole				
Case material							Security chip vPro (optional)			
	Optimus	5.43 lb / 2.46kg		5.80 lb / 2.63kg		Trusted Platform Module, TCG 1.2-compliant				
							Intel vPro Technology			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint reader			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						Optional: Fingerprint reader on the palm rest, swipe sensor			
NFC	Optional: Near Field Communication						Preload			
							Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
							Win8 / 8.1 64: Windows 8 / 8.1 64-bit			
							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-KM1-4) © Lenovo

ThinkPad T540p 20BF

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF005U++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8.1 DG Win7	1-depot	Yes	04/14
20BF005S++	i7-4600M	vPro	HD 4600	8GBx1	15.6" FHD	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8.1 DG Win7	3-depot	Yes	04/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	Integrated	7 hr	12.5 hr	
	i3-4100M		2.5 GHz	-	3MB		Optimus	6.2 hr	11 hr	
	i5-4200M		2.5 GHz	3.1 GHz	3MB		AC adapter 65-watt, 90-watt, or 135-watt AC adapter			
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
	i5-4300M		2.6 GHz	3.3 GHz	3MB		UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
	i5-4330M		2.8 GHz	3.5 GHz	3MB		ThinkLight™ None			
	i7-4600M	2.9 GHz	3.6 GHz	4MB	Chipset Mobile Intel QM87 Express Chipset					
	i7-4700MQ	2.4 GHz	3.4 GHz	6MB	ExpressCard One slot (ExpressCard/34)					
i7-4710MQ	2.5 GHz	3.5 GHz	6MB	Smart card reader Optional: Smart card reader						
i7-4800MQ	2.7 GHz	3.7 GHz	6MB	Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)						
i7-4900MQ	2.8 GHz	3.8 GHz	8MB	Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴ 11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
M.2 SSD							SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Audio support HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security Power-on password, hard disk password, supervisor password, security keyhole			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Security chip Trusted Platform Module, TCG 1.2-compliant			
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						vPro (optional) Intel vPro Technology			
Weight ²	Models		6-cell		9-cell		Fingerprint reader Optional: Fingerprint reader on the palm rest, swipe sensor			
	Integrated		5.31 lb / 2.41kg		5.65 lb / 2.56kg		Preload Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
	Optimus		5.43 lb / 2.46kg		5.80 lb / 2.63kg		Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Case material	Glass-Fiber Reinforced Plastic						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)									
NFC	Optional: Near Field Communication									

See footnotes for more detailed information

(G-KM1-5) © Lenovo

ThinkPad T540p 20BF (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF005X++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8.1 P64	3-depot	Yes	06/14
20BF002D++	i7-4600M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20BF002G++	i7-4600M	vPro	HD 4600	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20BF002P++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20BF0030++	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20BF0034++	i7-4600M	vPro	HD 4600	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13
20BF0037++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-depot	Yes	10/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			ThinkLight™		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Chipset		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Mobile Intel QM87 Express Chipset					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	ExpressCard					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		One slot (ExpressCard/34)				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Smart card reader	Optional: Smart card reader		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
M.2 SSD							Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
Weight ²							Security	Power-on password, hard disk password, supervisor password, security keyhole		
							Security chip	Trusted Platform Module, TCG 1.2-compliant		
							vPro (optional)	Intel vPro Technology		
							Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor		
Case material							Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
								Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
								Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)									
NFC	Optional: Near Field Communication									

See footnotes for more detailed information

(G-KM1-6) © Lenovo

ThinkPad T540p 20BF (Optimus)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF005R++	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	Yes	04/14
20BF005T++	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 a/b/g/n+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	Yes	04/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	Integrated	7 hr	12.5 hr	
	i3-4100M		2.5 GHz	-	3MB		Optimus	6.2 hr	11 hr	
	i5-4200M		2.5 GHz	3.1 GHz	3MB		AC adapter			
	i5-4210M		2.6 GHz	3.2 GHz	3MB		65-watt, 90-watt, or 135-watt AC adapter			
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Keyboard			
	i5-4330M		2.8 GHz	3.5 GHz	3MB		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		UltraNav™			
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		TrackPoint® pointing device and Mylar surface touchpad,			
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	integrated five buttons, multi-touch					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	ThinkLight™					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		None				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Chipset	Mobile Intel QM87 Express Chipset		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						ExpressCard	One slot (ExpressCard/34)		
M.2 SSD							Smart card reader	Optional: Smart card reader		
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Weight ²	Models		6-cell		9-cell		SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
	Integrated		5.31 lb / 2.41kg		5.65 lb / 2.56kg		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
	Optimus		5.43 lb / 2.46kg		5.80 lb / 2.63kg		Security chip vPro (optional)	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology		
Case material	Glass-Fiber Reinforced Plastic						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)							Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
NFC	Optional: Near Field Communication							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Limited warranty ¹²							1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-KM1-7) © Lenovo

ThinkPad T540p 20BF (Optimus) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF002F++	i7-4600M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002H++	i5-4300M	vPro	GT 730M	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002K++	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002L++	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002M++	i7-4600M	vPro	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002Q++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002V++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF002X++	i7-4600M	vPro	GT 730M	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13
20BF0033++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-depot	Yes	10/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			Keyboard		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			UltraNav™		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			ThinkLight™		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			Chipset		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	Mobile Intel QM87 Express Chipset					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	ExpressCard					
i7-4900MQ		2.8 GHz	3.8 GHz	8MB		One slot (ExpressCard/34)				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Smart card reader	Optional: Smart card reader		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
M.2 SSD							Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
Weight ²							Security	Power-on password, hard disk password, supervisor password, security keyhole		
							Security chip	Trusted Platform Module, TCG 1.2-compliant		
							vPro (optional)	Intel vPro Technology		
							Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor		
Case material							Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
								Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
								Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)									
NFC	Optional: Near Field Communication									

See footnotes for more detailed information

(G-KM1-8) © Lenovo

ThinkPad T540p 20BF (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Cam-era	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF0038++	i5-4300M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-onsite	No	10/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type		Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Max battery life ¹⁰		Models	6-cell	9-cell
Memory	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	Integrated		7 hr		
	i3-4100M		2.5 GHz	-	3MB		Optimus		6.2 hr		
	i5-4200M		2.5 GHz	3.1 GHz	3MB		AC adapter		65-watt, 90-watt, or 135-watt AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Keyboard		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight		
	i5-4300M		2.6 GHz	3.3 GHz	3MB		UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i5-4330M		2.8 GHz	3.5 GHz	3MB		ThinkLight™		None		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		Chipset		Mobile Intel QM87 Express Chipset		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		ExpressCard		One slot (ExpressCard/34)		
Optical Ultrabay Storage	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Smart card reader		Optional: Smart card reader		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)		
M.2 SSD	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card							WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS							SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)							Security chip		Power-on password, hard disk password, supervisor password, security keyhole		
HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm							vPro (optional)		Trusted Platform Module, TCG 1.2-compliant		
Models							Fingerprint reader		Optional: Fingerprint reader on the palm rest, swipe sensor		
Integrated							Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Optimus									Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Glass-Fiber Reinforced Plastic							Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
Bluetooth™											
Ethernet											
NFC											
Optional: Near Field Communication											

See footnotes for more detailed information

(G-KM1-9) © Lenovo

ThinkPad T540p 20BF (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF002B++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF002E++	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF002T++	i7-4600M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF002W++	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF002Y++	i7-4600M	vPro	HD 4600	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF0036++	i7-4600M	vPro	HD 4600	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 P64	3-onsite	Yes	10/13
20BF0043++	i5-4300M	vPro	HD 4600	8GBx1	15.6" HD	128G SSD	7260 ac+BT	N5321	Select	Smart	Exp/34	720p	Backlit	None	None	6	65W	Win8 P64	3-onsite IWS	No	01/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB			AC adapter		
	i5-4210M		2.6 GHz	3.2 GHz	3MB			65-watt, 90-watt, or 135-watt AC adapter		
	i5-4300M		2.6 GHz	3.3 GHz	3MB			Keyboard		
	i5-4330M		2.8 GHz	3.5 GHz	3MB			6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight		
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB			UltraNav™		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB			TrackPoint® pointing device and Mylar surface touchpad,		
i7-4710MQ	2.5 GHz		3.5 GHz	6MB	integrated five buttons, multi-touch					
i7-4800MQ	2.7 GHz		3.7 GHz	6MB	ThinkLight™					
i7-4900MQ	2.8 GHz	3.8 GHz	8MB	None						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Chipset	Mobile Intel QM87 Express Chipset		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						ExpressCard	One slot (ExpressCard/34)		
M.2 SSD							Smart card reader	Optional: Smart card reader		
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						WLAN ⁴			
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Weight ²	Models		6-cell		9-cell		WWAN (optional)			
	Integrated		5.31 lb / 2.41kg		5.65 lb / 2.56kg		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
	Optimus		5.43 lb / 2.46kg		5.80 lb / 2.63kg		SIM card (optional)			
Case material	Glass-Fiber Reinforced Plastic						Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Audio support			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
NFC	Optional: Near Field Communication						Security			
							Power-on password, hard disk password, supervisor password, security keyhole			
							Security chip			
							Trusted Platform Module, TCG 1.2-compliant			
							vPro (optional)			
							Intel vPro Technology			
							Fingerprint reader			
							Optional: Fingerprint reader on the palm rest, swipe sensor			
							Preload			
							Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
							Win8 / 8.1 64: Windows 8 / 8.1 64-bit			
							Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-KM1-10) © Lenovo

ThinkPad T540p 20BF (Optimus) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Cam-era	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF0039++	i5-4300M	vPro	GT 730M	8GBx1	15.6" FHD	128G SSD	7260 ac+BT	N5321	Lenovo	None	Exp/34	720p	None	Finger	None	9	90W	Win8 DG Win7	3-onsite	No	10/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB		DDR3L-1600	Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB					
	i5-4210M		2.6 GHz	3.2 GHz	3MB					
	i5-4300M		2.6 GHz	3.3 GHz	3MB					
	i5-4330M		2.8 GHz	3.5 GHz	3MB					
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB					
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB					
i7-4710MQ	2.5 GHz		3.5 GHz	6MB						
i7-4800MQ	2.7 GHz		3.7 GHz	6MB						
i7-4900MQ		2.8 GHz	3.8 GHz	8MB						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					AC adapter	65-watt, 90-watt, or 135-watt AC adapter			
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card					Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
M.2 SSD						ThinkLight™	None			
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS					Chipset	Mobile Intel QM87 Express Chipset			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					ExpressCard	One slot (ExpressCard/34)			
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)					Smart card reader	Optional: Smart card reader			
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Weight ²						Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector			
Case material						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
						WWAN (optional)	Upg: Wireless WAN upgradeable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider			
Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) Optional: Near Field Communication					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
						Security chip	Power-on password, hard disk password, supervisor password, security keyhole			
						Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant			
						Fingerprint reader	Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor			
						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

ThinkPad T540p 20BF (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BF002C++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF002J++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF002N++	i7-4600M	vPro	GT 730M	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF002R++	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF002S++	i7-4600M	vPro	GT 730M	8GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF002U++	i5-4300M	vPro	GT 730M	4GBx1	15.6" HD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF0031++	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF0032++	i5-4300M	vPro	GT 730M	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13
20BF0035++	i7-4600M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 P64	3-onsite	Yes	10/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Battery type Max battery life ¹⁰	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	6-cell	9-cell
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600		Integrated	7 hr	12.5 hr
	i3-4100M		2.5 GHz	-	3MB			Optimus	6.2 hr	11 hr
	i5-4200M		2.5 GHz	3.1 GHz	3MB					
	i5-4210M		2.6 GHz	3.2 GHz	3MB					
	i5-4300M		2.6 GHz	3.3 GHz	3MB					
	i5-4330M		2.8 GHz	3.5 GHz	3MB					
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		AC adapter	65-watt, 90-watt, or 135-watt AC adapter		
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		ThinkLight™	None		
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		Chipset	Mobile Intel QM87 Express Chipset		
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		ExpressCard	One slot (ExpressCard/34)		
							Smart card reader	Optional: Smart card reader		
							Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
							Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
Camera (optional)							Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor		
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
Weight ²	Models		6-cell		9-cell					
	Integrated		5.31 lb / 2.41kg		5.65 lb / 2.56kg					
	Optimus		5.43 lb / 2.46kg		5.80 lb / 2.63kg					
Case material	Glass-Fiber Reinforced Plastic									
Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) Optional: Near Field Communication									

See footnotes for more detailed information

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Lenovo® ThinkPad T550



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ThinkPad T550 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Smart card reader <i>Optional:</i> Smart card reader					
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500	Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector				
	i5-5300U			2.3 GHz	2.9 GHz	3MB			Camera (optional)	HD720p resolution, low light sensitive, fixed focus				
	i7-5600U			2.6 GHz	3.2 GHz	4MB			Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 2560x1600@60Hz (VGA)								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight				
Chipset	Intel SoC (System on Chip) platform								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Security	Power-on password, hard disk password, supervisor password, security keyhole				
Display	Some:	15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 200 or 220 nits, 16:9 aspect ratio, 350:1 or 400:1 contrast ratio						Security chip	Trusted Platform Module, TCG 1.2-compliant					
	Some:	15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio						ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures					
	Some:	15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS						vPro (optional)	Intel vPro Technology					
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits								Fingerprint reader	<i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor				
Storage	Some:	SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable						Internal battery	<i>Optional:</i> Integrated Li-Polymer 3-cell (44Wh)					
	Some:	HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™						External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)					
M.2 SSD (opt)	Some:	SSHD with 8GB NAND flash memory						Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh		
Optical	None	Single-sided M.2 SSD, via M.2 card slot							Battery life	14.8 hr	20 hr	25.2 hr		
Ethernet	Non-vPro model:	Intel Ethernet Connection I218-V (Clarkville)						AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter					
Bluetooth™	vPro model:	Intel Ethernet Connection I218-LM (Clarkville)						Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit					
WLAN ⁴	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Some: Windows 8.1 64-bit					
	One of the following, configurable by model:								• Lenovo Solution Center					
	• 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card								• Lenovo SHAREit					
	• 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card								• Lenovo Companion					
	• 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card								• ThinkVantage Product Recovery					
	• 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card								• Rescue and Recovery™					
									• ThinkVantage System Update					
									• PC Device Stage					
									• Adobe® Reader®					
									• Evernote®					
									• Skype™					
									• Maxthon Cloud Browser					
									• Microsoft® Office preloaded; purchase a product key to activate					
									• Norton™ Internet Security (30 days of virus definitions)					
									• Norton Internet Security (30 days of virus definitions)					
WWAN (optional)	One of the following, configurable by model:							Limited warranty ¹²	One of the following, configurable by model:					
	• Wireless WAN upgradable								• 1-year depot repair service					
	• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card								• 3-year/1-yr battery depot repair service					
	• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								• 3-year/1-yr battery limited onsite service ²⁴					
									• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service) ¹⁷					
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant				
Dimensions ³	15.6" (WxDxH):	14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm												
	15.6" Touch (WxDxH):	14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm												
Weight ²	Models	No + 6-cell		3-cell + 3-cell		3-cell + 6-cell								
	Integrated Non-touch	4.93 lb / 2.23 kg		4.70 lb / 2.13 kg		5.04 lb / 2.29 kg								
	Integrated Multi-touch	-		5.01 lb / 2.27 kg		5.35 lb / 2.43 kg								
	Discrete Non-touch	5.01 lb / 2.27 kg		4.78 lb / 2.17 kg		5.12 lb / 2.32 kg								
	Discrete Multi-touch	-		5.09 lb / 2.31 kg		5.43 lb / 2.46 kg								
Case material	Display cover:	Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model);												
	Bottom:	Glass-Fiber Reinforced Plastic												

ThinkPad T550 20CK (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20CK0003++	i5-5200U	No	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK0004++	i5-5200U	No	HD 5500	4GBx1	15.6" FHD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK0006++	i5-5200U	No	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK0008++	i5-5200U	No	HD 5500	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK000X++	i5-5200U	No	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK000V++	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK000W++	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK0001++	i7-5600U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CK0002++	i7-5600U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T550 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²				
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600						
	i5-5300U		2.3 GHz	2.9 GHz	3MB							
	i7-5600U		2.6 GHz	3.2 GHz	4MB							
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material		Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							Smart card reader Multicard reader Ports	Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
Display	Some: 15.6" (396mm) HD (1366x768), 200 / 220 nits, 350:1 / 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS								Camera (optional) HD720p resolution, low light sensitive, fixed focus			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits								Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory								Keyboard UltraNav™ 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Security Security chip vPro (optional) Fingerprint reader		Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor			
Optical	None							Internal battery External battery Max battery life ¹⁰				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)							Optional: Integrated Li-Polymer 3-cell (44Wh) Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Models				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card							3-cell + 3-cell				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Battery life					
							14.8 hr					
							20 hr					
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						25.2 hr					
							AC adapter					
							45W AC adapter, 65W Slim AC adapter, or 65W AC adapter					
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit				
								Win8.1 64: Windows 8.1 64-bit				
								Win8.1 P64: Windows 8.1 Pro 64-bit				
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-SZ1-1) © Lenovo

ThinkPad T550 20CJ (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CJ0002++	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	500G 5400 SSHD	None	7265 a/b/g/n+BT	Upg	None	None	None	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CJ0003++	i5-5300U	vPro	HD 5500	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 a/b/g/n+BT	Upg	None	None	None	Backlit	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CJ0004++	i5-5300U	vPro	HD 5500	4GBx1	15.6" FHD	No	500G 7200	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	None	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20CJ0006++	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ0008++	i5-5300U	vPro	HD 5500	8GBx1	15.6" HD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ000F++	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ000H++	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ000J++	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ000K++	i5-5300U	vPro	HD 5500	4GBx1	15.6" FHD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ0007++	i7-5600U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ0009++	i7-5600U	vPro	HD 5500	8GBx1	15.6" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20CJ000D++	i7-5600U	vPro	HD 5500	8GBx1	15.6" HD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T550 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³		15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²					
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell	
	i5-5300U		4.93 lb / 2.23 kg	4.70 lb / 2.13 kg	5.04 lb / 2.29 kg							
i7-5600U	2.6 GHz		3.2 GHz	4MB	Integrated Non-touch		-	5.01 lb / 2.27 kg	5.35 lb / 2.43 kg			
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory							Integrated Multi-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg	
Chipset	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							Discrete Non-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg	
Memory								Discrete Multi-touch	-			
Display	Some: 15.6" (396mm) HD (1366x768), 200 / 220 nits, 350:1 / 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic				
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits						Smart card reader	Optional: Smart card reader				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector				
Optical	None						Camera (optional)	HD720p resolution, low light sensitive, fixed focus				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Security	Power-on password, hard disk password, supervisor password, security keyhole				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Security chip	Trusted Platform Module, TCG 1.2-compliant				
							vPro (optional)	Intel vPro Technology				
							Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor				
							Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)				
							External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)				
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	
								Battery life	14.8 hr	20 hr	25.2 hr	
							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter				
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit				
								Win8.1 64: Windows 8.1 64-bit				
								Win8.1 P64: Windows 8.1 Pro 64-bit				
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS				

See footnotes for more detailed information

(G-SZ1-2) © Lenovo

ThinkPad T550 20CJ (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CJ000V++	i5-5300U	vPro	HD 5500	8GBx1	15.5" 3K IPS	MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+6(48wh)	65W	Win8.1 P64	3-onsite	No	01/15
20CJ000U++	i7-5600U	vPro	HD 5500	8GBx1	15.5" 3K IPS	MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 P64	3-onsite	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad T550 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor					Dimensions ³		15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Integrated Non-touch	4.93 lb / 2.23 kg	4.70 lb / 2.13 kg	5.04 lb / 2.29 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Integrated Multi-touch	-	5.01 lb / 2.27 kg	5.35 lb / 2.43 kg
	i7-5600U		2.6 GHz	3.2 GHz	4MB			Discrete Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg
								Discrete Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory					Case material		Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					Smart card reader		Optional: Smart card reader			
Display	Some: 15.6" (396mm) HD (1366x768), 200 / 220 nits, 350:1 / 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS					Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits					Ports		Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory					Camera (optional)		HD720p resolution, low light sensitive, fixed focus			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot					Audio support		HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Optical	None					Keyboard		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					UltraNav™		TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Security		Power-on password, hard disk password, supervisor password, security keyhole			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card					Security chip		Trusted Platform Module, TCG 1.2-compliant			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					vPro (optional)		Intel vPro Technology			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					Fingerprint reader		Optional: Fingerprint reader on the palm rest, swipe sensor			
						Internal battery		Optional: Integrated Li-Polymer 3-cell (44Wh) Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)			
						External battery					
						Max battery life ¹⁰		Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Battery life	14.8 hr	20 hr	25.2 hr
						AC adapter		45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
						Preload		Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit			
						Limited warranty ¹²		1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-SZ1-3) © Lenovo



Lenovo® ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540

ThinkPad W540 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mobile workstation; two spindles								Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor								WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none">• ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card• Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics			
	i5-4200M	2	4	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600			
	i5-4210M			2.6 GHz	3.2 GHz	3MB					
	i5-4330M			2.8 GHz	3.5 GHz	3MB					
	i7-4600M			2.9 GHz	3.6 GHz	4MB					
	i7-4700MQ	4	8	2.4 GHz	3.4 GHz	6MB					
	i7-4710MQ			2.5 GHz	3.5 GHz	6MB					
	i7-4800MQ			2.7 GHz	3.7 GHz	6MB					
	i7-4810MQ			2.8 GHz	3.8 GHz	6MB					
i7-4900MQ	2.8 GHz			3.8 GHz	8MB						
i7-4910MQ	2.9 GHz			3.9 GHz	8MB						
i7-4930MX	3 GHz	3.9 GHz	8MB								
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable								SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none">• AT&T® or Verizon® LTE (4G), contract required with service provider (US models)• Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)• User selectable, contract required with service provider	
Optical (optional) Ultrabay	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) Optional: Near Field Communication	
Storage	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor	
M.2 SSD									Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)	
Widescreen display	Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• ThinkVantage Product Recovery• Rescue and Recovery™• ThinkVantage System Update• Lenovo Cloud Storage by SugarSync• PC Device Stage• Adobe® Reader®• Nitro Pro• Evernote®• Skype™• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions)• Cyberlink PowerDVD (DVD±RW)• Cyberlink Power2Go (DVD±RW)• Cyberlink PowerProducer (DVD±RW) Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo Support• Lenovo Companion• ThinkVantage System Update• Lenovo Reach (Windows 8.1 model)• Hightail - Metro (Windows 8.1 model)• Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model)• Lenovo Cloud Storage by SugarSync (Windows 8 model)• PC Device Stage• AccuWeather• Amazon Kindle• Nitro Pro• Evernote• Skype• Rara Streaming• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)• Cyberlink PowerDVD (DVD±RW)• Cyberlink Power2Go (DVD±RW)• Cyberlink PowerProducer (DVD±RW)	
Multi-touch	None										
Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator										
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus										
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory, supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays; Max external resolution: 3840x2160@60Hz (DisplayPort via MiniDP cable); 3840x2160@60Hz (Thunderbolt); 1920x1200@60Hz (VGA)										
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch										
ThinkLight™	None										
Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm										
Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)										
Case material	Glass-Fiber Reinforced Plastic										
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr										
AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter										
Chipset	Mobile Intel QM87 Express Chipset										
ExpressCard	One slot (ExpressCard/34)										
Smart card reader	Optional: Smart card reader										
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card										
Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector										
For ISV certifications, please visit www.lenovo.com/support/ISV											
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant										

ThinkPad W540 20BG (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Color calibration	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BG003X++	i7-4810MQ	vPro	K1100M	8GBx2	15.6" FHD	1T 5400	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	None	Finger	None	None	9	170W	Win8.1 DG Win7	3-depot	No	06/14
20BG003Y++	i7-4710MQ	No	K1100M	8GBx1	15.6" FHD	1T 5400	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	None	Finger	None	None	9	170W	Win8.1 DG Win7	3-depot	No	06/14
20BG0040++	i7-4810MQ	vPro	K1100M	8GBx1	15.6" FHD	1T 5400	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	None	Finger	None	None	9	170W	Win8.1 DG Win7	3-depot	No	06/14
20BG0041++	i7-4810MQ	vPro	K1100M	8GBx2	15.6" FHD	512G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	None	Finger	None	None	9	170W	Win8.1 DG Win7	3-depot	No	06/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)	
	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Case material	Glass-Fiber Reinforced Plastic	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	i7-4600M		2.9 GHz	3.6 GHz	4MB		AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter	
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Chipset	Mobile Intel QM87 Express Chipset	
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		ExpressCard	One slot (ExpressCard/34)	
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		Smart card reader	Optional: Smart card reader	
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
	i7-4910MQ		2.9 GHz	3.9 GHz	8MB		Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector	
i7-4930MX	3 GHz	3.9 GHz	8MB						
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						SIM card (opt)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
Widescreen display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						NFC (optional)	Near Field Communication	
Multi-touch	None						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						vPro (optional)	Intel vPro Technology	
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor	
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch							Win8 / 8.1 64: Win8 / 8.1 P64:	Windows 8 / 8.1 64-bit Windows 8 / 8.1 Pro 64-bit
ThinkLight™	None						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-KM1W-1) © Lenovo

ThinkPad W540 20BG (Optimus) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Cam- era	Backlit key- board	Finger- print reader	NFC	Color cali- brator	Bat- tery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob- al	Ann date (m/y)	
20BG0045++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	06/14
20BG0046++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7	3-onsite	No	06/14
20BG0047++	i5-4210M	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	135W	Win8.1 DG	Win7	3-onsite	No	06/14
20BG001E++	i7-4700MQ	No	K1100M	4GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	11/13
20BG001H++	i5-4200M	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	135W	Win8 DG	Win7	3-onsite	No	11/13
20BG001K++	i7-4700MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	None	9	170W	Win8 DG	Win7	3-onsite	No	11/13
20BG001T++	i5-4330M vPro	K1100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	135W	Win8 DG	Win7	3-onsite	No	11/13	
20BG002W++	i7-4700MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	None	9	170W	Win8 DG	Win7	3-onsite	No	01/14
20BG0032++	i7-4700MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	EM7345	Select	Smart	None	Backlit	Finger	None	None	9	170W	Win8 DG	Win7	3-onsite	No	03/14
20BG0042++	i7-4910MQ vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	06/14	
20BG0044++	i7-4810MQ vPro	K2100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	06/14	
20BG001B++	i7-4800MQ vPro	K2100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	11/13	
20BG001C++	i7-4900MQ vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	11/13	
20BG001S++	i7-4930MX vPro	K2100M	8GBx2	15.5" 3K IPS	2x512G SSD	0	None	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	11/13	
20BG002V++	i7-4900MQ vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	01/14	
20BG0031++	i7-4900MQ vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	EM7345	Select	None	None	Backlit	Finger	None	X-Rite	9	170W	Win8 DG	Win7	3-onsite	No	03/14	

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)	
	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Case material	Glass-Fiber Reinforced Plastic	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	i7-4600M		2.9 GHz	3.6 GHz	4MB		AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter	
	i7-4700MQ	2.4 GHz	3.4 GHz	6MB	Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
	i7-4710MQ	2.5 GHz	3.5 GHz	6MB	Chipset ExpressCard Smart card reader Multicard reader Ports		Mobile Intel QM87 Express Chipset		
	i7-4800MQ	2.7 GHz	3.7 GHz	6MB			One slot (ExpressCard/34)		
	i7-4810MQ	2.8 GHz	3.8 GHz	6MB			Optional: Smart card reader		
	i7-4900MQ	2.8 GHz	3.8 GHz	8MB			4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card		
i7-4910MQ	2.9 GHz	3.9 GHz	8MB	Two USB 3.0, two USB 2.0 (one Always On),					
i7-4930MX	3 GHz	3.9 GHz	8MB	VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector					
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
	Optical (optional) Ultrabay Storage	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS M.2 SSD (opt) M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Widescreen display Multi-touch	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS None						SIM card (opt)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
	Color calibration Camera (optional)	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Bluetooth™ Ethernet NFC (optional)	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) Near Field Communication
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory						Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor	
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch						Preload	Win8 / 8.1 DG Win7: Win8 / 8.1 64: Win8 / 8.1 P64:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Windows 8 / 8.1 64-bit Windows 8 / 8.1 Pro 64-bit
ThinkLight™	None						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-KM1W-2) © Lenovo

ThinkPad W540 20BG (Optimus) - TopSeller (Onsite) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Color calibrator	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BG001U++	i7-4600M	vPro	K1100M	8GBx1	15.6" FHD	256G SSD eDrive + 500G 7200	No	None	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	X-Rite	9	135W	Win8 DG Win7	3-onsite	No	11/13
20BG0043++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	256G SSD eDrive + 1T 5400	No	None	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite	No	06/14
20BG001D++	i7-4800MQ	vPro	K2100M	8GBx1	15.6" FHD	256G SSD eDrive + 1T 5400	No	None	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG Win7	3-onsite	No	11/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)	
	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Case material	Glass-Fiber Reinforced Plastic	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	i7-4600M		2.9 GHz	3.6 GHz	4MB		AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter	
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Chipset	Mobile Intel QM87 Express Chipset	
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		ExpressCard	One slot (ExpressCard/34)	
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		Smart card reader	Optional: Smart card reader	
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
	i7-4910MQ		2.9 GHz	3.9 GHz	8MB		Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector	
i7-4930MX	3 GHz	3.9 GHz	8MB						
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						SIM card (opt)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
Widescreen display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						NFC (optional)	Near Field Communication	
Multi-touch	None						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						vPro (optional)	Intel vPro Technology	
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor	
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch							Win8 / 8.1 64:	Windows 8 / 8.1 64-bit
ThinkLight™	None							Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-KM1W-5) © Lenovo

ThinkPad W540 20BH (Optimus) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Cam- era	Backlit key- board	Finger- print reader	NFC	Color cali- brator	Bat- tery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob- al	Ann date (m/y)
20BH002C++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	180G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002D++	i7-4800MQ	vPro	K1100M	4GBx2	15.5" 3K IPS	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002F++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002H++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002R++	i7-4800MQ	vPro	K1100M	8GBx1	15.6" FHD	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002T++	i7-4800MQ	vPro	K1100M	8GBx1	15.5" 3K IPS	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH004M++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	180G SSD Opal	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	04/14
20BH004N++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	500G 7200	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	None	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	04/14
20BH004Q++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	128G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	04/14
20BH002K++	i7-4800MQ	vPro	K2100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-depot	Yes	11/13
20BH002P++	i7-4800MQ	vPro	K2100M	4GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 P64	3-depot	Yes	11/13
20BH004P++	i7-4800MQ	vPro	K2100M	4GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 P64	3-depot	Yes	04/14
20BH004R++	i7-4900MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	NFC	X-Rite	9	170W	Win8 P64	3-depot	Yes	04/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)	
	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Case material	Glass-Fiber Reinforced Plastic	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	i7-4600M		2.9 GHz	3.6 GHz	4MB		AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter	
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Chipset	Mobile Intel QM87 Express Chipset	
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		ExpressCard	One slot (ExpressCard/34)	
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		Smart card reader	Optional: Smart card reader	
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
i7-4910MQ	2.9 GHz		3.9 GHz	8MB	Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector		
i7-4930MX		3 GHz	3.9 GHz	8MB					
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card	
	quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support							7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
	All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable							7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable							7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						WWAN (optional)	Upg: Wireless WAN upgradable	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS	
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS							N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						SIM card (opt)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required	
								Select: User selectable, contract required with service provider	
Widescreen display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Multi-touch	Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
Color calibration	None						NFC (optional)	Near Field Communication	
Camera (optional)	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest						Security	Power-on password, hard disk password, supervisor password, security keyhole	
	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and						vPro (optional)	Intel vPro Technology	
	NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor	
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch							Win8 / 8.1 64:	through downgrade rights in Windows 8 / 8.1 Pro 64-bit
	None							Win8 / 8.1 P64:	Windows 8 / 8.1 64-bit
ThinkLight™									Windows 8 / 8.1 Pro 64-bit
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-KM1W-3) © Lenovo

ThinkPad W540 20BH (Optimus) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Fingerprint reader	NFC	Color calibration	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BH002E++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	2x500G 7200	0	None	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002J++	i7-4800MQ	vPro	K1100M	4GBx2	15.5" 3K IPS	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002M++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002N++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002Q++	i7-4800MQ	vPro	K1100M	4GBx2	15.6" FHD	180G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002S++	i7-4800MQ	vPro	K1100M	8GBx1	15.6" FHD	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002U++	i7-4800MQ	vPro	K1100M	8GBx1	15.5" 3K IPS	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002G++	i7-4800MQ	vPro	K2100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 P64	3-onsite	Yes	11/13
20BH002L++	i7-4800MQ	vPro	K2100M	4GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 P64	3-onsite	Yes	11/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)	
	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Case material	Glass-Fiber Reinforced Plastic	
	i5-4210M		2.6 GHz	3.2 GHz	3MB		Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	i7-4600M		2.9 GHz	3.6 GHz	4MB		AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter	
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	i7-4710MQ		2.5 GHz	3.5 GHz	6MB		Chipset	Mobile Intel QM87 Express Chipset	
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		ExpressCard	One slot (ExpressCard/34)	
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		Smart card reader	Optional: Smart card reader	
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
i7-4910MQ	2.9 GHz		3.9 GHz	8MB	Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector		
i7-4930MX	3 GHz	3.9 GHz	8MB						
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						SIM card (opt)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
Widescreen display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						NFC (optional)	Near Field Communication	
Multi-touch	None						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						vPro (optional)	Intel vPro Technology	
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M, PCI Express® x16, 2GB memory						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor	
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight						Preload	Win8 / 8.1 DG Win7:	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch							Win8 / 8.1 64:	Windows 8 / 8.1 64-bit
ThinkLight™	None							Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

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Lenovo® ThinkPad W541



Lenovo ThinkPad W541



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Lenovo ThinkPad W541



Lenovo ThinkPad W541

ThinkPad W541 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor								Smart card reader		Optional: Smart card reader	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	ExpressCard	One slot (ExpressCard/34)		
	i5-4210M	2	4	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card		
	i5-4340M			2.9 GHz	3.6 GHz	3MB			Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector		
	i7-4600M			2.9 GHz	3.6 GHz	4MB			Camera (optional)	HD720p resolution, low light sensitive, fixed focus		
	i7-4710MQ	4	8	2.5 GHz	3.5 GHz	6MB	DDR3L-1600	Intel HD Graphics 4600	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack		
	i7-4810MQ			2.8 GHz	3.8 GHz	6MB			Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight		
	i7-4910MQ			2.9 GHz	3.9 GHz	8MB				TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch		
	i7-4940MX			3.1 GHz	4 GHz	8MB				Security	Power-on password, hard disk password, supervisor password, security keyhole	
Graphics	Intel HD Graphics 4600 in processor and NVIDIA Quadro® K1100M or K2100M, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays; Max resolution: 3840x2160 @60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160 @60Hz (Thunderbolt); 1920x1200 @60Hz (VGA)								Security chip	Trusted Platform Module, TCG 1.2-compliant		
Chipset	Mobile Intel QM87 Express Chipset								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures		
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable								vPro (optional)	Intel vPro Technology		
									Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor		
									Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator		
Display	Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication		
Multi-touch	None								Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Shock Mounted Hard Drive, Active Protection System™ All: removable, upgradable, supports the second disk								AC adapter	dual-core: 135W AC adapter; quad-core: 170W AC adapter		
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable									Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit		
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access									• Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Cloud Storage by SugarSync • PC Device Stage • Adobe® Reader® • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)									• Microsoft Office preloaded; purchase a product key to activate • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									• Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio		
WLAN ⁴	One of the following, configurable by model: • 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11b/g/n, Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • 11a/b/g/n, Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT adapter, M.2 card • 11ac, Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT adapter, M.2 card									• Norton Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)		
WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): • Wireless WAN upgradable • Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) • Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)									For ISV certifications, please visit www.lenovo.com/support/ISV		
SIM card (optional)	One of the following, configurable by model: • AT&T® or Verizon® LTE (4G), contract required with service provider • User selectable, contract required with service provider								Limited warranty ¹²	One of the following, configurable by model: • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, IWS (International Warranty Service ¹⁷)		
Dimensions ³	15.6" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm								Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant		
Weight ²	6-cell: starting at 5.57 lb (2.53 kg); 9-cell: starting at 5.95 lb (2.70 kg)											
Case material	Glass-Fiber Reinforced Plastic											

ThinkPad W541 20EF (Discrete) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	NFC	Color cali-brator	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)	
20EF000Y++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF0010++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF0011++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF0012++	i7-4710MQ	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF0013++	i5-4210M	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	135W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF0014++	i5-4210M	No	K1100M	4GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	135W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000Q++	i7-4810MQ	vPro	K2100M	8GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000R++	i7-4810MQ	vPro	K2100M	8GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000S++	i7-4910MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000T++	i7-4910MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000W++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000U++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	256G SSD eDrive + 1T 5400	No	None	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000V++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	256G SSD eDrive + 1T 5400	No	None	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15
20EF000X++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7	3-onsite	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W541 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	
	i5-4210M	2	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	
	i5-4340M		2.9 GHz	3.6 GHz	3MB		
	i7-4600M		2.9 GHz	3.6 GHz	4MB		
	i7-4710MQ	4	2.5 GHz	3.5 GHz	6MB		
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		
	i7-4910MQ		2.9 GHz	3.9 GHz	8MB		
i7-4940MX	3.1 GHz		4 GHz	8MB			
Graphics	Intel HD Graphics 4600 and NVIDIA Quadro® K1100M or K2100M, 2GB memory						
Chipset	Mobile Intel QM87 Express Chipset						
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS None						SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider Dimensions ³ 15.6" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm Weight ² 6-cell: starting at 5.57 lb (2.53 kg); 9-cell: starting at 5.95 lb (2.70 kg) Case material Glass-Fiber Reinforced Plastic Smart card reader Optional: Smart card reader ExpressCard One slot (ExpressCard/34) Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector Camera (optional) HD720p resolution, low light sensitive, fixed focus Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack
Multi-touch							
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card						Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, TCG 1.2-compliant vPro (optional) Intel vPro Technology Fingerprint reader Optional: Fingerprint reader on the palm rest, swipe sensor Color calibration Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest Battery type Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication Max battery life ¹⁰ 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr AC adapter dual-core: 135W AC adapter; quad-core: 170W AC adapter Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS

See footnotes for more detailed information

(G-KM15W-1) © Lenovo

ThinkPad W541 20EG (Discrete) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	NFC	Color cali-brator	Bat-tery adapter	Power (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20EG000G++	i5-4340M	vPro	K1100M	8GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	EM7345 select	Smart	720p	Backlit	Finger	None	X-Rite	9	135W	Win8.1 DG Win7	3-onsite	No	01/15	
20EG000F++	i7-4940MX	vPro	K2100M	8GBx2	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	EM7345 select	Smart	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite	No	01/15	
20EG0006++	i7-4810MQ	vPro	K1100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG0009++	i7-4810MQ	vPro	K1100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG000B++	i7-4810MQ	vPro	K1100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG000E++	i7-4810MQ	vPro	K1100M	8GBx1	15.5" 3K IPS	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG0005++	i7-4810MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG0007++	i7-4910MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG0008++	i7-4810MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG000A++	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG000C++	i7-4810MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20EG000D++	i7-4910MQ	vPro	K2100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W541 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	
	i5-4210M	2	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	
	i5-4340M		2.9 GHz	3.6 GHz	3MB		
	i7-4600M		2.9 GHz	3.6 GHz	4MB		
	i7-4710MQ	4	2.5 GHz	3.5 GHz	6MB		
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB		
	i7-4910MQ		2.9 GHz	3.9 GHz	8MB		
i7-4940MX	3.1 GHz		4 GHz	8MB			
Graphics	Intel HD Graphics 4600 and NVIDIA Quadro® K1100M or K2100M, 2GB memory						
Chipset	Mobile Intel QM87 Express Chipset						
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets						
	quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support						
	All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS None						
Multi-touch							
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card						
WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS							
SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider							
Dimensions ³ 15.6" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm							
Weight ² 6-cell: starting at 5.57 lb (2.53 kg); 9-cell: starting at 5.95 lb (2.70 kg)							
Case material Glass-Fiber Reinforced Plastic							
Smart card readerOptional: Smart card reader							
ExpressCard One slot (ExpressCard/34)							
Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card							
Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector							
Camera (optional)HD720p resolution, low light sensitive, fixed focus							
Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack							
Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight							
UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch							
Security Power-on password, hard disk password, supervisor password, security keyhole							
Security chip Trusted Platform Module, TCG 1.2-compliant							
vPro (optional) Intel vPro Technology							
Fingerprint readerOptional: Fingerprint reader on the palm rest, swipe sensor							
Color calibrationOptional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest							
Battery type Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication							
Max battery life ¹⁰ 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr							
AC adapter dual-core: 135W AC adapter; quad-core: 170W AC adapter							
Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit							
Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS							

See footnotes for more detailed information

(G-KM15W-2) © Lenovo



ThinkPad W550s Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor							
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics
	i5-5300U	2	4	2.3 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500
	i7-5500U			2.4 GHz	3 GHz	4MB		
i7-5600U	2.6 GHz			3.2 GHz	4MB			
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 2560x1600@60Hz (VGA)							
Chipset	Intel SoC (System on Chip) platform							
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio <i>Some:</i> 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS							
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits							
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory							
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot							
Optical	None							
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)							
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							
WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card• 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card• 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card							
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• Wireless WAN upgradable• Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card• Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card							
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider							
Dimensions ³	<i>15.6" (WxDxH):</i> 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm <i>15.6" Touch (WxDxH):</i> 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm							
Weight ²	<i>Models</i>	<i>No + 6-cell</i>		<i>3-cell + 3-cell</i>		<i>3-cell + 6-cell</i>		
	<i>Non-touch</i>	5.01 lb / 2.27 kg		4.78 lb / 2.17 kg		5.12 lb / 2.32 kg		
	<i>Multi-touch</i>	-		5.09 lb / 2.31 kg		5.43 lb / 2.46 kg		
Case material	<i>Display cover:</i> Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); <i>Bottom:</i> Glass-Fiber Reinforced Plastic							

Smart card reader	<i>Optional:</i> Smart card reader			
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
Camera	HD720p resolution, low light sensitive, fixed focus			
Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, TCG 1.2-compliant			
ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures			
vPro (optional)	Intel vPro Technology			
Fingerprint reader	<i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor			
Internal battery	<i>Optional:</i> Integrated Li-Polymer 3-cell (44Wh)			
External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)			
Max battery life ¹⁰	<i>Models</i>	<i>3-cell + 3-cell</i>	<i>3-cell + 6-cell 48Wh</i>	<i>3-cell + 6-cell 72Wh</i>
	<i>Battery life</i>	12.7 hr	17.3 hr	21.8 hr
AC adapter	65W Slim or 65W AC adapter			
Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo SHAREit• ThinkVantage Product Recovery• Rescue and Recovery™• ThinkVantage System Update• PC Device Stage• Adobe® Reader®• Evernote®• Skype™• Maxthon Cloud Browser• Microsoft® Office preloaded; purchase a product key to activate• Norton™ Internet Security (30 days of virus definitions) <i>For ISV certifications, please visit www.lenovo.com/support/ISV</i>			
	<i>Some:</i> Windows 8.1 64-bit			
	<i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none">• Lenovo Solution Center• Lenovo SHAREit• Lenovo Companion• ThinkVantage System Update• PC Device Stage• Weather Channel• Evernote• Maxthon Cloud Browser• Bing Translator• Norton Studio• Microsoft Office preloaded; purchase a product key to activate• Norton Internet Security (30 days of virus definitions)			
Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service²⁴• 3-year/1-yr battery limited onsite service, IWS (International Warranty Service)¹⁷⁾			
Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant			

ThinkPad W550s 20E2 (Discrete) - TopSeller (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20E2000D++	i5-5300U	vPro	K620M	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000E++	i5-5300U	vPro	K620M	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000F++	i5-5300U	vPro	K620M	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000G++	i5-5300U	vPro	K620M	4GBx1	15.6" FHD	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000A++	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000B++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000C++	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000H++	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000J++	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000K++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000L++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 a/b/g/n+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E2000P++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W550s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 6-cell	3-cell + 3-cell
	i5-5300U	2	2.3 GHz	2.9 GHz	3MB	DDR3L-1600	Non-touch		5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg
	i7-5500U		2.4 GHz	3 GHz	4MB		Multi-touch		-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg
i7-5600U	2.6 GHz		3.2 GHz	4MB							
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory						Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh) Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)			
							External battery	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
							Max battery life ¹⁰	Battery life	12.7 hr	17.3 hr	21.8 hr
							AC adapter	65W Slim or 65W AC adapter			
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-SZ1W-1) © Lenovo

ThinkPad W550s 20E2 (Discrete) - TopSeller (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (Int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20E2000M++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	MT	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 P64	3-onsite	No	01/15
20E2000N++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	MT	512G SSD	None	7265 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 P64	3-onsite	No	01/15
20E20014++	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	MT	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 P64	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W550s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor					Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Weight ²				
	i5-5300U	2	2.3 GHz	2.9 GHz	3MB		DDR3L-1600		Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell
	i7-5500U		2.4 GHz	3 GHz	4MB				Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg
i7-5600U	2.6 GHz		3.2 GHz	4MB	Multi-touch	-			5.09 lb / 2.31 kg	5.43 lb / 2.46 kg		
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory					Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic					
Chipset	Intel SoC (System on Chip) platform					Smart card reader	Optional: Smart card reader					
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)					
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS					Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits					Camera	HD720p resolution, low light sensitive, fixed focus					
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory					Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack					
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot					Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight					
Optical	None					UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch					
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					Security	Power-on password, hard disk password, supervisor password, security keyhole					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Security chip	Trusted Platform Module, TCG 1.2-compliant					
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card					vPro (optional)	Intel vPro Technology					
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor					
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)					
						External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)					
						Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh		
							Battery life	12.7 hr	17.3 hr	21.8 hr		
						AC adapter	65W Slim or 65W AC adapter					
						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit					
							Win8.1 64:	Windows 8.1 64-bit				
							Win8.1 P64:	Windows 8.1 Pro 64-bit				
						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS					

See footnotes for more detailed information

(G-SZ1W-2) © Lenovo

ThinkPad W550s 20E1 (Discrete) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20E1000E++	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS	No	240G SSD Opal2	None	7265 a/b/g/n+BT	EM7345	None	None	720p	Backlit	Finger	3+6(48wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E1000F++	i7-5600U	vPro	K620M	8GBx1	15.6" FHD	No	240G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(48wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E1000T++	i7-5600U	vPro	K620M	8GBx1	15.6" FHD	No	240G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20E10007++	i7-5600U	vPro	K620M	8GBx1	15.6" FHD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E10008++	i7-5600U	vPro	K620M	8GBx2	15.5" 3K IPS MT		512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E10009++	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E1000A++	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS MT		256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E1000B++	i7-5600U	vPro	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E1000C++	i7-5600U	vPro	K620M	8GBx2	15.6" FHD	No	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15
20E1000D++	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS MT		500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-onsite IWS	Yes	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad W550s Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³ Weight ²	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell
	i5-5300U	2	2.3 GHz	2.9 GHz	3MB	DDR3L-1600		Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg
	i7-5500U		2.4 GHz	3 GHz	4MB			Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg
i7-5600U	2.6 GHz		3.2 GHz	4MB							
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory						Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits						Camera	HD720p resolution, low light sensitive, fixed focus			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack			
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant			
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)			
							External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)			
							Max battery life ¹⁰	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh
								Battery life	12.7 hr	17.3 hr	21.8 hr
							AC adapter	65W Slim or 65W AC adapter			
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit			
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			

See footnotes for more detailed information

(G-SZ1W-3) © Lenovo



Lenovo® ThinkPad 11e



Lenovo ThinkPad 11e



Lenovo ThinkPad 11e

ThinkPad 11e 20D9 (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20D90008++	Cel N2920	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	11/14
20D90005++	Cel N2930	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	10/14
20D9001B++	Cel N2940	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	01/15

Processor	Intel® Celeron® processor N2920, N2930, or N2940								Chipset	Intel SoC (System on Chip) platform		
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Ports	One USB 3.0, one powered USB 2.0, HDMI, Ethernet (RJ-45)		
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333		Control buttons	Power button, volume control button		
N2940	1.83 GHz			2.25 GHz	WLAN ⁴				11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								WWAN	None		
Optical Storage	None Some: SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Widescreen display	11.6" (295mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio								Ethernet	Realtek RTL8111GUS-CG Gigabit Network Connection		
Multi-touch									None			
Hinge									Normal hinge, 180 degree			
Camera (optional)									HD720p resolution, low light sensitive			
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz								NFC	None		
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm from 3.28 lb (1.49kg)								Security	Power-on password, hard disk password, supervisor password, security keyhole		
Weight ²									None			
Case color									None			
Case material									None			
Battery type	Integrated Lithium Ion 4-cell (35Wh)								Security chip	None		
Max battery life ¹⁰	Models		Windows 7		Windows 8		vPro (optional) None					
	MobileMark® 2007		7.0 hr		-		Fingerprint readerNone					
	MobileMark 2012		6.0 hr		6.5 hr		Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available For Lenovo service upgrade options, please go to QP-TA sheet					
AC adapter	45-watt AC adapter								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate		
Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack								Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • Lenovo Reach • Hightail - Metro • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)			
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys								Environment EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant			
Touchpad	Buttonless touchpad below keyboard, multi-touch											
ThinkLight™	None											

See footnotes for more detailed information

(G-MR1W-1) © Lenovo

ThinkPad 11e 20D9 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20D90009++	Cel N2920	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	11/14
20D9000N++	Cel N2930	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	10/14
20D9001E++	Cel N2940	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	01/15

Processor	Intel® Celeron® processor N2920, N2930, or N2940								Chipset Multicard reader Ports Control buttons	Intel SoC (System on Chip) platform 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, one powered USB 2.0, HDMI, Ethernet (RJ-45) Power button, volume control button									
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics											
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics											
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333												
N2940	1.83 GHz			2.25 GHz															
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card									
Optical Storage	None Some: SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™								WWAN	None									
Widescreen display	11.6" (295mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio None Normal hinge, 180 degree HD720p resolution, low light sensitive								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									
Multi-touch									Ethernet	Realtek RTL8111GUS-CG Gigabit Network Connection									
Hinge									NFC	None									
Camera (optional)									Security	Power-on password, hard disk password, supervisor password, security keyhole									
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz								Security chip	None									
									vPro (optional)	None									
									Fingerprint reader	None									
									Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available For Lenovo service upgrade options, please go to QP-TA sheet									
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm from 3.28 lb (1.49kg) Display cover: Graphite Black or Silver Bottom: Graphite Black Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Integrated Lithium Ion 4-cell (35Wh)								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate									
Weight ²																			
Case color																			
Case material																			
Battery type	<table><tr><td>Models</td><td>Windows 7</td><td>Windows 8</td></tr><tr><td>MobileMark® 2007</td><td>7.0 hr</td><td>-</td></tr><tr><td>MobileMark 2012</td><td>6.0 hr</td><td>6.5 hr</td></tr></table>								Models	Windows 7	Windows 8	MobileMark® 2007	7.0 hr	-	MobileMark 2012	6.0 hr	6.5 hr	Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • Lenovo Reach • Hightail - Metro • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)	
Models									Windows 7	Windows 8									
MobileMark® 2007									7.0 hr	-									
MobileMark 2012									6.0 hr	6.5 hr									
Max battery life ¹⁰																			
AC adapter																			
Audio support																			
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys								Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant									
Touchpad	Buttonless touchpad below keyboard, multi-touch																		
ThinkLight™	None																		

See footnotes for more detailed information

(G-MR1W-2) © Lenovo

ThinkPad 11e 20DA

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DA0008++	Cel N2920	No	Intel HD	8GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	06/14

Processor	Intel® Celeron® processor N2920, N2930, or N2940								Chipset Multicard reader Ports Control buttons	Intel SoC (System on Chip) platform 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, one powered USB 2.0, HDMI, Ethernet (RJ-45) Power button, volume control button	
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics			
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics			
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333				
N2940	1.83 GHz			2.25 GHz							
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								WLAN ⁴ WWAN Bluetooth™ Ethernet NFC	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card None Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Realtek RTL8111GUS-CG Gigabit Network Connection None Power-on password, hard disk password, supervisor password, security keyhole None None None None	
Optical Storage	None Some: SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™										
Widescreen display	11.6" (295mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio										
Multi-touch											
Hinge	Normal hinge, 180 degree								Security chip vPro (optional) Fingerprint reader	Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available For Lenovo service upgrade options, please go to QP-TA sheet	
Camera (optional)	HD720p resolution, low light sensitive										
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Support - Metro • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • Lenovo Reach • Hightail - Metro • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)	
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm										
Weight ²	from 3.28 lb (1.49kg)										
Case color	Display cover: Graphite Black or Silver Bottom: Graphite Black										
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										
Battery type	Integrated Lithium Ion 4-cell (35Wh)										
Max battery life ¹⁰	Models		Windows 7		Windows 8						
	MobileMark® 2007		7.0 hr		-						
	MobileMark 2012		6.0 hr		6.5 hr						
AC adapter	45-watt AC adapter										
Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack										
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys										
Touchpad	Buttonless touchpad below keyboard, multi-touch										
ThinkLight™	None										
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant										

See footnotes for more detailed information

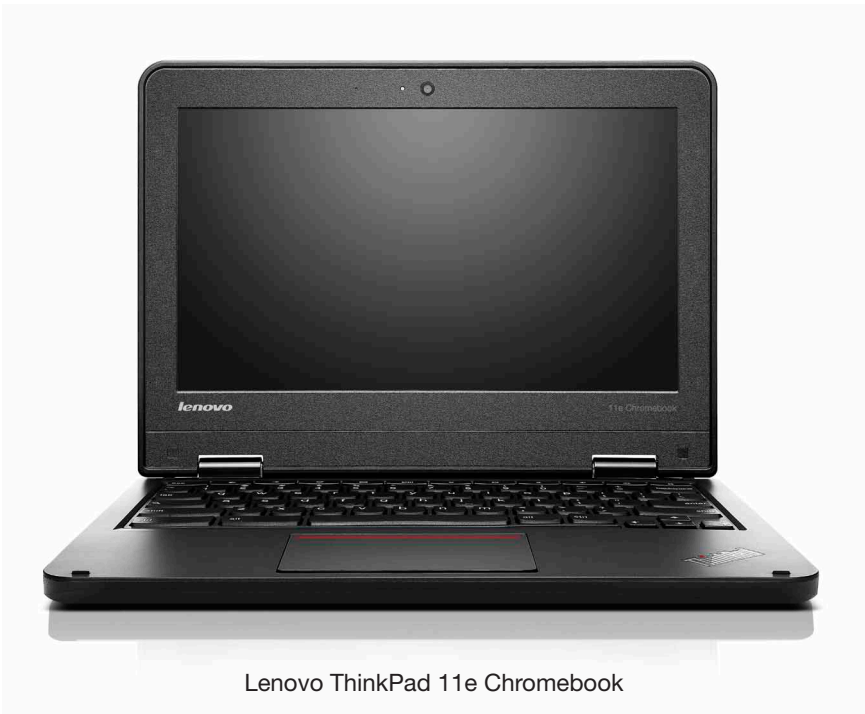
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Lenovo® ThinkPad 11e Chromebook



Lenovo ThinkPad 11e Chromebook



Lenovo ThinkPad 11e Chromebook

ThinkPad 11e Chromebook 20DU (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DU0005++	Cel N2930	No	Intel HD	4GBx1	11.6" HD	16GB eMMC	7260 ac+BT	Black	720p	None	4	45W	Google Chrome	1-depot	No	01/15
20DU0009++	Cel N2940	No	Intel HD	4GBx1	11.6" HD	16GB eMMC	7260 ac+BT	Black	720p	None	4	45W	Google Chrome	1-depot	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

Processor	Intel® Celeron® processor N2920, N2930, or N2940								Audio support	HD Audio, Maxim MAX98090AETL+T codec / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Keyboard	ThinkPad Chrome keyboard, 6-row, multimedia Fn keys
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Touchpad	Buttonless touchpad below keyboard, multi-touch
	N2930			1.83 GHz	2.16 GHz		ThinkLight™		None	
N2940	1.83 GHz			2.25 GHz						
Memory	2GB or 4GB / DDR3L-1600MHz / soldered to systemboard, no sockets									
Optical Storage	None 16GB eMMC (embedded Multi Media Card) flash memory on board									
Widescreen display	11.6" (295mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio									
Multi-touch	None									
Hinge	Normal hinge, 180 degree									
Camera	HD720p resolution, low light sensitive									
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz									
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm									
Weight ²	from 3.09 lb (1.4kg)									
Case color	Display cover: Graphite Black or Silver Bottom: Graphite Black									
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic									
Battery type	Integrated Lithium Ion 4-cell (35Wh)									
Max battery life ¹⁰	more than 8 hours									
AC adapter	45-watt AC adapter									
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available										
Preload Google Chrome OS										
Environment EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant										

See footnotes for more detailed information

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ThinkPad 11e Chromebook 20DB

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DB000D++	Cel N2930	No	Intel HD	4GBx1	11.6" HD	16GB eMMC	7260 ac+BT	Black	720p	None	4	45W	Google Chrome	1-depot	No	09/14

Country Code"++" : AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

Processor	Intel® Celeron® processor N2920, N2930, or N2940								Audio support	HD Audio, Maxim MAX98090AETL+T codec / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Keyboard	ThinkPad Chrome keyboard, 6-row, multimedia Fn keys
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Touchpad	Buttonless touchpad below keyboard, multi-touch
	N2930			1.83 GHz	2.16 GHz		ThinkLight™		None	
N2940	1.83 GHz			2.25 GHz						
Memory	2GB or 4GB / DDR3L-1600MHz / soldered to systemboard, no sockets									
Optical Storage	None 16GB eMMC (embedded Multi Media Card) flash memory on board									
Widescreen display	11.6" (295mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio									
Multi-touch	None									
Hinge	Normal hinge, 180 degree									
Camera	HD720p resolution, low light sensitive									
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz									
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm									
Weight ²	from 3.09 lb (1.4kg)									
Case color	Display cover: Graphite Black or Silver Bottom: Graphite Black									
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic									
Battery type	Integrated Lithium Ion 4-cell (35Wh)									
Max battery life ¹⁰	more than 8 hours									
AC adapter	45-watt AC adapter									

See footnotes for more detailed information

(G-MR1C-2) © Lenovo



Lenovo® ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240

ThinkPad X240 Platform Specifications										Product Specifications Reference (PSREF)											
Positioning	Ultraportable Ultrabook™ or Thinbook; one spindle									WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 										
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor									WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 										
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics													
	i3-4010U	2	4	1.7 GHz	-	3MB	DDR3L-1600	Intel HD graphics 4400													
	i5-4200U			1.6 GHz	2.6 GHz	3MB															
	i5-4210U			1.7 GHz	2.7 GHz	3MB															
	i5-4300U			1.9 GHz	2.9 GHz	3MB															
	i7-4600U			2.1 GHz	3.3 GHz	4MB															
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket									SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 										
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory									Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card									Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication										
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio, TN <i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS									NFC											
Multi-touch Camera (optional)	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus									Security Security chip vPro (optional) Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the keyboard bezel, swipe sensor										
Graphics	Intel HD Graphics 4400 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)									Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 										
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch									Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 /										

ThinkPad X240 20AL (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor vPro		Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AL0081++	i3-4010U	No	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600			ThinkLight™	None	
	i5-4200U		1.6 GHz	2.6 GHz	3MB						
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						Chipset	Intel SoC (System on Chip) platform			
Optical Storage	None						Smart card reader	Optional: Smart card reader			
	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Ports	Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector			
	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card			
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Selecto: User selectable, contract required with service provider			
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Graphics	Intel HD Graphics 4400 in processor						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication			
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						NFC				
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell		Security	Power-on password, hard disk password, supervisor password, security keyhole			
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg		Security chip	Trusted Platform Module, TCG 1.2-compliant			
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg		vPro (optional)	Intel vPro Technology			
Case material	Glass-Fiber Reinforced Plastic						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication							Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh							
	Battery life	8.7 hr	13.1 hr	17.4 hr							
AC adapter	45-watt AC adapter						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-WV1-1) © Lenovo

ThinkPad X240 20AL (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AL008C++	i3-4010U	No	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AL00BY++	i5-4200U	No	HD 4400	8GBx1	12.5" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL00C3++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL00D1++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL007S++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AL007Y++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AL009Q++	i5-4200U	No	HD 4400	8GBx1	12.5" FHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AL00C5++	i5-4200U	No	HD 4400	8GBx1	12.5" FHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14
20AL00FG++	i5-4210U	No	HD 4400	4GBx1	12.5" HD IPS	No	500G 5400 SSHD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL00FH++	i5-4210U	No	HD 4400	4GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL00FM++	i5-4210U	No	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL00FN++	i5-4210U	No	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14
20AL008E++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13	
20AL00BS++	i5-4300U vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 a/b/g/n+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AL00BT++	i5-4300U vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 a/b/g/n+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14	
20AL00C0++	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	EM7345	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14	
20AL00C1++	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14	
20AL00C6++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14	
20AL00D2++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-onsite	No	20/14	
20AL007L++	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13	
20AL007N++	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13	

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None		
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset	Intel SoC (System on Chip) platform		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Ports	Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector		
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Multi-touch	Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication		
Graphics							Intel HD Graphics 4400 in processor			NFC
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg					
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg					
Case material	Glass-Fiber Reinforced Plastic									
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication									
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication									
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh						
	Battery life	8.7 hr	13.1 hr	17.4 hr						
AC adapter	45-watt AC adapter									

See footnotes for more detailed information

(G-WV1-2) © Lenovo

ThinkPad X240 20AL (TopSeller) - Onsite - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AL009N++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AL00BQ++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14
20AL00BR++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None		
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset	Intel SoC (System on Chip) platform		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
i7-4600U	2.1 GHz		3.3 GHz	4MB	Ports		Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						NFC	Optional: Near Field Communication		
Graphics	Intel HD Graphics 4400 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole		
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						Security chip	Trusted Platform Module, TCG 1.2-compliant		
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell		vPro (optional)	Intel vPro Technology		
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Case material	Glass-Fiber Reinforced Plastic						Win8 / 8.1 64:	Windows 8 / 8.1 64-bit		
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit		
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication									
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh						
	Battery life	8.7 hr	13.1 hr	17.4 hr						
AC adapter	45-watt AC adapter						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			

See footnotes for more detailed information

(G-WV1-3) © Lenovo

ThinkPad X240 20AL (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AL00C4++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	MT	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AL007A++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	MT	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL007C++	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	MT	500G 7200	7260 ac+BT	N5321	Select	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL00FP++	i5-4210U	No	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AL00FQ++	i5-4210U	No	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AL0013++	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 a/b/g/n+BT	N5321	Select	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL00BW++	i5-4300U	vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None 3+6(47.5wh)	45W	Win8 P64	3-onsite	No	20/14	
20AL00BX++	i5-4300U	vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None 3+6(47.5wh)	45W	Win8 P64	3-onsite	No	20/14	
20AL00C2++	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AL00C7++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	No	20/14
20AL0011++	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL0076++	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL009L++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AL00BU++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14
20AL00BV++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	240G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14
20AL00C8++	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset	Intel SoC (System on Chip) platform
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)
i7-4600U	2.1 GHz		3.3 GHz	4MB	Ports		Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					NFC	Optional: Near Field Communication	
Graphics	Intel HD Graphics 4400 in processor					Security	Power-on password, hard disk password, supervisor password, security keyhole	
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant	
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg	Win8 / 8.1 64:	Windows 8 / 8.1 64-bit	
Case material	Glass-Fiber Reinforced Plastic					Win8 / 8.1 P64:	Windows 8 / 8.1 Pro 64-bit	
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication							
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh				
	Battery life	8.7 hr	13.1 hr	17.4 hr				
AC adapter	45-watt AC adapter							

See footnotes for more detailed information

(G-WV1-4) © Lenovo

ThinkPad X240 20AM (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AM009J++	i5-4300U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM009K++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM009M++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM009P++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM0014++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM0016++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-depot	Yes	20/13
20AM0018++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	None	None	None	No+6(72wh)	45W	Win8 P64	3-depot	Yes	20/13
20AM0019++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM001C++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM001F++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-depot	Yes	20/13
20AM001J++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM001V++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM004M++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM004T++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-depot	Yes	20/13
20AM004V++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM0054++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM009R++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM009X++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	Yes	20/14
20AM001B++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM001D++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM001K++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™		6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™		None	
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset		Intel SoC (System on Chip) platform	
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader		Optional: Smart card reader	
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)	
i7-4600U	2.1 GHz		3.3 GHz	4MB	Ports		Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						WWAN (optional)		Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						SIM card (optional)		Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Multi-touch	Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet		Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication	
Graphics	Intel HD Graphics 4400 in processor						NFC		Security	
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						Security chip		Power-on password, hard disk password, supervisor password, security keyhole	
Weight ²	Models		3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	vPro (optional)		Trusted Platform Module, TCG 1.2-compliant	
	Non-MultiTouch		2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	Intel vPro Technology		Intel vPro Technology	
	MultiTouch		-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg	Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
Case material	Glass-Fiber Reinforced Plastic						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication								Win8 / 8.1 64: Windows 8 / 8.1 64-bit	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication								Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Max battery life ¹⁰	Battery configuration		3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh		Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	
	Battery life		8.7 hr	13.1 hr	17.4 hr					
AC adapter	45-watt AC adapter									

See footnotes for more detailed information

(G-WV1-5) © Lenovo

ThinkPad X240 20AM (Windows 8) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AM001L++	i7-4600U	vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-depot	Yes	20/13
20AM001Q++	i7-4600U	vPro	HD 4400	4GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM004L++	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13
20AM0053++	i7-4600U	vPro	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	Yes	20/13

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600			ThinkLight™	None	
	i5-4200U		1.6 GHz	2.6 GHz	3MB						
	i5-4210U		1.7 GHz	2.7 GHz	3MB						
	i5-4300U		1.9 GHz	2.9 GHz	3MB						
i7-4600U	2.1 GHz		3.3 GHz	4MB							
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						Smart card reader	Intel SoC (System on Chip) platform <i>Optional:</i> Smart card reader			
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory							Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Ports		Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector		
								WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio <i>Some:</i> 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS			
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports ten-finger gesture							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Graphics	Intel HD Graphics 4400 in processor							Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) <i>Optional:</i> Near Field Communication		
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						NFC		Security		
Weight ²	Models		3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell		Security chip	Power-on password, hard disk password, supervisor password, security keyhole		
	Non-MultiTouch		2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	vPro (optional)		Trusted Platform Module, TCG 1.2-compliant		
	MultiTouch		-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg			Fingerprint reader	Intel vPro Technology <i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor	
Case material	Glass-Fiber Reinforced Plastic						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled			
Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication							through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Win8 / 8.1 64: Windows 8 / 8.1 64-bit				
Max battery life ¹⁰	Battery configuration		3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh		Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
	Battery life		8.7 hr	13.1 hr	17.4 hr		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite				
AC adapter	45-watt AC adapter										

See footnotes for more detailed information

(G-WV1-6) © Lenovo

ThinkPad X240 20AM (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Cam-era	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AM005W++	i5-4300U	vPro	HD 4400	8GBx1	12.5" HD IPS	No	128G SSD	7260 a/b/g/n+BT	N5321	Select	Smart	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AM005X++	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 a/b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+6(47.5wh)	45W	Win8 DG Win7	3-onsite	No	20/13
20AM005Y++	i5-4300U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-onsite	No	20/13
20AM009D++	i5-4300U	vPro	HD 4400	8GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-onsite IWS	No	20/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None
	i5-4200U		1.6 GHz	2.6 GHz	3MB			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
i7-4600U	2.1 GHz		3.3 GHz	4MB				
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket					Chipset	Intel SoC (System on Chip) platform	
Optical Storage	None					Smart card reader	Optional: Smart card reader	
M.2 SSD	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS					Ports	Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector	
	Some: SSHD with 8GB NAND flash memory					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Widescreen display	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader					WWAN (optional)	Upg: Wireless WAN upgradable	
	Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider	
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication	
Graphics	Intel HD Graphics 4400 in processor					NFC	Optional: Near Field Communication	
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					Security	Power-on password, hard disk password, supervisor password, security keyhole	
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Security chip	Trusted Platform Module, TCG 1.2-compliant	
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	vPro (optional)	Intel vPro Technology	
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor	
Case material	Glass-Fiber Reinforced Plastic					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Win8 / 8.1 64: Windows 8 / 8.1 64-bit	
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh				
	Battery life	8.7 hr	13.1 hr	17.4 hr				
AC adapter	45-watt AC adapter					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-WV1-7) © Lenovo

ThinkPad X240 20AM (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AM009H++	i5-4300U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM009L++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM009N++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM009Q++	i5-4300U vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM0017++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 a/b/g/n+BT	Upg	None	None	None	None	None	None	No+6(72wh)	45W	Win8 P64	3-onsite	Yes	20/13
20AM001A++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM001H++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	No+6(72wh)	45W	Win8 P64	3-onsite	Yes	20/13
20AM001S++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM001U++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM004P++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-onsite	Yes	20/13
20AM004Q++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM004X++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM0055++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM006P++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	N5321 Select	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AM006Q++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	N5321 Select	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	No	20/13
20AM009S++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM009T++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-onsite	Yes	20/14
20AM0011++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM0012++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM0015++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM001M++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None		
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset	Intel SoC (System on Chip) platform		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Ports	Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector		
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider		
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						NFC	Optional: Near Field Communication		
Graphics	Intel HD Graphics 4400 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole		
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant		
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit		
Case material	Glass-Fiber Reinforced Plastic						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication									
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication									
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh						
	Battery life	8.7 hr	13.1 hr	17.4 hr						
AC adapter	45-watt AC adapter									

See footnotes for more detailed information

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ThinkPad X240 20AM (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AM001P++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-onsite	Yes	20/13
20AM004W++	i7-4600U vPro	HD 4400	4GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM005C++	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite	Yes	20/13
20AM00AB++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 5400 SSHD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 P64	3-onsite IWS	No	20/14
20AM001G++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+6(47.5wh)	45W	Win8 P64	3-onsite IWS	Yes	20/13
20AM001N++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	Yes	20/13
20AM001R++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	Yes	20/13
20AM001T++	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 P64	3-onsite IWS	Yes	20/13
20AM006M++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	No	20/13
20AM006N++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-onsite IWS	No	20/13
20AM007Q++	i5-4300U vPro	HD 4400	8GBx1	12.5" HD	No	128G SSD	7260 ac+BT	N5321 Select	Smart	Smart	720p	Backlit	None	None	3+3	45W	Win8 P64	3-onsite IWS	No	20/14
20AM00AA++	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	No	500G 5400 SSHD	7260 ac+BT	Upg	None	Smart	720p	Backlit	Finger	NFC	3+3	45W	Win8.1 P64	3-onsite IWS	No	20/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch		
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	ThinkLight™	None		
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Chipset	Intel SoC (System on Chip) platform		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Smart card reader	Optional: Smart card reader		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
i7-4600U	2.1 GHz		3.3 GHz	4MB	Ports		Two USB 3.0 (one Always On), VGA, Mini DP, Ethernet (RJ-45), Dock connector			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						WWAN (optional)	Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Selecto: User selectable, contract required with service provider		
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						NFC	Optional: Near Field Communication		
Graphics	Intel HD Graphics 4400 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole		
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology		
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor			
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit			
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg		Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit			
Case material	Glass-Fiber Reinforced Plastic						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite			
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication									
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication									
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh						
	Battery life	8.7 hr	13.1 hr	17.4 hr						
AC adapter	45-watt AC adapter									

See footnotes for more detailed information

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Lenovo® ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250

ThinkPad X250 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Smart card reader <i>Optional</i> : Smart card reader															
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
	i3-5010U	2	4	2.1 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 5500	Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector														
	i5-5200U			2.2 GHz	2.7 GHz	3MB			Camera (<i>optional</i>)	HD720p resolution, low light sensitive, fixed focus														
	i5-5300U			2.3 GHz	2.9 GHz	3MB			Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack														
i7-5600U	2.6 GHz			3.2 GHz	4MB	Keyboard			6-row, spill-resistant, multimedia Fn keys, optional LED backlight															
Graphics	Intel HD Graphics 5500 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch														
									Security	Power-on password, hard disk password, supervisor password, security keyhole														
Chipset	Intel SoC (System on Chip) platform								Security chip	Trusted Platform Module, TCG 1.2-compliant														
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures														
Display	<i>Some</i> : 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some</i> : 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS <i>Some</i> : 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								vPro (<i>optional</i>)	Intel vPro Technology														
									Fingerprint reader	<i>Optional</i> : Fingerprint reader on the keyboard bezel, swipe sensor														
									Internal battery	<i>Optional</i> : Integrated Li-Ion or Li-Polymer 3-cell (23Wh)														
Multi-touch (<i>opt</i>)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)														
									Max battery life ¹⁰	<table><tr><th>Models</th><th>No + 3-cell</th><th>3-cell + 3-cell</th><th>3-cell + 6-cell 48Wh</th><th>3-cell + 6-cell 72Wh</th></tr><tr><td>Battery life</td><td>5.2 hr</td><td>10.7 hr</td><td>16.0 hr</td><td>21.4 hr</td></tr></table>					Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr
									Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh											
Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr																				
AC adapter	45W AC adapter																							
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some</i> : SSHD with 8GB NAND flash memory								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit														
									M.2 SSD (<i>opt</i>)	Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions)														
Optical	None																							
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I218-V (Clarkville)								Limited warranty ¹²	<i>Some</i> : Windows 8.1 64-bit <i>Some</i> : Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • PC Device Stage • Weather Channel • Evernote • Maxthon Cloud Browser • Bing Translator • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)														
Bluetooth™	<i>vPro model</i> : Intel Ethernet Connection I218-LM (Clarkville)																							
WLAN ⁴	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant														
WWAN (<i>optional</i>)	<i>One of the following, configurable by model:</i> • Wireless WAN upgradable • Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card																							
	SIM card (<i>opt</i>)	AT&T® or Verizon® LTE (4G), contract required with service provider							Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic														
	Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm																						
Weight ²	Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell																			
	Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg																			
	Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg																			

ThinkPad X250 20CM (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CM0020++	i3-5010U	No	HD 5500	4GBx1	12.5" HD	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0021++	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 7200	16GB	7265 a/b/g/n+BT	Upg	None	None	720p	None	None	No+6(48wh)	45W	Win8.1 DG Win7	3-depot	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor					Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Weight ²	Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell
	i3-5010U	2	2.1 GHz	-	3MB		DDR3L-1600		Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB				Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB				Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
i7-5600U	2.6 GHz		3.2 GHz	4MB									
Graphics	Intel HD Graphics 5500 in processor					Smart card reader Multicard reader Ports Camera (optional) Audio support Keyboard UltraNav™ Security Security chip vPro (optional) Fingerprint reader Internal battery External battery Max battery life ¹⁰ AC adapter Preload Limited warranty ¹²	Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector HD720p resolution, low light sensitive, fixed focus HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack 6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the keyboard bezel, swipe sensor Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh) Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh) ModelsNo + 3-cell3-cell + 3-cell3-cell + 6-cell 48Wh3-cell + 6-cell 72Wh Battery life5.2 hr10.7 hr16.0 hr21.4 hr 45W AC adapter Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS						
Chipset	Intel SoC (System on Chip) platform												
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket												
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS												
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits												
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory												
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot												
Optical	None												
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)												
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter												
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card												
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card												
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider												

See footnotes for more detailed information

(G-WV2-1) © Lenovo

ThinkPad X250 20CM (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CM001V++	i5-5200U	No	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001W++	i5-5200U	No	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001X++	i5-5200U	No	HD 5500	4GBx1	12.5" HD IPS	No	500G 5400 SSHD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0024++	i5-5200U	No	HD 5500	4GBx1	12.5" HD IPS	No	500G 5400 SSHD	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0028++	i5-5200U	No	HD 5500	4GBx1	12.5" HD IPS	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001Y++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	240G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0023++	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	128G SSD	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0025++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0026++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM0027++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001R++	i7-5600U	vPro	HD 5500	8GBx1	12.5" FHD IPS	No	512G SSD	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001S++	i7-5600U	vPro	HD 5500	8GBx1	12.5" FHD IPS	No	512G SSD	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001T++	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	N5321	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15
20CM001U++	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	EM7345	None	Smart	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor						Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell
	i3-5010U	2	2.1 GHz	-	3MB	DDR3L-1600			Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB				Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB				Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
i7-5600U	2.6 GHz		3.2 GHz	4MB									
Graphics	Intel HD Graphics 5500 in processor						Smart card reader	Optional: Smart card reader					
Chipset	Intel SoC (System on Chip) platform						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)					
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS						Camera (optional)	HD720p resolution, low light sensitive, fixed focus					
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack					
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight					
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch					
Optical	None						Security	Power-on password, hard disk password, supervisor password, security keyhole					
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security chip	Trusted Platform Module, TCG 1.2-compliant					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						vPro (optional)	Intel vPro Technology					
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
WWAN (optional)	Upg:	Wireless WAN upgradable					Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)					
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)					
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					Max battery life ¹⁰	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						AC adapter	45W AC adapter					
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit					
								Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit					
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS					

See footnotes for more detailed information

(G-WV2-2) © Lenovo

ThinkPad X250 20CM (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CM001P++	i7-5600U	vPro	HD 5500	8GBx1	12.5" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15
20CM001Q++	i7-5600U	vPro	HD 5500	8GBx1	12.5" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor						Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Weight ²	Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell
	i3-5010U	2	2.1 GHz	-	3MB	DDR3L-1600			Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB				Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB				Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
i7-5600U	2.6 GHz		3.2 GHz	4MB									
Graphics	Intel HD Graphics 5500 in processor						Smart card reader Multicard reader Ports Camera (optional) Audio support Keyboard UltraNav™ Security Security chip vPro (optional) Fingerprint reader Internal battery External battery Max battery life ¹⁰ AC adapter Preload Limited warranty ¹²	Optional: Smart card reader					
Chipset	Intel SoC (System on Chip) platform							4-in-1 reader (MMC, SD, SDHC, SDXC)					
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket							Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS							HD720p resolution, low light sensitive, fixed focus					
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits							HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack					
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory							6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch					
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot							Power-on password, hard disk password, supervisor password, security keyhole					
Optical	None							Trusted Platform Module, TCG 1.2-compliant					
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)							Intel vPro Technology					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh) Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)						
WWAN (optional)	Upg:	Wireless WAN upgradable					Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh		
	N5321:	Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card					Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr		
	EM7345:	Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					45W AC adapter						
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit						
							Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit						
							1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS						

See footnotes for more detailed information

(G-WV2-3) © Lenovo

ThinkPad X250 20CL (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Cam-era	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CL001D++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001F++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	500G 7200	16GB	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001G++	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 7200	None	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001J++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD	No	500G 7200	16GB	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001N++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	180G SSD Opal2	None	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001B++	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	500G 7200	16GB	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15
20CL001L++	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD IPS	No	256G SSD Opal2	None	7265 ac+BT	Upd	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-onsite	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor						Dimensions ³ 12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	
	i3-5010U	2	2.1 GHz	-	3MB	DDR3L-1600	
	i5-5200U		2.2 GHz	2.7 GHz	3MB		
	i5-5300U		2.3 GHz	2.9 GHz	3MB		
	i7-5600U		2.6 GHz	3.2 GHz	4MB		
Graphics	Intel HD Graphics 5500 in processor						Weight ² ModelsNo + 3-cell3-cell + 3-cellNo + 6-cell3-cell + 6-cell Non-touch2.88 lb / 1.31 kg3.13 lb / 1.42 kg3.23 lb / 1.47 kg3.48 lb / 1.58 kg Multi-touch-3.29 lb / 1.49 kg-3.64 lb / 1.65 kg
Chipset	Intel SoC (System on Chip) platform						
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS						
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits						
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot						Case material Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic
Optical	None						
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Smart card readerOptional: Smart card reader
							Multicard reader4-in-1 reader (MMC, SD, SDHC, SDXC)
							PortsTwo USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector
							Camera (optional)HD720p resolution, low light sensitive, fixed focus
							Audio supportHD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack
							Keyboard6-row, spill-resistant, multimedia Fn keys, optional LED backlight
							UltraNav™TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch
							SecurityPower-on password, hard disk password, supervisor password, security keyhole
							Security chipTrusted Platform Module, TCG 1.2-compliant
							vPro (optional)Intel vPro Technology
							Fingerprint readerOptional: Fingerprint reader on the keyboard bezel, swipe sensor
							Internal batteryOptional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)
							External batteryLi-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)
							Max battery life ¹⁰
							ModelsNo + 3-cell3-cell + 3-cell3-cell + 6-cell 48Wh3-cell + 6-cell 72Wh
							Battery life5.2 hr10.7 hr16.0 hr21.4 hr
							AC adapter45W AC adapter
							PreloadWin8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
							Win8.1 64: Windows 8.1 64-bit
							Win8.1 P64: Windows 8.1 Pro 64-bit
							Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS

See footnotes for more detailed information

(G-WV2-4) © Lenovo

ThinkPad X250 20CL (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20CL001C++	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	Yes	01/15
20CL001E++	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-onsite	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications](#) sheet

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor					Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm						
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Weight ²	Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell
	i3-5010U	2	2.1 GHz	-	3MB		DDR3L-1600		Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg
	i5-5200U		2.2 GHz	2.7 GHz	3MB				Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg
	i5-5300U		2.3 GHz	2.9 GHz	3MB				Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic			
i7-5600U	2.6 GHz		3.2 GHz	4MB									
Graphics	Intel HD Graphics 5500 in processor												
Chipset	Intel SoC (System on Chip) platform					Smart card reader	Optional: Smart card reader						
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket												
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)						
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits					Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector						
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Camera (optional)	HD720p resolution, low light sensitive, fixed focus						
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot					Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack						
Optical	None					Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight						
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch						
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Security	Power-on password, hard disk password, supervisor password, security keyhole						
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card					Security chip	Trusted Platform Module, TCG 1.2-compliant						
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					vPro (optional)	Intel vPro Technology						
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor						
						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)						
						External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)						
						Max battery life ¹⁰	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh		
							Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr		
						AC adapter	45W AC adapter						
						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit						
						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS						

See footnotes for more detailed information

(G-WV2-5) © Lenovo



Lenovo® ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)

ThinkPad X1 Carbon (2nd Gen) Platform Specifications Product Specifications Reference (PSREF)

ThinkPad X1 Carbon (2nd Gen) Platform Specifications Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 / i7 Processor								Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack													
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none">Intel Wireless-N 7260, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 cardIntel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 cardIntel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card													
	i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400	WWAN (optional)	One of the following, configurable by model: <ul style="list-style-type: none">Wireless WAN upgradableWireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)													
	i5-4210U			1.7 GHz	2.7 GHz	3MB																	
	i5-4300U			1.9 GHz	2.9 GHz	3MB																	
	i7-4600U			2.1 GHz	3.3 GHz	4MB																	
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets								SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none">AT&T® or Verizon® LTE (4G), contract required with service provider (US models)Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)User selectable, contract required with service provider													
Optical Storage	None M.2 Solid State Drive (SSD)								Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Ethernet Extension cable Optional: Near Field Communication													
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS , 170° viewing angle								Security	Power-on password, hard disk password, supervisor password, security keyhole, reset switch													
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture, 270 nits								Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology													
Camera	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input								Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor													
Light sensor	Ambient Light Sensor (Windows 8.1 64-bit only)								Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none">1-year depot repair service3-year/1-yr battery depot repair service3-year/1-yr battery limited onsite service²⁴3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)													
Graphics	Intel HD Graphics 4400 or 5000 in processor, external digital monitor support via Mini DisplayPort or HDMI™ (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable); supports three independent displays; Max resolution: 3840x2160 (Mini DisplayPort)@30Hz; 2880x1620 (HDMI)@60Hz								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SupportLenovo CompanionThinkVantage System UpdateHightail - MetroPC Device StageAdobe® Reader®Nitro ProEvernote®Microsoft® Office preloaded; purchase a product key to activateNorton™ Internet Security (30 days of virus definitions) <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SupportLenovo CompanionThinkVantage System UpdateHightail - MetroPC Device StageAccuWeatherAmazon KindleNitro ProRara StreamingNorton StudioMicrosoft Office preloaded; purchase a product key to activateNorton Internet Security (30 days of virus definitions)													
Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit								Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant													
UltraNav™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch																						
ThinkLight™	None																						
Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm HD+ (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm																						
Weight ²	<table><tr><td>Models</td><td>WQHD</td><td>HD+</td><td>WQHD Touch</td></tr><tr><td>Weight</td><td>2.82 lb / 1.28kg</td><td>2.96 lb / 1.34kg</td><td>3.15 lb / 1.43kg</td></tr></table>								Models	WQHD	HD+	WQHD Touch	Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg							
Models	WQHD	HD+	WQHD Touch																				
Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg																				
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																						
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery																						
Max battery life ¹⁰	Integrated battery: up to 9 hr																						
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter																						
RapidCharge	<table><tr><td>AC Adapter</td><td>45W</td><td>65W Slim</td><td>65W</td></tr><tr><td>Charge to 80%</td><td>1.0hr</td><td>50min</td><td>50min</td></tr><tr><td>Charge to 100%</td><td>2.3hr</td><td>2.1hr</td><td>2.1hr</td></tr></table>								AC Adapter	45W	65W Slim	65W	Charge to 80%	1.0hr	50min	50min	Charge to 100%	2.3hr	2.1hr	2.1hr			
AC Adapter	45W	65W Slim	65W																				
Charge to 80%	1.0hr	50min	50min																				
Charge to 100%	2.3hr	2.1hr	2.1hr																				
Chipset	Intel SoC (System on Chip) platform																						
Smart card reader	None																						
Multicard reader	None																						
Ports	Two USB 3.0 (one Always On), MiniDP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)																						
Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable																						

ThinkPad X1 Carbon (2nd Gen) 20A7 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A70061++	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 64	1-depot	No	01/14
20A70062++	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 64	1-depot	No	01/14
20A70063++	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 64	1-depot	No	01/14

Country Code"++" : AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard UltraNav™ ThinkLight™ Chipset Smart card reader Multicard reader Ports Monitor Cable WLAN ⁴ WWAN (<i>optional</i>) SIM card (<i>optional</i>) Bluetooth™ Ethernet NFC Security Security chip vPro (<i>optional</i>) Fingerprint reader Preload Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	None			
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB		DDR3L-1600	Intel SoC (System on Chip) platform			
	i5-4210U		1.7 GHz	2.7 GHz	3MB			None			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)			
	i7-4550U		1.5 GHz	3 GHz	4MB			<i>Some:</i> Mini DisplayPort to VGA Monitor Cable			
	i7-4600U		2.1 GHz	3.3 GHz	4MB						
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets										
Optical Storage	None M.2 Solid State Drive (SSD)										
Widescreen display	<i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS <i>Some:</i> Capacitive-type multi-touch, supports ten-finger gesture, 270 nits HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input Ambient Light Sensor (Windows 8.1 64-bit only)					<i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
Multi-touch											
Camera											
Light sensor											
Graphics	Intel HD Graphics 4400 or 5000										
Dimensions ³	<i>WQHD (WxDxH):</i> 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm <i>HD+ (WxDxH):</i> 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm <i>WQHD Touch (WxDxH):</i> 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm										
Weight ²	<i>Models</i>		<i>WQHD</i>	<i>HD+</i>	<i>WQHD Touch</i>						
	<i>Weight</i>		2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg						
Case material	<i>Display cover:</i> Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery <i>Integrated battery:</i> up to 9 hr 45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter										
Battery type											
Max battery life ¹⁰											
AC Adapter											
RapidCharge											
	<i>AC Adapter</i>		<i>45W</i>	<i>65W Slim</i>	<i>65W</i>						
	<i>Charge to 80%</i>		1.0hr	50min	50min						
	<i>Charge to 100%</i>		2.3hr	2.1hr	2.1hr						
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack										

See footnotes for more detailed information

(G-MQ1-1) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A7 (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A70027++/ 20A7003T++	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A7006C++/ 20A7006B++	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	02/14
20A70023++/ 20A7003R++	i5-4200U	No	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A70025++/ 20A7003S++	i5-4200U	No	HD 4400	8GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A7005M++/ 20A7005L++	i5-4200U	No	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A70066++/ 20A70067++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	02/14
20A7006P++/ 20A7006Q++	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	03/14
20A70021++/ 20A7003Q++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A7005J++/ 20A7005K++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A70091++/ 20A70092++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	No	512G SSD	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	07/14
20A70090++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	07/14
20A70093++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	No	512G SSD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	07/14

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	UltraNav™	None		
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	ThinkLight™	None		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Chipset	Intel SoC (System on Chip) platform		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Smart card reader	None		
	i7-4550U		1.5 GHz	3 GHz	4MB		Multicard reader	None		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Ports	Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)		
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets							Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable	
Optical Storage	None M.2 Solid State Drive (SSD)							WLAN ⁴	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio							WWAN (optional)	Upg: Wireless WAN upgradable	
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS								EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS	
Camera	Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits								N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input							SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required	
	Ambient Light Sensor (Windows 8.1 64-bit only)							Select:	User selectable, contract required with service provider	
Graphics	Intel HD Graphics 4400 or 5000							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm		Ethernet	Ethernet Extension cable		
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm		NFC	Optional: Near Field Communication		
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm		Security	Power-on / hard disk / supervisor password, security keyhole, reset switch		
Weight ²	Models	WQHD		HD+		WQHD Touch	Security chip	Trusted Platform Module, TCG 1.2-compliant		
	Weight	2.82 lb / 1.28kg		2.96 lb / 1.34kg		3.15 lb / 1.43kg	vPro (optional)	Intel vPro Technology		
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum							Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor	
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
Max battery life ¹⁰	Integrated battery: up to 9 hr								Win8.1 64: Windows 8.1 64-bit	
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter								Win8.1 P64: Windows 8.1 Pro 64-bit	
RapidCharge	AC Adapter	45W		65W Slim		65W				
	Charge to 80%	1.0hr		50min		50min				
	Charge to 100%	2.3hr		2.1hr		2.1hr				
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack							Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

(G-MQ1-2) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A7 (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A7002C++/ 20A7003V++	i5-4200U	No	HD 4400	8GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A70029++/ 20A7003U++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A7005N++/ 20A7005P++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A7005R++/ 20A7005U++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A7005S++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	EM7345	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A7002D++	i7-4550U	No	HD 5000	8GBx1	14" WQHD IPS	MT	512G SSD	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14
20A7005Q++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	NFC	8(45wh)	45W	Win8.1 P64	3-onsite	No	01/14

Country Code"++" : AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard UltraNav™ ThinkLight™ Chipset Intel SoC (System on Chip) platform Smart card readerNone Multicard readerNone Ports Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only) Some: Mini DisplayPort to VGA Monitor Cable WLAN ⁴ 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider Bluetooth™ Ethernet NFC Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Ethernet Extension cable Optional: Near Field Communication Security Security chip vPro (optional) Intel vPro Technology Fingerprint readerFingerprint reader on the keyboard bezel, swipe sensor Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB		DDR3L-1600
	i5-4210U		1.7 GHz	2.7 GHz	3MB		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		
	i7-4550U		1.5 GHz	3 GHz	4MB		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets						
Optical Storage	None M.2 Solid State Drive (SSD)						
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits						
Multi-touch	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input						
Camera	Ambient Light Sensor (Windows 8.1 64-bit only)						
Light sensor							
Graphics	Intel HD Graphics 4400 or 5000						
Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm HD+ (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm						
Weight ²	Models	WQHD	HD+	WQHD Touch			
	Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg			
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum						
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery						
Max battery life ¹⁰	Integrated battery: up to 9 hr						
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter						
RapidCharge	AC Adapter	45W	65W Slim	65W			
	Charge to 80%	1.0hr	50min	50min			
	Charge to 100%	2.3hr	2.1hr	2.1hr			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack						
Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite							

See footnotes for more detailed information

(G-MQ1-3) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A8 (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A8002C++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8002P++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80031++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80041++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80047++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8007X++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14
20A80085++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14
20A80088++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14
20A8002F++	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8002G++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80032++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80049++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8004B++	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8004E++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8002N++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8002R++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80037++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80045++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A80048++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14
20A8004A++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	01/14

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	UltraNav™		
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	ThinkLight™		
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Chipset		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Intel SoC (System on Chip) platform		
	i7-4550U		1.5 GHz	3 GHz	4MB		Smart card reader		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		None		
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets						Multicard reader	None	
Optical Storage	None						Ports	Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)	
	M.2 Solid State Drive (SSD)						Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable	
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio						WLAN ⁴	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS							7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card	
Camera	Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits							7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input						WWAN (optional)	Upg: Wireless WAN upgradable	
	Ambient Light Sensor (Windows 8.1 64-bit only)							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS	
Graphics	Intel HD Graphics 4400 or 5000							N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS	
Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm						SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required	
	HD+ (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm							Select: User selectable, contract required with service provider	
	WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Weight ²	Models	WQHD		HD+		WQHD Touch		Ethernet	Ethernet Extension cable
	Weight	2.82 lb / 1.28kg		2.96 lb / 1.34kg		3.15 lb / 1.43kg		NFC	Optional: Near Field Communication
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch	
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Max battery life ¹⁰	Integrated battery: up to 9 hr						vPro (optional)	Intel vPro Technology	
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor	
RapidCharge	AC Adapter	45W		65W Slim		65W		Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
	Charge to 80%	1.0hr		50min		50min			Win8.1 64: Windows 8.1 64-bit
	Charge to 100%	2.3hr		2.1hr		2.1hr			Win8.1 P64: Windows 8.1 Pro 64-bit
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite	

See footnotes for more detailed information

(G-MQ1-4) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A8 (Windows 8) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20A80083++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14
20A80086++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14
20A80089++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	Yes	04/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch		
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache				Memory Speed
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB				DDR3L-1600
	i5-4210U		1.7 GHz	2.7 GHz	3MB				
	i5-4300U		1.9 GHz	2.9 GHz	3MB				
	i7-4550U		1.5 GHz	3 GHz	4MB				
	i7-4600U		2.1 GHz	3.3 GHz	4MB				
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets					UltraNav™	None		
Optical	None					ThinkLight™	None		
Storage	M.2 Solid State Drive (SSD)					Chipset	Intel SoC (System on Chip) platform		
Widescreen display	<i>Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio <i>Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS <i>Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input Ambient Light Sensor (Windows 8.1 64-bit only)</i></i></i>					Smart card reader	None		
Multi-touch						Multicard reader	None		
Camera						Ports	Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)		
Light sensor						Monitor Cable	<i>Some:</i> Mini DisplayPort to VGA Monitor Cable		
Graphics	Intel HD Graphics 4400 or 5000					WLAN ⁴	<i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Dimensions ³	<i>WQHD (WxDxH):</i> 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm <i>HD+ (WxDxH):</i> 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm <i>WQHD Touch (WxDxH):</i> 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm					WWAN (<i>optional</i>)	<i>Upg:</i> Wireless WAN upgradable <i>EM7345:</i> Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS <i>N5321:</i> Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS		
Weight ²						SIM card (<i>optional</i>)		<i>Lenovo:</i> Lenovo SIM, out-of-box service, pay-as-you-go, no contract required <i>Select:</i> User selectable, contract required with service provider	
Case material						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Battery type	<i>Display cover:</i> Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery <i>Integrated battery:</i> up to 9 hr 45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter					Ethernet	Ethernet Extension cable		
Max battery life ¹⁰						NFC	<i>Optional:</i> Near Field Communication		
AC Adapter						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch		
RapidCharge	<i>AC Adapter</i> 45W 65W Slim 65W <i>Charge to 80%</i> 1.0hr 50min 50min <i>Charge to 100%</i> 2.3hr 2.1hr 2.1hr					Security chip	Trusted Platform Module, TCG 1.2-compliant		
Audio support						vPro (<i>optional</i>)	Intel vPro Technology		
						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor		
Preload							<i>Win8.1 DG Win7:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Win8.1 64:</i> Windows 8.1 64-bit <i>Win8.1 P64:</i> Windows 8.1 Pro 64-bit		
Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite									

See footnotes for more detailed information

(G-MQ1-5) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A8 (Onsite)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A8003W++/20A8003Y++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A80052++/20A80053++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	240G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-onsite	No	01/14
20A8003V++/20A80040++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A8003X++/20A8003X++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	N5321	Select	None	720p	Backlit	Finger	None	8(45wh)	45W	Win8.1 DG Win7	3-onsite	No	01/14
20A80055++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-onsite	No	01/14

Country Code++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

- For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 / i7 Processor				Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600
	i5-4210U		1.7 GHz	2.7 GHz	3MB	
	i5-4300U		1.9 GHz	2.9 GHz	3MB	
	i7-4550U		1.5 GHz	3 GHz	4MB	
	i7-4600U		2.1 GHz	3.3 GHz	4MB	
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets					
Optical Storage	None					
	M.2 Solid State Drive (SSD)					
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio					
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS					
Camera	Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits					
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input					
	Ambient Light Sensor (Windows 8.1 64-bit only)					
Graphics	Intel HD Graphics 4400 or 5000					
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm	
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm	
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm	
Weight ²	Models	WQHD	HD+	WQHD Touch		
	Weight	2.82 lb / 1.28kg		2.96 lb / 1.34kg 3.15 lb / 1.43kg		
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum					
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery					
Max battery life ¹⁰	Integrated battery: up to 9 hr					
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter					
RapidCharge	AC Adapter	45W	65W Slim	65W		
	Charge to 80%	1.0hr	50min	50min		
	Charge to 100%	2.3hr	2.1hr	2.1hr		
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack					
	Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					

See footnotes for more detailed information

(G-MQ1-6) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A8 (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A8002Q++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8002S++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8002X++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8004C++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8004D++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8007Y++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14
20A80082++	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	180G SSD Opal	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14
20A80084++	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14
20A8002H++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8002L++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A80035++	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A80043++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A80044++	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8004F++	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8002M++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8002V++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A80042++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A80046++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14
20A8004G++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	01/14

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	
	i5-4210U		1.7 GHz	2.7 GHz	3MB		
	i5-4300U		1.9 GHz	2.9 GHz	3MB		
	i7-4550U		1.5 GHz	3 GHz	4MB		
	i7-4600U		2.1 GHz	3.3 GHz	4MB		
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets						UltraNav™ ThinkLight™ Chipset Intel SoC (System on Chip) platform Smart card reader None Multicard reader None Ports Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only) Monitor Cable Some: Mini DisplayPort to VGA Monitor Cable
Optical Storage	None M.2 Solid State Drive (SSD)						
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS						
Multi-touch	Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits						WLAN ⁴ 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Camera	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input						
Light sensor	Ambient Light Sensor (Windows 8.1 64-bit only)						WWAN (optional) Upg: Wireless WAN upgradable EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Graphics	Intel HD Graphics 4400 or 5000						
Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm HD+ (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm						SIM card (optional) Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required Select: User selectable, contract required with service provider
Weight ²	Models	WQHD	HD+	WQHD Touch			
	Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg			
	Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum					
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery						
Max battery life ¹⁰	Integrated battery: up to 9 hr						Security Power-on / hard disk / supervisor password, security keyhole, reset switch Security chip Trusted Platform Module, TCG 1.2-compliant vPro (optional) Intel vPro Technology Fingerprint reader Fingerprint reader on the keyboard bezel, swipe sensor
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter						
RapidCharge	AC Adapter	45W	65W Slim	65W			Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit
	Charge to 80%	1.0hr	50min	50min			
	Charge to 100%	2.3hr	2.1hr	2.1hr			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite

See footnotes for more detailed information

(G-MQ1-7) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A8 (Onsite) - Windows 8 - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob- al	Ann date (m/y)
20A80080++	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14
20A80081++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14
20A80087++	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-onsite	Yes	04/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		UltraNav™
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600		ThinkLight™
	i5-4210U		1.7 GHz	2.7 GHz	3MB			Chipset
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Intel SoC (System on Chip) platform
	i7-4550U		1.5 GHz	3 GHz	4MB		Smart card reader	
	i7-4600U		2.1 GHz	3.3 GHz	4MB		None	
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets						Multicard reader	None
Optical	None						Ports	Two USB 3.0 (one Always On), Mini DP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)
Storage	M.2 Solid State Drive (SSD)						Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio						WLAN ⁴	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS							7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card
Camera	Some: Capacitive-type multi-touch, supports ten-finger gesture, 270 nits							7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input						WWAN (optional)	Upg: Wireless WAN upgradable
	Ambient Light Sensor (Windows 8.1 64-bit only)							EM7345: Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS
Graphics	Intel HD Graphics 4400 or 5000							N5321: Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm		SIM card (optional)	Lenovo: Lenovo SIM, out-of-box service, pay-as-you-go, no contract required
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm		Select:	User selectable, contract required with service provider
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm		Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Weight ²	Models		WQHD		HD+		Ethernet	Ethernet Extension cable
	Weight		2.82 lb / 1.28kg		2.96 lb / 1.34kg		NFC	Optional: Near Field Communication
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery						Security chip	Trusted Platform Module, TCG 1.2-compliant
Max battery life ¹⁰	Integrated battery: up to 9 hr						vPro (optional)	Intel vPro Technology
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor
RapidCharge	AC Adapter		45W		65W Slim		Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
	Charge to 80%		1.0hr		50min			Win8.1 64: Windows 8.1 64-bit
	Charge to 100%		2.3hr		2.1hr			Win8.1 P64: Windows 8.1 Pro 64-bit
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite

See footnotes for more detailed information

(G-MQ1-8) © Lenovo



Lenovo® ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)

ThinkPad X1 Carbon (3rd Gen) Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Multicard reader Ports	None															
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics		Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector															
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500		<i>Optional:</i> Mini DisplayPort to VGA Monitor Cable															
	i5-5300U			2.3 GHz	2.9 GHz	3MB																			
	i7-5500U			2.4 GHz	3 GHz	4MB																			
i7-5600U	2.6 GHz			3.2 GHz	4MB																				
Graphics	Intel HD Graphics 5500 in processor, external digital monitor support via Mini DisplayPort or HDMI™ (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable); supports three independent displays; Max resolution: 3840x2160 (Mini DisplayPort) @60Hz; 4096x2304 (HDMI) @24Hz								Monitor cable	HD720p resolution, low light sensitive, fixed focus, gesture input															
Chipset	Intel SoC (System on Chip) platform								Camera Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack															
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets								Keyboard UltraNav™	6-row, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch															
Display	<i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS, 170° viewing angle								Security	Power-on password, hard disk password, supervisor password, security keyhole, reset switch															
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits								Security chip ThinkEngine	Trusted Platform Module, TCG 1.2-compliant Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures															
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA								vPro (optional)	Intel vPro Technology															
Optical	None								Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor															
Ethernet Bluetooth™	Gigabit Ethernet via Ethernet extension cable Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery															
WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card								Max battery life ¹⁰	<table><tr><th>Models</th><th>FHD</th><th>WQHD</th><th>WQHD Touch</th></tr><tr><td>Battery life</td><td>10.9 hr</td><td>9.9 hr</td><td>9.9 hr</td></tr></table>				Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr				
Models	FHD	WQHD	WQHD Touch																						
Battery life	10.9 hr	9.9 hr	9.9 hr																						
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">Wireless WAN upgradableWireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 cardWireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter															
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider								RapidCharge	<table><tr><th>AC adapter</th><th>45W</th><th>65W Slim</th><th>65W</th></tr><tr><td>Charge to 80%</td><td>1.1hr</td><td>55min</td><td>55min</td></tr><tr><td>Charge to 100%</td><td>2.5hr</td><td>2.3hr</td><td>2.3hr</td></tr></table>				AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min	Charge to 100%	2.5hr	2.3hr	2.3hr
AC adapter	45W	65W Slim	65W																						
Charge to 80%	1.1hr	55min	55min																						
Charge to 100%	2.5hr	2.3hr	2.3hr																						
Dimensions ³	<i>WQHD (WxDxH):</i> 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm <i>FHD (WxDxH):</i> 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm <i>WQHD Touch (WxDxH):</i> 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SHAREitThinkVantage Product RecoveryRescue and Recovery™ThinkVantage System UpdatePC Device StageAdobe® Reader®Evernote®Skype™Maxthon Cloud BrowserMicrosoft® Office preloaded; purchase a product key to activateNorton™ Internet Security (30 days of virus definitions)															
Weight ²	<table><tr><th>Models</th><th>FHD</th><th>WQHD</th><th>WQHD Touch</th></tr><tr><td>Weight</td><td>2.996 lb / 1.359 kg</td><td>2.877 lb / 1.305 kg</td><td>3.175 lb / 1.44 kg</td></tr></table>								Models	FHD	WQHD	WQHD Touch	Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg	Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SHAREitLenovo CompanionThinkVantage System UpdatePC Device StageWeather ChannelEvernoteMaxthon Cloud BrowserBing TranslatorNorton StudioMicrosoft Office preloaded; purchase a product key to activateNorton Internet Security (30 days of virus definitions)								
Models	FHD	WQHD	WQHD Touch																						
Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg																						
Case material	<i>Display cover:</i> Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum								Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">1-year depot repair service3-year/1-yr battery depot repair service3-year/1-yr battery limited onsite service²⁴3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)															
Environment									EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant																

ThinkPad X1 Carbon (3rd Gen) 20BS (TopSeller) - Onsite

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BS003H++	i5-5200U	No	HD 5500	4GBx1	14" FHD	No	180G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003J++	i5-5200U	No	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003K++	i5-5200U	No	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006A++	i5-5200U	No	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006E++	i5-5200U	No	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006G++	i5-5200U	No	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003U++	i5-5300U vPro	HD 5500	4GBx1	14" FHD	No	128G SSD	7265 ac+BT	Upg	None	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003S++	i5-5300U vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003T++	i5-5300U vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	N5321	None	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003L++	i7-5500U	No	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003M++	i7-5500U	No	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006B++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006D++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	No	512G SSD PCIe	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006F++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS006H++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	No	512G SSD PCIe	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003V++	i7-5600U vPro	HD 5500	8GBx1	14" WQHD IPS	No	240G SSD Opal2	7265 ac+BT	EM7345	None	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15
20BS003W++	i7-5600U vPro	HD 5500	8GBx1	14" WQHD IPS	No	240G SSD Opal2	7265 ac+BT	N5321	None	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-onsite	No	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³ WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	
	i5-5300U		2.3 GHz	2.9 GHz	3MB		
	i7-5500U		2.4 GHz	3 GHz	4MB		
	i7-5600U		2.6 GHz	3.2 GHz	4MB		
Graphics	Intel HD Graphics 5500						
Chipset	Intel SoC (System on Chip) platform						
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets						
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS						
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits						
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA						
Optical	None						
Ethernet	Gigabit Ethernet via Ethernet extension cable						
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						
Multicard reader	None						
Ports	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector						
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable						
Camera							
Audio support							
Keyboard							
UltraNav™							
Security							
Security chip							
vPro (optional)							
Fingerprint reader							
Battery type							
Max battery life ¹⁰							
AC adapter							
RapidCharge							
Preload							
Limited warranty ¹²							

See footnotes for more detailed information

(G-MQ2-1) © Lenovo

ThinkPad X1 Carbon (3rd Gen) 20BS (TopSeller) - Onsite (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BS003N++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	MT	512G SSD PCIe	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS003P++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	MT	512G SSD PCIe	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS0067++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS0069++	i7-5500U	No	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS003Q++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	360G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS003R++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	360G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS0068++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15
20BS006C++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	N5321	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	Models FHD WQHD WQHD Touch			
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		Weight 2.996 lb / 1.359 kg 2.877 lb / 1.305 kg 3.175 lb / 1.44 kg			
	i5-5300U		2.3 GHz	2.9 GHz	3MB						
	i7-5500U		2.4 GHz	3 GHz	4MB						
i7-5600U	2.6 GHz		3.2 GHz	4MB							
Graphics	Intel HD Graphics 5500						Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum			
Chipset	Intel SoC (System on Chip) platform						Camera	HD720p resolution, low light sensitive, fixed focus, gesture input			
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack			
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS						Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch			
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch			
Optical	None						Security chip	Trusted Platform Module, TCG 1.2-compliant			
Ethernet	Gigabit Ethernet via Ethernet extension cable						vPro (optional)	Intel vPro Technology			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor			
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery			
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Max battery life ¹⁰	Models FHD WQHD WQHD Touch			
							AC adapter	Battery life 10.9 hr 9.9 hr 9.9 hr			
								45W AC adapter, 65W Slim AC adapter, or 65W AC adapter			
								AC adapter 45W 65W Slim 65W			
								Charge to 80% 1.1hr 55min 55min			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Preload	Charge to 100% 2.5hr 2.3hr 2.3hr			
								Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
								Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit			
Multicard reader	None						Ports	Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS			
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable										

See footnotes for more detailed information

(G-MQ2-2) © Lenovo

ThinkPad X1 Carbon (3rd Gen) 20BT (Windows 8)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BT000A++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15
20BT000F++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	180G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15
20BT000H++	i5-5300U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15
20BT000C++	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15
20BT000G++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15
20BT003M++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	Yes	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm											
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²												
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600													
	i5-5300U		2.3 GHz	2.9 GHz	3MB														
	i7-5500U		2.4 GHz	3 GHz	4MB														
i7-5600U	2.6 GHz		3.2 GHz	4MB															
Graphics	Intel HD Graphics 5500						Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum											
Chipset	Intel SoC (System on Chip) platform						Camera	HD720p resolution, low light sensitive, fixed focus, gesture input											
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack											
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS						Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys											
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch											
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch											
Optical	None						Security chip	Trusted Platform Module, TCG 1.2-compliant											
Ethernet	Gigabit Ethernet via Ethernet extension cable						vPro (optional)	Intel vPro Technology											
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor											
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery											
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Max battery life ¹⁰	<table><tr><td>Models</td><td>FHD</td><td>WQHD</td><td>WQHD Touch</td></tr><tr><td>Battery life</td><td>10.9 hr</td><td>9.9 hr</td><td>9.9 hr</td></tr></table>				Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr
							Models	FHD	WQHD	WQHD Touch									
							Battery life	10.9 hr	9.9 hr	9.9 hr									
							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter											
							RapidCharge	<table><tr><td>AC adapter</td><td>45W</td><td>65W Slim</td><td>65W</td></tr><tr><td>Charge to 80%</td><td>1.1hr</td><td>55min</td><td>55min</td></tr><tr><td>Charge to 100%</td><td>2.5hr</td><td>2.3hr</td><td>2.3hr</td></tr></table>				AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min
AC adapter	45W	65W Slim	65W																
Charge to 80%	1.1hr	55min	55min																
Charge to 100%	2.5hr	2.3hr	2.3hr																
Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																		
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS											
Multicard reader	None																		
Ports	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector																		
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable																		

See footnotes for more detailed information

(G-MQ2-3) © Lenovo

ThinkPad X1 Carbon (3rd Gen) 20BT (Onsite) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BT000J++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	180G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15
20BT003X++	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15
20BT003V++	i5-5300U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15
20BT000B++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15
20BT000D++	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15
20BT000E++	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-onsite	Yes	01/15

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm															
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm															
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600		WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm															
	i5-5300U		2.3 GHz	2.9 GHz	3MB																		
	i7-5500U		2.4 GHz	3 GHz	4MB																		
i7-5600U	2.6 GHz		3.2 GHz	4MB																			
Graphics	Intel HD Graphics 5500						Weight ²	<table><tr><td>Models</td><td>FHD</td><td>WQHD</td><td>WQHD Touch</td></tr><tr><td>Weight</td><td>2.996 lb / 1.359 kg</td><td>2.877 lb / 1.305 kg</td><td>3.175 lb / 1.44 kg</td></tr></table>				Models	FHD	WQHD	WQHD Touch	Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg				
Models	FHD	WQHD	WQHD Touch																				
Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg																				
Chipset	Intel SoC (System on Chip) platform						Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum															
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets																						
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS						Camera	HD720p resolution, low light sensitive, fixed focus, gesture input															
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack															
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA						Keyboard UltraNav™	6-row, LED backlit, spill-resistant, multimedia Fn keys															
Optical	None							TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch															
Ethernet	Gigabit Ethernet via Ethernet extension cable						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch															
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant															
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology															
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor															
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery															
Multicard reader	None						Max battery life ¹⁰	<table><tr><td>Models</td><td>FHD</td><td>WQHD</td><td>WQHD Touch</td></tr><tr><td>Battery life</td><td>10.9 hr</td><td>9.9 hr</td><td>9.9 hr</td></tr></table>				Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr				
Models	FHD	WQHD	WQHD Touch																				
Battery life	10.9 hr	9.9 hr	9.9 hr																				
Ports	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector						AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter															
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable							RapidCharge	<table><tr><td>AC adapter</td><td>45W</td><td>65W Slim</td><td>65W</td></tr><tr><td>Charge to 80%</td><td>1.1hr</td><td>55min</td><td>55min</td></tr><tr><td>Charge to 100%</td><td>2.5hr</td><td>2.3hr</td><td>2.3hr</td></tr></table>				AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min	Charge to 100%	2.5hr	2.3hr
AC adapter	45W	65W Slim	65W																				
Charge to 80%	1.1hr	55min	55min																				
Charge to 100%	2.5hr	2.3hr	2.3hr																				
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit															
								Win8.1 64: Windows 8.1 64-bit															
								Win8.1 P64: Windows 8.1 Pro 64-bit															
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS															

See footnotes for more detailed information

(G-MQ2-4) © Lenovo

ThinkPad Edge E145

ThinkPad®



Lenovo® ThinkPad Edge E145



Lenovo ThinkPad Edge E145



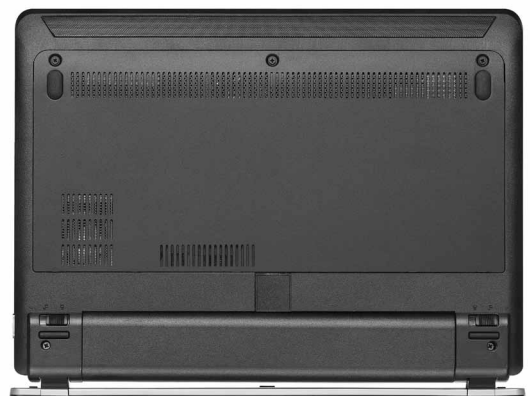
Lenovo ThinkPad Edge E145



Lenovo ThinkPad Edge E145



Lenovo ThinkPad Edge E145



Lenovo ThinkPad Edge E145

ThinkPad Edge E145 20BC (AMD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Screen type	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN	Top color	Finger print reader	Blue-tooth	Battery cells	Preload	Ann Date (mm/yy)
20BC0000++	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Red	None	BT	6	Win8 64	08/13
20BC0005++	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	08/13
20BC0006++	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11b/g/n	Black	None	BT	6	DOS-Lic.	08/13
20BC000U++	A4-5000	4GBx2	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win8 64	10/13
20BC0008++	A4-5000	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	10/13
20BC000W++	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	01/14
20BCA00L++	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11b/g/n	Black	None	BT	6	DOS-Lic.	01/14
20BC000X++	A4-5000	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	01/14
20BC000YIU	E1-2500	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	02/14
20BC0010IU	A4-5000	4GBx1	11.6" HD	anti-glare	720p	500G 5400	TP 11a/b/g/n	Black	None	BT	6	Win7 Pro64	02/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; one spindle</i> AMD Accelerated Processor E1-2500 (dual-core, 1.40GHz, 2MB L2 cache), integrated AMD Radeon HD 8240 Graphics, integrated DDR3 memory controller (up to 1333MHz) AMD Accelerated Processor A4-5000 (quad-core, 1.50GHz, 2MB L2 cache), integrated AMD Radeon HD 8330 Graphics, integrated DDR3 memory controller (up to 1600MHz)	Preloaded operating system²⁰ - Some: DOS-Lic. - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models (exclude DOS and No OS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical	None	
SATA disk	Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™	
mSATA™ SSD	None	
Widescreen display	11.6" (295mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio	
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	
Graphics	AMD Radeon HD 8240 graphics or HD 8330 graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Maximum external resolution: 1920x1200 (VGA)@60Hz; 1920x1080 (HDMI)@60Hz</i>	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, buttonless touchpad below keyboard, multi-touch	
ThinkLight™	None	
Dimensions ³	11.6W" (WxDxH): 11.30" x 8.35" x 0.85-0.91"; 287mm x 212mm x 21.7-23mm	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating (exclude DOS and No OS models) ENERGY STAR® compliant (exclude DOS and No OS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Weight ²	6-cell: from 3.40 lb (1.54kg)	
Case color	Midnight black, Heatwave red, or Arctic blue (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell (62.4Whr), HW Authentication	
Battery - life ¹⁰	<i>MobileMark 2007:</i> up to 12.7 hr <i>MobileMark 2012:</i> up to 9.2 hr	
Platform	AMD SoC (System on Chip) platform	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one powered USB 2.0, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1, Wi-Fi + BT combo adapter <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter	
PCIe WWAN	None	
SIM card	None	
Modem	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	HD Audio, Realtek ALC3202 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2 watt x 2 / monaural digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	None	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for more detailed information

WE model(s) announced August 27, or October 15, 2013; January 7, or February 4, 2014

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(G-KBNI-1) February 2014

ThinkPad Edge E531

ThinkPad®



Lenovo® ThinkPad Edge E531



Lenovo ThinkPad Edge E531



Lenovo ThinkPad Edge E531
with Numeric Keypad

ThinkPad Edge E531 6885 (Intel) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells/Wh	Preload	Ann date (mm/yy)
6885-2CG	i3-3120M	4GBx1	15.6" HD	720p	128G SSD	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	04/13
6885-2EG	i3-3120M	4GBx1	15.6" HD	720p	128G SSD	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win8 64	04/13
6885-2FG	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win8 64	04/13
6885-2GG	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	None	Numpad	Red	Finger	6 48	Win8 64	04/13
6885-2HG	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	DOS-Lic.	04/13
6885-2JG	i3-2348M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	04/13
6885-2KG	i3-2348M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win8 64	04/13
6885-67G	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	TP 11a/b/g/n + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	04/13
6885-68G	i7-3632QM	4GBx1	15.6" HD	720p	500G 7200	TP 11a/b/g/n + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	04/13
6885-69G	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	TP 11a/b/g/n + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	04/13
6885-BPG	i5-3230M	4GBx1	15.6" FHD	720p	500G 7200	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win8 64	06/13
6885-2AG	i5-3230M	4GBx1	15.6" FHD	720p	128G SSD	Intel 2230 + BT	Ericsson	selectable	Numpad	Black	Finger	6 48	Win7 Pro64	07/13
6885-9WG	i3-3110M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win8 64	06/13
6885-9XG	i3-3110M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-2348M processor (2 cores, 2.30GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology				Preloaded operating system²⁰ - <i>Some:</i> DOS-Lic. - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit Preloaded applications (only some listed, exclude DOS models) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models (exclude DOS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Skype™			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™							
M.2 SSD	None							
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio							
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator							
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz							
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None							
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm							
Weight ²	6-cell: from 5.4 lb (2.46kg)							
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom							
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic							
Battery - type ³⁷	Lithium Ion 6-cell							
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 8.1 hr							
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM77 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)							
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Mini Card slot <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter							
M.2 Card M.2 WWAN SIM card Bluetooth™ Ethernet Audio support	One M.2 Card slot for support of WWAN card or SSD <i>Some:</i> Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card <i>Some:</i> User selectable, contract required with service provider Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole None				Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating (exclude DOS models) ENERGY STAR® 6.0-compliant (exclude DOS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Security Security chip Fingerprint reader	None UPEK Fingerprint reader on palm rest, swipe sensor							
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available							

See footnotes for more detailed information

WE model(s) announced April 30, June 11, June 25 or July 2, 2013

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ThinkPad Edge E531 6885 (Intel) - TopSeller (Windows 8) - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells/Wh	Bat-tery	Preload	Ann date (mm/yy)
6885-DBG	i3-3120M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	None	11/13
6885-DCG	i3-3110M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	None	11/13
6885-DDG	i3-3120M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win8 64	11/13
6885-DFG	i3-3110M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win8 64	11/13
6885-DHG	i5-3110M	4GBx1	15.6" HD	720p	500G 5400	TP 11a/b/g/n + BT	None	None	Numpad	Black	None	6	48	Win8 64	11/13
6885-DKG	i3-3110M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-DLG	i3-3120M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-DMG	i5-3230M	4GBx1	15.6" HD	720p	500G 5400	TP 11a/b/g/n + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-DNG	i5-3230M	4GBx1	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-DPG	i7-3632QM	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-DRG	i7-3632QM	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	11/13
6885-EYG	i7-3632QM	4GBx1	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win8 64	12/13
6885-EXG	i7-3632QM	4GBx1	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	None	12/13
6885-EVG	i5-3230M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win8 64	12/13
6885-EUG	i5-3230M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	None	12/13
6885-ETG	2030M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	None	12/13
6885-ERG	2030M	4GBx1	15.6" HD	720p	500G 5400	Intel 2230 + BT	None	None	Numpad	Black	None	6	48	Win8 64	12/13
6885-FFG	i5-3230M	4GBx1	15.6" HD	720p	1TB 5400	TP 11a/b/g/n + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	01/14

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Pentium® 2030M Processor (2 cores, 2.50 GHz, 2MB Cache), Intel HD Graphics , DDR3 memory controller (up to 1600MHz) Intel Core™ i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology										Preloaded operating system ²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models (exclude No OS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Skype™				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets														
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™														
M.2 SSD	None														
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio														
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator														
Graphics	Intel HD Graphics or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz														
Keyboard TrackPoint® Touchpad	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch														
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)														
Weight ²	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom														
Case color	Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Case material	Lithium Ion 6-cell														
Battery - type ³⁷	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 8.1 hr														
Battery - life ¹⁰															
Chipset	Mobile Intel HM77 Express Chipset														
ExpressCard	None														
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)														
PCIe Mini Card	One PCI Express Mini Card slot														
PCIe WLAN ⁴	Some: 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter														
M.2 Card	One M.2 Card slot for support of WWAN card or SSD														
M.2 WWAN	None														
SIM card	None														
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card														
Ethernet	Realtek® RTL8111F Gigabit Network Connection														
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone, combo audio/mic jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	None														
Fingerprint reader	None														
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information

WE model(s) announced November 19, or December 17, 2013 or January 7, 2014

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Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
(exclude No OS models)
ENERGY STAR® 6.0-compliant
(exclude No OS models)
RoHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²

ThinkPad Edge E531 6885 (Intel) - Optimus (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Discrete graphics	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN / SSD	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery Wh	Preload	Ann date (mm/yy)
6885-26G	i7-3632QM	4GBx1	15.6" FHD	GT740M	720p	1TB 5400	Intel 2230 + BT	24G	Numpad	Black	Finger	6	62	Win7 Pro64	04/13
6885-27G	i7-3632QM	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	Intel 2230 + BT	24G	Numpad	Red	Finger	6	62	Win8 64	04/13
6885-29G	i5-3230M	4GBx1	15.6" FHD	GT740M	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-9YG	i7-3632QM	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	Intel 2230 + BT	24G	Numpad	Black	Finger	6	62	Win8 64	06/13
6885-B6G	i3-3120M	4GBx1	15.6" HD	710M	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 64	06/13
6885-B7G	i3-3120M	4GBx1	15.6" HD	710M	720p	128G SSD	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	06/13
6885-B8G	i5-3230M	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 64	06/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology		Preloaded operating system ²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none">• Access Connections™• ThinkVantage Power Manager• ThinkVantage Tools• Lenovo SimpleTap• Adobe® Reader® - Windows 8 models <ul style="list-style-type: none">• Lenovo Support• Lenovo Companion• Lenovo Cloud Storage - All models <ul style="list-style-type: none">• ThinkVantage System Update• Norton™ Internet Security (30 days of virus definitions)• Skype™• Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets		
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™		
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot		
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio		
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator		
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® 710M , PCI Express® x 8, 1GB memory, DirectX® 11.1, or NVIDIA GeForce® GT740M , PCI Express® x 8, 2GB memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, External monitor support via analog VGA DB-15 connector / digital HDMI connector <i>Max external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz		
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None		
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm		
Weight ²	6-cell: from 5.5 lb (2.49kg)		
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom		
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic		
Battery - type ³⁷	Lithium Ion 6-cell		
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 8.0 hr		
Chipset	Mobile Intel HM77 Express Chipset		
ExpressCard	None		
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card	One PCI Express Mini Card slot		
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 One M.2 Card slot for support of WWAN card or SSD		
M.2 Card	None		
M.2 WWAN	None		
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card		
Ethernet	Realtek® RTL8111F Gigabit Network Connection		
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole		
Security	None		
Security chip	None		
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

See footnotes for more detailed information

WE model(s) announced April 30 or June 11, 2013

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Lenovo® ThinkPad E540



Lenovo ThinkPad E540



Lenovo ThinkPad E540
with Numeric Keypad



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen

ThinkPad E540 20C6 (Intel) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20C60043++	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	None	10/13
20C6004J++	i3-4000M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 64	10/13
20C60042++	i5-4200M	4GBx1	15.6" FHD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 64	10/13
20C6003U++	i3-4000M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 P64 DG Win8	10/13
20C60041++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6	48	Win7 P64 DG Win8	10/13
20C60046++	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6	48	Win7 P64 DG Win8	10/13
20C6004G++	i5-4200M	4GBx1	15.6" FHD	720p	128G SSD	Intel 7260 + BT	Ericsson select	None	Numpad	Black	Finger	6	48	Win7 P64 DG Win8	10/13
20C6003T++	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6	48	Win7 P64 DG Win8	10/13
20C6006H++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	None	11/13
20C600BR++	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Red	Finger	6	48	Win7 P64 DG Win8	04/14
20C600HS++	i7-4702MQ	4GBx1	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	None	06/14
20C600J0++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	None	6	48	Win8.1 64	06/14
20C600J4++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	None	06/14
20C600HV++	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8.1 64	06/14
20C600HU++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win8.1 64	06/14
20C600L7++	P3550M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	None	07/14
20C600L8++	P3550M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win8.1 64	07/14

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Pentium® 3550M processor (2 cores, 2.30GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1600MHz) Intel Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology											Preloaded operating system²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 64-bit			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets											Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate			
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™														
M.2 SSD	None														
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio														
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator														
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display														
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None														
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm														
Weight ²	6-cell: from 5.4 lb (2.46kg)														
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom														
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Battery - type ³⁷	Lithium Ion 6-cell														
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr														
Chipset	Mobile Intel HM87 Express Chipset														
ExpressCard	None														
Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)														
PCIe Mini Card	One PCI Express Half Mini Card slot														
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2														
M.2 Card	One M.2 Card slot for support of WWAN card or SSD														
M.2 WWAN	Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card														
SIM card	Some: User selectable, contract required with service provider														
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card														
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection														
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor														
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger print reader	Bat-tery cells/Wh	Bat-tery Preload	Ann date (mm/yy)
20C600HW++	P3560M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6 48	Win8.1 64	05/14
20C600HT++	i5-4300M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6 48	Win8.1 64	05/14
20C600J3++	i5-4210M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	None	05/14
20C600HY++	i5-4210M	4GBx1	15.6" FHD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 64	05/14
20C600HX++	P3560M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6 48	None	05/14
20C600J9++	i5-4210M	4GBx1	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/14
20C600JB++	i5-4210M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/14
20C600JG++	i3-4100M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/14
20C600JK++	i5-4210M	4GBx1	15.6" FHD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 62	Win7 Pro64	06/14
20C600JE++	i5-4300M	4GBx1	15.6" HD	720p	1TB 5400	Intel 7260 ac + BT	None	None	Numpad	Black	None	6 48	Win7 Pro64	06/14
20C600JC++	i5-4210M	4GBx1	15.6" FHD	720p	128G SSD	Intel 7260 + BT	Ericsson	select	Numpad	Black	Finger	6 62	Win7 Pro64	06/14
20C600JJ++	i5-4210M	4GBx1	15.6" HD	720p	500G 5400	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/14
20C600JD++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6 48	Win7 Pro64	06/14
20C600JV++	i5-4210M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Red	Finger	6 48	Win7 Pro64	06/14
20C600JF++	i3-4100M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	06/14

Country Code"+": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Pentium® 3560M processor (2 cores, 2.40GHz, 2MB cache), Intel HD Graphics , DDR3 memory controller (up to 1600MHz) Intel Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core™ i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-4300M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology										Preloaded operating system ²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit - Some: Windows 8.1 64-bit			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader®			
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™										- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage			
M.2 SSD	None										- All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate			
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio													
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator													
Graphics	Intel HD Graphics or Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display													
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None													
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)													
Weight ²	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Case color	Lithium Ion 6-cell													
Case material	6-cell (48Whr): up to 6.2 hr													
Battery - type ³⁷	6-cell (62Whr): up to 7.4 hr													
Battery - life ¹⁰														
Chipset	Mobile Intel HM87 Express Chipset													
ExpressCard	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)													
PCIe Mini Card	One PCI Express Half Mini Card slot													
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2													
M.2 Card	One M.2 Card slot for support of WWAN card or SSD													
M.2 WWAN	Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card													
SIM card	Some: User selectable, contract required with service provider													
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card													
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection													
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, TCG 1.2-compliant													
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger print reader	Bat-tery cells/Wh	Preload	Ann date (mm/yy)
20C600LH++	i7-4712MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	en 6 48	Win8.1 64	09/14
20C600LD++	i7-4712MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	en 6 48	Win7 P64 DG Win8.1	09/14
20C600LR++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	en 6 48	Win7 P64 DG Win8.1	02/15
20C600LS++	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	en 6 48	Win7 P64 DG Win8.1	02/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology		Preloaded operating system ²⁰ <ul style="list-style-type: none">- <i>Some:</i> No operating system- <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit- <i>Some:</i> Windows 8.1 64-bit Preloaded applications (only some listed, exclude No OS models) <ul style="list-style-type: none">- Windows 7 models<ul style="list-style-type: none">• Adobe® Reader®- Windows 8 models<ul style="list-style-type: none">• Lenovo Support• Lenovo Companion• Lenovo Cloud Storage- All models<ul style="list-style-type: none">• ThinkVantage System Update• Norton™ Internet Security (30 days of virus definitions)• Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets		
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™		
M.2 SSD	None		
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio		
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator		
Graphics	Intel HD Graphics or Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display		
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad		
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³		
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch		
ThinkLight™	None		
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)		
Weight ²	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom		
Case color	Acrylonitrile-Butadiene-Styrene (ABS) plastic		
Case material	Lithium Ion 6-cell		
Battery - type ³⁷	6-cell (48Whr): up to 6.2 hr		
Battery - life ¹⁰	6-cell (62Whr): up to 7.4 hr		
Chipset	Mobile Intel HM87 Express Chipset		
ExpressCard	None		
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card	One PCI Express Half Mini Card slot		
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2		
M.2 Card	One M.2 Card slot for support of WWAN card or SSD		
M.2 WWAN	<i>Some:</i> Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card		
SIM card	<i>Some:</i> User selectable, contract required with service provider		
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card		
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection		
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack		
Security	Power-on password, hard disk password, supervisor password, security keyhole		
Security chip	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

Supports ThinkVantage® technologies
65-watt AC adapter EPEAT™ Gold rating (exclude No OS models) ENERGY STAR® 6.0-compliant (exclude No OS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - Optimus (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Discrete graphics	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Numeric Keypad	Top color	Finger print reader	TPM	Bat-tery cells/Wh	Bat-tery	Preload	Ann date (mm/yy)
20C6003Y++	i3-4000M	4GBx1	15.6" HD	710M	720p	500G 7200	7260 + BT	None	Numpad	Black	Finger	en	6 48	Win8 64		10/13
20C60044++	i7-4702MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Red	Finger	en	6 62	Win8 64		10/13
20C60045++	i5-4200M	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	None	Numpad	Black	Finger	en	6 48	Win8 64		10/13
20C6003V++	i5-4200M	4GBx1	15.6" FHD	GT740M	720p	500G 7200	7260 + BT	None	Numpad	Black	Finger	en	6 48	Win7 P64 DG Win8		10/13
20C60040++	i3-4000M	4GBx1	15.6" FHD	710M	720p	128G SSD	7260 + BT	None	Numpad	Black	Finger	en	6 48	Win7 P64 DG Win8		10/13
20C6003Q++	i7-4702MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win7 P64 DG Win8		10/13
20C6003A++	i7-4702MQ	4GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win7 P64 DG Win8		10/13
20C6006G++	i3-4000M	4GBx1	15.6" HD	GT740M	720p	500G 7200	7260 + BT	None	Numpad	Black	Finger	en	6 48	None		11/13
20C6006J++	i5-4200M	4GBx1	15.6" HD	GT740M	720p	500G 7200	7260 + BT	None	Numpad	Black	Finger	en	6 48	None		11/13
20C6008F++	i7-4702MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win8 64		12/13
20C600JA++	i5-4210M	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	None	Numpad	Black	Finger	dis	6 48	Win8.1 64		06/14
20C600JH++	i5-4210M	4GBx1	15.6" FHD	GT740M	720p	500G 7200	7260 + BT	None	Numpad	Black	Finger	dis	6 48	Win7 P64 DG Win8.1		06/14
20C600LF++	i7-4712MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Red	Finger	en	6 62	Win8.1 64		09/14
20C600LG++	i7-4712MQ	4GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win7 P64 DG Win8.1		09/14
20C600LJ++	i7-4712MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win8.1 64		09/14
20C600LL++	i7-4712MQ	8GBx1	15.6" FHD	GT740M	720p	1TB 5400	7260 + BT	16GB	Numpad	Black	Finger	en	6 62	Win7 P64 DG Win8.1		09/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>												<p>Preloaded operating system²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8.1 64-bit Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets															
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™															
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot															
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio															
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator															
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA GeForce® 710M , PCI Express® x 8, 1GB memory, DirectX® 11.1, or NVIDIA GeForce® GT740M , PCI Express® x 8, 2GB memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, External monitor support via analog VGA DB-15 connector / digital HDMI connector															
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None															
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm															
Weight ²	6-cell: from 5.4 lb (2.46kg)															
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom															
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic															
Battery - type ³⁷	Lithium Ion 6-cell															
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr															
Chipset	Mobile Intel HM87 Express Chipset															
ExpressCard	None															
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)															
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)															
PCIe Mini Card	One PCI Express Half Mini Card slot															
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2															
M.2 Card	One M.2 Card slot for support of WWAN card or SSD															
M.2 WWAN	None															
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card															
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection															
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled															
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor															
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available															

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller (MultiTouch)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Numeric Keypad	Top color	Finger print reader	TPM	Bat- tery cells /Wh	Bat- tery cells /Wh	Preload	Ann date (mm/yy)
20C6003X++	i5-4200M	8GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 ac + BT	16GB	Numpad	Black	Finger	en	6	62	Win8 64	10/13
20C6004M++	i3-4000M	4GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win8 64	10/13
20C6003W++	i7-4702MQ	8GBx1	15.6" HD Touch	720p	1TB 5400	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win8 64	10/13
20C600BE++	i5-4200M	8GBx1	15.6" HD Touch	720p	500G 5400	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	62	Win8.1 64	03/14
20C600J2++	i3-4100M	4GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win8.1 64	05/14
20C600J1++	i5-4210M	8GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 ac + BT	16GB	Numpad	Black	Finger	en	6	62	Win8.1 64	05/14
20C600LN++	i5-4210M	8GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 ac + BT	16GB	Numpad	Black	Finger	en	6	62	Win7 P64 DG Win8.1	09/14
20C600LK++	i7-4712MQ	8GBx1	15.6" HD Touch	720p	1TB 5400	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win8.1 64	09/14
20C600LP++	i7-4712MQ	8GBx1	15.6" HD Touch	720p	1TB 5400	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win7 P64 DG Win8.1	09/14
20C600LM++	i3-4100M	8GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	62	Win7 P64 DG Win8.1	09/14
20C600LQ++	i3-4100M	4GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 ac + BT	None	Numpad	Black	Finger	en	6	48	Win7 P64 DG Win8.1	09/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology										Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8.1 64-bit Preloaded applications (only some listed, for Windows 8/8.1 models) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets														
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™														
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot														
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, 10-point touch screen LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, 10-point touch screen LED backlight, 300 nits, 16:9 aspect ratio														
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator														
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display														
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None														
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)														
Weight ²															
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom														
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Battery - type ³⁷	Lithium Ion 6-cell														
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr														
Chipset	Mobile Intel HM87 Express Chipset														
ExpressCard	None														
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)														
PCIe Mini Card	One PCI Express Half Mini Card slot														
PCIe WLAN ⁴	11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2														
M.2 Card	One M.2 Card slot for support of WWAN card or SSD														
M.2 WWAN	None														
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card														
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection														
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor														
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information

ThinkPad Edge S430

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Lenovo® ThinkPad Edge S430



Lenovo ThinkPad Edge S430



Lenovo ThinkPad Edge S430



Lenovo ThinkPad Edge S430



Lenovo ThinkPad Edge S430



Lenovo ThinkPad Edge S430

ThinkPad Edge S430 3364 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	SIM card	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Ann Date (mm/yy)
3364-3DG	i7-3520M	4GBx2	14.0" HD+	720p	500G 7200	Intel 2230	Ericsson	Lenovo	Finger	BT	4	Pro 64	06/12

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology								Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller								Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager				
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive								Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • TrueSuite™ (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office preloaded; purchase a product key to activate				
mSATA™ SSD	None												
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio												
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus												
Graphics	Intel HD Graphics 4000 in processor, supports external digital monitor via mini-HDMI™ (HDCP-compliant) or Mini DisplayPort; supports dual independent display; <i>Max external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200 (HDMI via optional mini-HDMI cable)@60Hz; 2048x1536 (VGA)@75Hz												
Keyboard	6-row, spill-resistant, multimedia Fn keys												
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³												
Touchpad	UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.0W" (WxDxH): 13.82" x 9.37" x 0.87-0.95"; 351mm x 238mm x 22.2-24.2mm												
Weight ²	4-cell: from 3.97 lb (1.8kg)												
Case color	Mocha black (top), trimmed with a thin silver band (side); black bottom												
Case material	<i>Display cover:</i> Magnesium/Aluminum; <i>Bottom:</i> Magnesium/Aluminum												
Battery - type ³⁷	Integrated Lithium Polymer 4-cell												
Battery - life ¹⁰	4-cell (48.8Whr): up to 7.0 hr												
Chipset	Mobile Intel HM77 Express Chipset												
ExpressCard	None												
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)												
Ports	Two USB 3.0, ethernet (RJ-45), one mini-HDMI, one Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i5 discrete models and i7 models, switch via BIOS)												
PCIe Mini Card	Two PCI Express Mini Card slots												
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter												
PCIe WWAN	Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS												
SIM card	<i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required												
Modem	None												
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter												
Ethernet	Realtek® RTL8111F Gigabit Network Connection												
Intel AMT	None												
Audio support	HD Audio, Realtek ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/mic jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, TCG 1.2-compliant												
Fingerprint reader	AuthenTec fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												

See footnotes for more detailed information
WE model(s) announced June 19, 2012

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Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²

ThinkPad Edge S430 3364 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ^a rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	SIM card	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Ann Date (mm/yy)
3364-5HG	i7-3520M	4GBx2	14.0" HD+	720p	500G 7200	Intel 2230	Ericsson	Lenovo	Finger	BT	4	Win7 Pro64	10/12
3364-57G	i7-3520M	4GBx2	14.0" HD+	720p	500G 7200	Intel 2230	Ericsson	Lenovo	Finger	BT	4	Win8 Pro64	10/12

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology	Preloaded operating system ²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none">• Access Connections™• ThinkVantage Power Manager• ThinkVantage Tools• Lenovo SimpleTap• Adobe® Reader® - Windows 8 models <ul style="list-style-type: none">• Lenovo Support• Lenovo Companion• Lenovo Mobile Access• Lenovo Cloud Storage - All models <ul style="list-style-type: none">• ThinkVantage System Update• Norton™ Internet Security (30 days of virus definitions)• Skype™• Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive	
mSATA™ SSD	None	
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	
Graphics	Intel HD Graphics 4000 in processor, supports external digital monitor via mini-HDMI™ (HDCP-compliant) or Mini DisplayPort; supports dual independent display; <i>Max external resolution:</i> 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200 (HDMI via optional mini-HDMI cable)@60Hz; 2048x1536 (VGA)@75Hz	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>14.0W" (WxDxH):</i> 13.82" x 9.37" x 0.87-0.95"; 351mm x 238mm x 22.2-24.2mm	
Weight ²	<i>4-cell:</i> from 3.97 lb (1.8kg)	
Case color	Mocha black (top), trimmed with a thin silver band (side); black bottom	
Case material	<i>Display cover :</i> Magnesium/Aluminum; <i>Bottom:</i> Magnesium/Aluminum	
Battery - type ³⁷	Integrated Lithium Polymer 4-cell	
Battery - life ¹⁰	<i>4-cell (48.8Whr):</i> up to 6.0 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, ethernet (RJ-45), one mini-HDMI, one Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i5 discrete models and i7 models, switch via BIOS)	
PCIe Mini Card	Two PCI Express Mini Card slots	
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	
PCIe WWAN	Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCIe Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
SIM card	<i>Some:</i> Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required	
Modem	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Intel AMT	None	
Audio support	HD Audio, Realtek ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	AuthenTec fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

Supports ThinkVantage® technologies
65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information
WE model(s) announced October 23, 2012

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Supports ThinkVantage® technologies

65-watt AC adapter
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
RoHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²

ThinkPad Edge S430 3364 (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ^a rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Ann Date (mm/yy)
3364-3EG	i5-3210M	4GBx1	14.0" HD+	720p	500G 7200	Intel 2230	16GB mSATA	Finger	BT	4	Prem 64	06/12

• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology							Preloaded operating system ²⁰ Genuine Windows® 7 Home Premium 64				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller							Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Password Manager				
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive							Preloaded applications ¹⁴ (only some listed) • Lenovo® Solution Center • Lenovo Message Center Plus • ThinkVantage Product Recovery • Access Connections™ • TrueSuite™ (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • Lenovo Cloud Storage by SugarSync • Lenovo SimpleTap • Norton™ Internet Security 2012 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Evernote® • Intel Small Business Advantage • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office preloaded; purchase a product key to activate				
mSATA™ SSD	mSATA Solid State Drive (SSD), via PCIe Mini Card slot											
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio											
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus											
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® GT 620M , PCI Express® x16, 2GB memory, supports external digital monitor via mini-HDMI™ (HDCP-compliant) or Mini DisplayPort; supports dual independent display; <i>Max external resolution:</i> 2560x1600 @60Hz (DisplayPort via optional Mini DP cable); 1920x1200 (HDMI via optional mini-HDMI cable) @60Hz; 2048x1536 (VGA) @85Hz											
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case color Case material	<i>14.0W" (WxDxH):</i> 13.82" x 9.37" x 0.87-0.95"; 351mm x 238mm x 22.2-24.2mm <i>4-cell:</i> from 3.97 lb (1.8kg) Mocha black (top), trimmed with a thin silver band (side); black bottom <i>Display cover:</i> Magnesium/Aluminum; <i>Bottom:</i> Magnesium/Aluminum											
Battery - type ³⁷ Battery - life ¹⁰	Integrated Lithium Polymer 4-cell <i>4-cell (48.8Whr):</i> up to 6.0 hr											
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM77 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, ethernet (RJ-45), one mini-HDMI, one Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i5 discrete models and i7 models, switch via BIOS)											
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter None None None Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/mic jack											
Security Security chip Fingerpring reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available							Supports ThinkVantage® technologies 90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				

See footnotes for more detailed information
WE model(s) announced June 19, 2012

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ThinkPad Edge S430 3364 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCle Mini Card WLAN	PCle Mini Card WWAN /mSATA	SIM card	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Ann Date (mm/yy)
3364-5JG	i7-3520M	4GBx2	14.0" HD+	720p	128G SSD	Intel 2230	Ericsson	Lenovo	Finger	BT	4	Win7 Pro64	10/12
3364-58G	i7-3520M	4GBx2	14.0" HD+	720p	128G SSD	Intel 2230	Ericsson	Lenovo	Finger	BT	4	Win8 Pro64	10/12
3364-56G	i5-3210M	4GBx1	14.0" HD+	720p	500G 7200	Intel 2230	16GB	None	Finger	BT	4	Win8 64	10/12
3364-7AG	i5-3210M	4GBx1	14.0" HD+	720p	500G 7200	TP 11a/b/g/n	None	None	Finger	BT	4	Win7 Pro64	03/13

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i5-3210M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-3520M processor (2 cores, 2.90GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology										Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller										Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Mobile Access • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate		
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ All: removable, upgradable, Shock Mounted Hard Drive Some: 16GB mSATA Solid State Drive (SSD), via PCIe Mini Card slot												
mSATA™ SSD													
Widescreen display	Some: 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio												
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus												
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® GT 620M , PCI Express® x16, 2GB memory, supports external digital monitor via mini-HDMI™ (HDCP-compliant) or Mini DisplayPort; supports dual independent display; Max external resolution: 2560x1600@60Hz (DisplayPort via optional Mini DP cable); 1920x1200 (HDMI via optional mini-HDMI cable)@60Hz; 2048x1536 (VGA)@85Hz												
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material	14.0W" (WxDxH): 13.82" x 9.37" x 0.87-0.95"; 351mm x 238mm x 22.2-24.2mm 4-cell: from 3.97 lb (1.8kg) Mocha black (top), trimmed with a thin silver band (side); black bottom Display cover : Magnesium/Aluminum; Bottom: Magnesium/Aluminum												
Battery - type ³⁷ Battery - life ¹⁰	Integrated Lithium Polymer 4-cell 4-cell (48.8Whr): up to 5.0 hr												
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM77 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, ethernet (RJ-45), one mini-HDMI, one Mini DisplayPort (Mini DP / Thunderbolt™ combo port on i5 discrete models and i7 models, switch via BIOS)												
PCle Mini Card PCle WLAN ⁴	Two PCI Express Mini Card slots Some: 11a/b/g/n, PCle Half Mini Card, ThinkPad a/b/g/n, 2x2, Wi-Fi / BT combo adapter Some: 11b/g/n, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter												
PCle WWAN	Some: Wireless WAN, Ericsson® H5321gw Mobile Broadband Module, PCle Half Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS												
SIM card Modem Bluetooth™ Ethernet Intel AMT Audio support	Some: Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required None Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Realtek® RTL8111F Gigabit Network Connection None HD Audio, Realtek ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/mic jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant AuthenTec fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										Supports ThinkVantage® technologies 90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²		

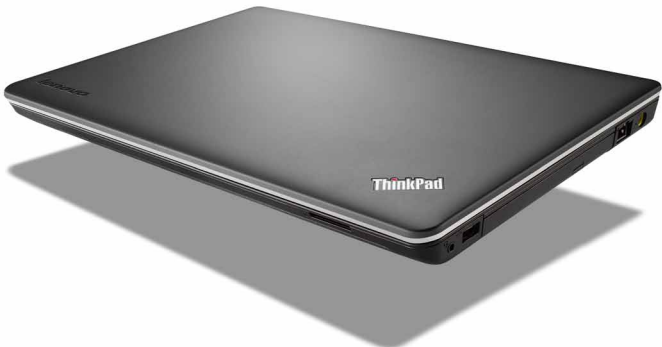
See footnotes for more detailed information
WE model(s) announced October 23, 2012 or March 19, 2013

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(G-PET1-4) March 2013

ThinkPad Edge E545



Lenovo® ThinkPad Edge E545



Lenovo ThinkPad Edge E545



Lenovo ThinkPad Edge E545



Lenovo ThinkPad Edge E545



Lenovo ThinkPad Edge E545



Lenovo ThinkPad Edge E545

ThinkPad Edge E545 20B2 (AMD) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	PCIe Mini Card WWAN /mSATA	Card Numeric Keypad	Top color	Micro-phone	Finger-print reader	Bat-tery cells	Preload	Ann date (mm/yy)
20B2000N++	A10-5750M	4GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B2000L++	A8-5550M	8GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	DOS-Lic.	08/13
20B2000K++	A8-5550M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B20015++	A8-4500M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	DOS-Lic.	09/13
20B2000T++	A8-4500M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 64	09/13
20B20010++	A8-4500M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	09/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor A8-4500M (quad-core, 1.90GHz, 4MB L2 cache), integrated AMD Radeon HD 7640G Graphics, AMD Turbo Core technology (up to 2.80GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A8-5550M (quad-core, 2.10GHz, 4MB L2 cache), integrated AMD Radeon HD 8550G Graphics, AMD Turbo Core technology (up to 3.10GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A10-5750M (quad-core, 2.50GHz, 4MB L2 cache), integrated AMD Radeon HD 8650G Graphics, AMD Turbo Core technology (up to 3.50GHz), integrated DDR3 memory controller (up to 1600MHz)			Preloaded operating system ²⁰ - <i>Some:</i> DOS-Lic. - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models (exclude DOS and No OS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets			
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™			
mSATA™ SSD	None			
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio			
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator			
Graphics	AMD Radeon HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 1920x1200 (HDMI) @60Hz</i>			
Keyboard	<i>Matte black (top):</i> 6-row, spill-resistant, multimedia Fn keys, numeric keypad			
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³			
Touchpad	UltraNav™, wide touchpad below keyboard, Tap Zones, multi-touch			
ThinkLight™	None			
Dimensions ³	<i>Matte black or Matte red (top):</i> 15.6W" (WxDxH): 14.84" x 9.65" x 1.12-1.35"; 377 x 245mm x 28.5-34.3mm			
Weight ²	<i>6-cell:</i> from 5.2 lb (2.37kg)			
Case color	Matte black (top), trimmed with a thin silver band (side); black bottom			
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic			
Battery - type ³⁷	Lithium Ion 6-cell			
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.2 hr			
Chipset	AMD A76M FCH			
ExpressCard	None			
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Ports	Three USB 3.0, one USB 2.0 (powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)			
PCIe Mini Card WLAN ⁴	One PCI Express Mini Card slot 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, Wi-Fi + Bluetooth combo adapter, 1x1			
WWAN	None			
Modem	None			
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card			
Ethernet	Realtek® RTL8111F Gigabit Network Connection			
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone or Mono digital microphone, combo audio/mic jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	None			
Fingerprint reader	None			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available			

Supports ThinkVantage® technologies
65-watt AC adapter EPEAT™ Gold rating (exclude DOS and No OS models) ENERGY STAR® 5.0-compliant (exclude DOS and No OS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

WE model(s) announced August 20 or September 17, 2013

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(G-GLN11-5) September 2013

ThinkPad Edge E545 20B2 (AMD) - Discrete (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	PCIe Mini Card WWAN /mSATA	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Preload	Ann date (mm/yy)
20B2000P++	A10-5750M	8GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	None	6	DOS-Lic.	08/13
20B2000M++	A8-5550M	8GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	None	6	Win8 64	08/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor A8-5550M (quad-core, 2.10GHz, 4MB L2 cache), integrated AMD Radeon HD 8550G Graphics, AMD Turbo Core technology (up to 3.10GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A10-5750M (quad-core, 2.50GHz, 4MB L2 cache), integrated AMD Radeon HD 8650G Graphics, AMD Turbo Core technology (up to 3.50GHz), integrated DDR3 memory controller (up to 1600MHz)		Preloaded operating system ²⁰ - <i>Some:</i> DOS-Lic. - <i>Some:</i> Windows 8 64-bit Preloaded applications ¹⁴ (only some listed, exclude DOS models) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets		
Optical	DVD burner, 12.7mm high, fixed, not removable, tray-in		
SATA disk	Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™		
mSATA™ SSD	None		
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio		
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator		
Graphics	AMD Radeon HD 8570M Graphics , PCI Express® x16, 2GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 1920x1200 (HDMI) @60Hz</i>		
Keyboard	<i>Matte black (top):</i> 6-row, spill-resistant, multimedia Fn keys, numeric keypad		
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³		
Touchpad	UltraNav™, wide touchpad below keyboard, Tap Zones, multi-touch		
ThinkLight™	None		
Dimensions ³	<i>Matte black (top):</i> 15.6W" (WxDxH): 14.84" x 9.65" x 1.12-1.35"; 377 x 245mm x 28.5-34.3mm		
Weight ²	<i>6-cell:</i> from 5.4 lb (2.45kg)		
Case color	Matte black (top), trimmed with a thin silver band (side); black bottom		
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic		
Battery - type ³⁷	Lithium Ion 6-cell		
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.2 hr		
Chipset	AMD A76M FCH		
ExpressCard	None		
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Ports	Three USB 3.0, one USB 2.0 (powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card	One PCI Express Mini Card slot		
WLAN ⁴	11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, Wi-Fi + Bluetooth combo adapter, 1x1		
WWAN	None		
Modem	None		
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card		
Ethernet	Realtek® RTL8111F Gigabit Network Connection		
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone, combo audio/mic jack		
Security	Power-on password, hard disk password, supervisor password, security keyhole		
Security chip	None		
Fingerprint reader	None		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

Supports ThinkVantage® technologies
90-watt AC adapter EPEAT™ Gold rating (exclude DOS models) ENERGY STAR® 5.0-compliant (exclude DOS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information
 WE model(s) announced August 20, 2013

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 (G-GLN11-6) August 2013



Lenovo® ThinkPad E550



Lenovo ThinkPad E550



Lenovo ThinkPad E550

ThinkPad E550 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector	
	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400		None	
	i3-5005U	2	4	2.0 GHz	-	3MB		HD5500			
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500			
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB	HD5500					
Graphics	Intel HD Graphics in processor only, or AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display Max resolution: 1920x1080 (HDMI) @60Hz								Monitor cable	None	
Chipset	Intel SoC (System on Chip) platform								Camera	Some: HD720p resolution, fixed focus	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Audio support	Some: 3D camera, Intel RealSense™ 3D Camera with MIC HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers or JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack	
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
Multi-touch	Some: supports 10-finger gesture								UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™								ThinkLight™	None	
Optical	Some: Hybrid drive with 8GB NAND flash memory Some: DVD burner, 9.0mm high, removable Some: Blank Bezel								Security	Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	None								Security chip vPro	Some: Trusted Platform Module, TCG 1.2-compliant	
Ethernet	Intel WGI218V Gigabit Ethernet Connection								Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								NFC	None	
WLAN	One of the following, configurable by model: <ul style="list-style-type: none">Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 CardIntel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 CardRTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 CardBCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card								Battery type	Li-Ion 6-cell (48Wh)	
WWAN	None								Battery life	6-cell (48Wh): up to 9.0 hr	
SIM card	None								AC adapter	Some: 45-watt AC adapter (Integrated Graphics) Some: 65-watt AC adapter (Discrete Graphics)	
Smart Card Read ExpressCard	None								Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none">Lenovo Solution CenterLenovo SHAREitThinkVantage Product RecoveryRescue and Recovery™ThinkVantage System UpdatePC Device StageAdobe® Reader®Evernote®Skype™Maxthon Cloud BrowserMicrosoft® Office preloaded; purchase a product key to activateNorton™ Internet Security (30 days of virus definitions)	
Dimensions	None Touch(WxDxH): 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm								Limited warranty	1-year - depot repair service / service upgrades available	
Weight	6-cell None Touch: from 5.21 lb (2.35kg)								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	
Case color	Graphite Black										
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										

See footnotes for more detailed information

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(GDN1-Spec) January 2015

ThinkPad E550 20DF - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DF004P++	I5-5200U	No	HD 5500	4GBx1	15.6" FHD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 64	1-depot	No	01/15
20DF004R++	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	None	1-depot	No	01/15
20DF004X++	I5-5200U	No	HD 5500	4GBx1	15.6" FHD	None	128GB SSD	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF004Q++	I5-5200U	No	HD 5500	8GBx1	15.6" FHD	None	128GB SSD	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF004V++	I5-5200U	No	HD 5500	8GBx1	15.6" FHD	None	500GB 7200 SSHD	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0051++	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0050++	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	128GB SSD	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0053++	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200 SSHD	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0054++	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

Country Code"+-": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad E550 Platform Specifications sheet](#)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions	None Touch(WxDxH): 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm		
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Weight	6-cell None Touch: from 5.21 lb (2.35kg)		
	i3-4005U	2	4	1.7 GHz	-	3MB		HD4400	Case color	Graphite Black		
	i3-5005U	2	4	2.0 GHz	-	3MB	DDR3L-1600	HD5500	Case Matera	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic		
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Graphics	Intel HD Graphics in processor only, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content)								Ports	Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector		
									Monitor cable	None		
Chipset	Intel SoC (System on Chip) platform								Camera	HD720p resolution, fixed focus		
									Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad		
									UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad		
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								ThinkLight™	None		
									Security	Power-on password, hard disk password, supervisor password, security keyhole		
Multi-touch	Some: supports 10-finger gesture								Security chip	Some: Trusted Platform Module, TCG 1.2-compliant		
									vPro	None		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™								Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor		
									NFC	None		
Optical	Some: Hybrid drive with 8GB NAND flash memory DVD burner, 9.0mm high, removable								Battery type	Li-Ion 6-cell (48Wh)		
									Battery life	6-cell (48Wh): up to 9.0 hr		
M.2 SSD	None								AC adapter	45-watt AC adapter (Integrated Graphics)		
									Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
Ethernet	Intel WGI218V Gigabit Ethernet Connection									Some: Windows 8.1 64-bit		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									Some: Windows 8.1 Pro 64-bit		
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								Limited warranty	1-year - depot repair service / service upgrades available		
WWAN	None								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		
SIM card	None											

See footnotes for more detailed information

ThinkPad E550 20DF (Radeon) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DF004N++	I5-5200U	No	R7 M260	8GBx1	15.6" FHD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 64	1-depot	No	01/15
20DF004S++	I7-5500U	No	R7 M260	8GBx1	15.6" FHD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 64	1-depot	No	01/15
20DF004U++	I7-5500U	No	R7 M260	8GBx1	15.6" FHD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF004W++	I7-5500U	No	R7 M260	4GBx1	15.6" FHD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF004T++	I5-5200U	No	R7 M260	4GBx1	15.6" FHD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF0052++	I5-5200U	No	R7 M260	8GBx1	15.6" FHD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15

Country Code*++ : AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad E550 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions	None Touch(WxDxH): 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm				
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Weight	6-cell None Touch: from 5.21 lb (2.35kg)				
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	HD5500	Case color	Graphite Black				
	i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500	Case Matera	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic				
Graphics	AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content)								Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Chipset	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Ports	Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector				
Memory									Monitor cable	None				
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Camera	HD720p resolution, fixed focus				
Multi-touch	Some: supports 10-finger gesture								Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad				
Optical	DVD burner, 9.0mm high, removable None								UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad				
									ThinkLight™	None				
M.2 SSD									Security	Power-on password, hard disk password, supervisor password, security keyhole				
									Security chip	None				
Ethernet	Intel WGI218V Gigabit Ethernet Connection								vPro	None				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor				
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								NFC	None				
WWAN	None								Battery type	Li-Ion 6-cell (48Wh)				
SIM card	None								Battery life	6-cell (48Wh): up to 9.0 hr				
									AC adapter	65-watt AC adapter (Discrete Graphics)				
									Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit		
									Limited warranty	1-year - depot repair service / service upgrades available				
									Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant				

See footnotes for more detailed information



Lenovo® ThinkPad E555



Lenovo ThinkPad E555



Lenovo ThinkPad E555

ThinkPad E555 Platform Specifications

Product Specifications Reference (PSREF)

Processor	AMD Accelerated Processor A6, A8, A10, or FX APU								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics		Two USB 3.0 (one Always On), one USB 2.0, VGA DB-15, HDMI, Ethernet (RJ-45), Lenovo OneLink connector, combo audio/microphone jack	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD		None	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB		R5 M240			
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 HD			
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 M240			
	A10-7300	4	4	1.9 GHz	3.2 GHz	4MB		R7 M260DX (R6+R5 M240)			
FX-7500	4	4	2.1 GHz	3.3 GHz	4MB	R7 M265DX (R7+R5 M240)					
Graphics	AMD Radeon™ R4 or R5 HD Graphics in processor only, AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 and FX APU external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display								Security	Power-on password, hard disk password, supervisor password, security keyhole	
Chipset	AMD A76M FCH Chipset								Security chip	None	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								vPro	None	
Display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Fingerprint reader	None	
Multi-touch	None								NFC	None	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								Battery type	Li-Ion 6-cell (48Wh)	
Optical	<i>Some:</i> DVD burner, 9.0mm high, fixed <i>Some:</i> Blank Bezel								Battery life	Up to 6.3 hr	
M.2 SSD	None								AC adapter	<i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink PowerDVD • Cyberlink Power2Go • Cyberlink PowerProducer	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
WLAN	<i>One of the following, configurable by model:</i> • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM943162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card										
WWAN	None										
SIM card	None										
Smart Card Read	None										
ExpressCard	None										
Dimensions	<i>All (WxDxH):</i> 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm)								Limited warranty	1-year - depot repair service / service upgrades available	
Weight	From 5.20 lb (2.36kg)								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	
Case color	Graphite black										
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										

See footnotes for more detailed information

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ThinkPad E555 20DH (AMD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Graphics	Memory	Display	Storage	Optical	WLAN & Bluetooth	WWAN/ SSD	SIM card	Camera	Keyboard	UltraNav	Finger print reader	Battery cells(wh)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DH000T++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	08/14
20DH000Q++	A6-7000	R4 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	Win8.1 64	1-Depot	No	08/14
20DH000R++	A6-7000	R4 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	08/14
20DH0008++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	Win8.1 64	1-Depot	No	08/14
20DH000W++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	None	1-Depot	No	08/14
20DH001X++	A6-7000	R4 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	Win8.1 64	1-Depot	No	01/15
20DH0026++	A6-7000	R4 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH001W++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	Win8.1 64	1-Depot	No	01/15
20DH0020++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	None	1-Depot	No	01/15
20DH0027++	A8-7100	R5 HD	4GBx1	15.6" HD	500G 7200	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15

Country Code"++" : AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

- For detailed platform specifications, please see [ThinkPad E555 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A6, A8 APU								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), one USB 2.0, VGA DB-15, HDMI, Ethernet (RJ-45), Lenovo OneLink connector, combo audio/microphone jack None	
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics			
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD			
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 HD			
Graphics	AMD Radeon™ R4 or R5 HD Graphics in processor only								Camera	HD720p resolution, fixed focus	
Chipset	AMD A76M FCH Chipset								Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
Display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, 200 nits <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, 220 nits								UltraNav™	<i>Touchpad:</i> TrackPoint® pointing device and Mylar surface touchpad, multi-touch <i>Click pad:</i> TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								ThinkLight™	None	
Optical	<i>Some:</i> DVD burner, 9.0mm high, fixed <i>Some:</i> Blank Bezel								Security	Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	None								Security chip	None	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								vPro	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Fingerprint reader	None	
WLAN	RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card								NFC	None	
WWAN	None								Battery type	Li-Ion 6-cell (48Wh)	
SIM card	None								Battery life	Up to 6.3 hr	
Dimensions	<i>All (WxDxH):</i> 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm)								AC adapter	45-watt AC adapter (Integrated Graphics)	
Weight	From 5.20 lb (2.36kg)								Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
Case color	Graphite black								Limited warranty	1-year - depot repair service / service upgrades available	
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	

See footnotes for more detailed information

ThinkPad E555 20DH (AMD) - Discrete (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Graphics	Memory	Display	Storage	Optical	WLAN & Bluetooth	WWAN/ SSD	SIM card	Camera	Keyboard	UltraNav	Finger print reader	Battery cells(wh)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DH000X++	A10-7300	R7 M260DX	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Touchpad	No	6(48wh)	None	1-Depot	No	08/14
20DH0021++	A10-7300	R7 M260DX	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	Click pad	No	6(48wh)	None	1-Depot	No	01/15

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

• For detailed platform specifications, please see [ThinkPad E555 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A6, A8, A10, or FX APU								Dimensions Weight Case color Case Material	<i>All (WxDxH):</i> 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm) From 5.20 lb (2.36kg) Graphite black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics			
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R5 M240			
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 M240			
	A10-7300	4	4	1.9 GHz	3.2 GHz	4MB		R7 M260DX (R6+R5 M240)			
	FX-7500	4	4	2.1 GHz	3.3 GHz	4MB		R7 M265DX (R7+R5 M240)			
Graphics	AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 and FX APU								Camera	HD720p resolution, fixed focus	
Chipset	AMD A76M FCH Chipset								Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
Display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, 200 nits <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, 220 nits								UltraNav™	<i>Touchpad:</i> TrackPoint® pointing device and Mylar surface touchpad, multi-touch <i>Click pad:</i> TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								ThinkLight™	None	
Optical	<i>Some:</i> DVD burner, 9.0mm high, fixed <i>Some:</i> Blank Bezel								Security	Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	None								Security chip	None	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								vPro	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Fingerprint reader	None	
WLAN	RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card								NFC	None	
WWAN	None								Battery type	Li-Ion 6-cell (48Wh)	
SIM card	None								Battery life	Up to 6.3 hr	
									AC adapter	65-watt AC adapter (Discrete Graphics)	
									Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
									Limited warranty	1-year - depot repair service / service upgrades available	
									Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	

See footnotes for more detailed information

ThinkPad S440

ThinkPad®



Lenovo® ThinkPad S440



Lenovo ThinkPad S440



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Lenovo ThinkPad S440

ThinkPad S440 20AY (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD Top color	Finger print reader	Bat- tery cells /Wh	Bat- tery Preload	Ann date (mm/yy)
20AY007P++	i5-4200U	8GBx1	14.0" HD+	720p	256G SSD OPAL	Intel 7260 + BT	None Black	Finger	4 46	Win7 Pro64	11/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
Note: models listed above might not be available in all WE countries

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; one spindles</i> Intel® Core™ i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology			Preloaded operating system ²⁰ - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Password Manager• Fingerprint Software (fingerprint models)• ThinkVantage System Update• Norton™ Internet Security (30 days of virus definitions)• Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket			
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™			
M.2 SSD	None			
Widescreen display	14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio			
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator			
Graphics	Intel HD Graphics 4400 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); <i>Max external resolution:</i> 1920x1200 (HDMI)@60Hz			
Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight			
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³			
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch			
ThinkLight™	None			
Dimensions ³	14.0W" (WxDxH): 13.10" x 8.85" x 0.80"; 332.8mm x 224.8mm x 20.3mm			
Weight ²	4-cell: from 3.92 lb (1.78kg)			
Case color	Black or silver (top); black bottom			
Case material	Sand Blast Aluminum (top)			
Battery - type ³⁷	Li-Polymer 4-cell (46Whr)			
Battery - life ¹⁰	<i>MobileMark 2007:</i> Windows 8: up to 6.9 hr <i>MobileMark 2012:</i> Windows 8: up to 5.5 hr			
Chipset	Intel 4th Generation core 1 chip (integrated chipset with processor)			
ExpressCard	None			
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Ports	Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)			
PCIe Mini Card	One PCI Express Mini Card slot			
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 7260, 2x2, Wi-Fi + Bluetooth combo adapter			
M.2 Card	One M.2 Card slot for support of WWAN card or SSD			
M.2 WWAN	None			
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card			
Ethernet	Realtek® RTL8111F Gigabit Network Connection			
Audio support	High Definition (HD) Audio, Conexant 20751 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available			

Supports ThinkVantage® technologies
65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

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(G-LBT2-3) November 2013

ThinkPad S440 20AY (TopSeller) - MultiTouch

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD Top color	Finger print reader	Bat- tery cells /Wh	Bat- tery Preload	Ann date (mm/yy)
20AY007H++	i5-4200U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 + BT	None Black	Finger	4 46	Win8 Pro64	08/13
20AY007C++	i3-4010U	4GBx1	14.0" HD+ Touch	720p	500G 7200	7260 + BT	16G Black	Finger	4 46	Win8 64	08/13
20AY006E++	i3-4010U	4GBx1	14.0" HD+ Touch	720p	128G SSD	7260 + BT	None Black	Finger	4 46	Win8 Pro64	08/13
20AY00BK++	i3-4030U	4GBx1	14.0" HD+ Touch	720p	128G SSD	7260 ac + BT	None Black	Finger	4 46	Win8.1 Pro64	06/14
20AY00BF++	i5-4210U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 ac + BT	None Black	Finger	4 46	Win8.1 Pro64	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)
 Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i3-4010U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4030U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology		Preloaded operating system ²⁰ - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit - <i>Some:</i> Windows 8.1 Pro 64-bit Preloaded applications ¹⁴ (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket		
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™		
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot		
Widescreen display	14.0" (355mm) HD+ (1600x900) color , anti-glare, 10-point touch screen		
Camera	LED backlight, 220 nits, 16:9 aspect ratio HD720p resolution, low light sensitive, fixed focus, LED indicator		
Graphics	Intel HD Graphics 4400 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); <i>Max external resolution:</i> 1920x1200 (HDMI)@60Hz		
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	14.0W" (WxDxH): 13.10" x 8.85" x 0.87"; 332.8mm x 224.8mm x 22.1mm <i>4-cell:</i> from 4.10 lb (1.86kg) Black or silver (top); black bottom Sand Blast Aluminum (top) Li-Polymer 4-cell (46Whr) <i>MobileMark 2007:</i> Windows 8: up to 6.9 hr <i>MobileMark 2012:</i> Windows 8: up to 5.5 hr		
Chipset ExpressCard Multicard Reader Ports	Intel 4th Generation core 1 chip (integrated chipset with processor) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)		
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Mini Card slot <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2 One M.2 Card slot for support of WWAN card or SSD		
M.2 Card M.2 WWAN Bluetooth™ Ethernet Audio support	None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, Conexant 20751 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

| | | | Supports ThinkVantage® technologies |
| | | | 65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² |

See footnotes for more detailed information

ThinkPad S440 20AY (AMD HD) - TopSeller (MultiTouch)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color reader	Finger print	Bat- tery cells	Bat- tery Wh	Preload	Ann date (mm/yy)
20AY001D++	i7-4500U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 + BT	None	Black	Finger	4	46	Win8 Pro64	08/13
20AY0050++	i5-4200U	8GBx1	14.0" HD+ Touch	720p	500G 7200	7260 + BT	16G	Black	Finger	4	46	Win8 64	08/13
20AY001C++	i7-4500U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 + BT	None	Black	Finger	4	46	Win8 64	08/13
20AY004Y++	i5-4200U	8GBx1	14.0" HD+ Touch	720p	500G 7200	7260 + BT	16G	Black	Finger	4	46	Win8 64	08/13
20AY0006++	i7-4500U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 + BT	None	Black	Finger	4	46	Win8 64	08/13
20AY007M++	i5-4200U	8GBx1	14.0" HD+ Touch	720p	500G 7200	7260 + BT	16G	Black	Finger	4	46	Win8 64	08/13
20AY007N++	i7-4500U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 + BT	None	Black	Finger	4	46	Win8 64	08/13
20AY00BH++	i5-4210U	8GBx1	14.0" HD+ Touch	720p	500G 7200	7260 ac + BT	16G	Black	Finger	4	46	Win8.1 64	06/14
20AY00BD++	i7-4510U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 ac + BT	None	Black	Finger	4	46	Win8.1 Pro64	06/14
20AY00BE++	i7-4510U	8GBx1	14.0" HD+ Touch	720p	256G SSD OPAL	7260 ac + BT	None	Black	Finger	4	46	Win8.1 64	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-4500U processor (2 cores, 1.80GHz, 4MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology Intel Core i7-4510U processor (2 cores, 2.00GHz, 4MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology							Preloaded operating system²⁰ <ul style="list-style-type: none"> - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit - Some: Windows 8.1 64-bit - Some: Windows 8.1 Pro 64-bit Preloaded applications (only some listed) <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate 					
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket												
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™												
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot												
Widescreen display	14.0" (355mm) HD+ (1600x900) color , anti-glare, 10-point touch screen												
Camera	LED backlight, 220 nits, 16:9 aspect ratio												
Graphics	AMD Radeon™ HD 8670M Graphics, 2GB memory external digital monitor support via HDMI™; Max external resolution: 1920x1200 (HDMI) @60Hz												
Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight												
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³												
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch												
ThinkLight™	None												
Dimensions ³	14.0W" (WxDxH): 13.10" x 8.85" x 0.87"; 332.8mm x 224.8mm x 22.1mm												
Weight ²	4-cell: from 4.23 lb (1.92kg)												
Case color	Black or silver (top); black bottom												
Case material	Sand Blast Aluminum (top)												
Battery - type ³⁷	Li-Polymer 4-cell (46Whr)												
Battery - life ¹⁰	MobileMark 2007: Windows 8: up to 6.7 hr MobileMark 2012: Windows 8: up to 5.3 hr												
Chipset	Intel 4th Generation core 1 chip (integrated chipset with processor)												
ExpressCard	None												
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)												
Ports	Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)												
PCIe Mini Card	One PCI Express Mini Card slot												
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2												
M.2 Card	One M.2 Card slot for support of WWAN card or SSD												
M.2 WWAN	None												
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card												
Ethernet	Realtek® RTL8111F Gigabit Network Connection												
Audio support	High Definition (HD) Audio, Conexant 20751 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor												
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												

See footnotes for more detailed information

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Lenovo® ThinkPad S531



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Lenovo ThinkPad S531

ThinkPad S531 20B0 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ^a rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Battery cells	Battery /Wh	Preload	Ann date (mm/yy)
20B00004++	i5-3337U	4+2GB	15.6" HD	720p	500G 7200	Intel 2230 + BT	24G	Black	Finger	4	62.8	Win8 64	06/13
20B00003++	i3-3227U	2+2GB	15.6" HD	720p	500G 7200	TP 11a/b/g/n + BT	None	Black	Finger	4	62.8	Win7 Pro64	06/13
20B00006++	i5-3337U	2+2GB	15.6" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	62.8	Win7 Pro64	06/13
20B00051++	i3-3217U	2+2GB	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	4	62.8	Win7 Pro64	07/13
20B00008++	i5-3337U	2+4GB	15.6" FHD	720p	128G SSD	TP 11a/b/g/n + BT	None	Black	Finger	4	62.8	Win7 Pro64	07/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i3-3217U processor (2 cores, 1.80GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3227U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology										Preloaded operating system ²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit		
Memory	10GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, 2GB memory on board, one 204-pin SO-DIMM socket										Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Adobe® Reader®		
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™										- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage		
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot										- All models (exclude DOS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate		
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio												
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator												
Graphics	Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); Max external resolution: 1920x1200 (HDMI)@60Hz												
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None												
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	15.6W" (WxDxH): 14.92" x 9.94" x 0.81"; 379.0mm x 252.4mm x 20.7mm 4-cell: from 5.06 lb (2.29kg) Black (top); black bottom Sand Blast Aluminum Li-Polymer 4-cell (62.8Whr) MobileMark 2007: Windows 7: up to 10.5 hr MobileMark 2012: Windows 8: up to 7.2 hr												
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM76 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one powered), OneLink Docking port (supports optional 4X10A06077) external monitor (HDMI), ethernet (RJ-45)												
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Mini Card slot Some: 11a/b/g/n, PCIe Half Mini Card, ThinkPad a/b/g/n, 2x2, Wi-Fi / BT combo adapter Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi / BT combo adapter												
M.2 Card M.2 WWAN Bluetooth™ Ethernet Audio support	One M.2 Card slot for support of WWAN card or SSD None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, ALC3202 codec / JBL® stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole										Supports ThinkVantage® technologies		
Security Security chip Fingerprint reader	Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor										65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												

See footnotes for more detailed information
WE model(s) announced June 11 or July 2, 2013

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ThinkPad S531 20B0 (AMD HD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20B0004L++	i7-3537U	2+8GB	15.6" FHD	720p	256G SSD OPAL	Intel 2230 + BT	None	Black	Finger	4	62.8	Win8 64	07/13
20B00050++	i5-3337U	2+4GB	15.6" FHD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	4	62.8	DOS-Lic.	07/13
20B0004K++	i7-3537U	2+8GB	15.6" FHD	720p	256G SSD OPAL	TP 11a/b/g/n + BT	None	Black	Finger	4	62.8	Win7 Pro64	07/13

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-3537U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology		Preloaded operating system ²⁰ - <i>Some:</i> DOS-Lic. - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit Preloaded applications (only some listed, exclude DOS models) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models (exclude DOS models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	10GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, 2GB memory on board, one 204-pin SO-DIMM socket		
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™		
M.2 SSD	None		
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio		
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator		
Graphics	AMD Radeon™ HD 8670M Graphics, 2GB memory external digital monitor support via HDMI™; <i>Max external resolution:</i> 1920x1200 (HDMI) @60Hz		
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	15.6W" (WxDxH): 14.92" x 9.94" x 0.81"; 379.0mm x 252.4mm x 20.7mm <i>4-cell:</i> from 5.06 lb (2.29kg) Black (top); black bottom Sand Blast Aluminum Li-Polymer 4-cell (62.8Whr) <i>MobileMark 2007:</i> Windows 7: up to 8.4 hr <i>MobileMark 2012:</i> Windows 8: up to 5.9 hr		
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM76 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one powered), OneLink Docking port (supports optional 4X10A06077) external monitor (HDMI), ethernet (RJ-45)		
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Mini Card slot <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad a/b/g/n, 2x2, Wi-Fi / BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi / BT combo adapter		
M.2 Card M.2 WWAN Bluetooth™ Ethernet Audio support	One M.2 Card slot for support of WWAN card or SSD None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, ALC3202 codec / JBL® stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

Supports ThinkVantage® technologies
65-watt AC adapter ENERGY STAR® compliant (exclude DOS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information
WE model(s) announced July 2, 2013

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ThinkPad S540

ThinkPad®



Lenovo® ThinkPad S540
with Touch Screen



Lenovo ThinkPad S540



Lenovo ThinkPad S540



Lenovo ThinkPad S540



Lenovo ThinkPad S540



Lenovo® ThinkPad S540
with Touch Screen

ThinkPad S540 20B3 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20B30021++	i5-4200U	8GBx1	15.6" HD	720p	500G 7200	7260 + BT	Ericsson	select	Black	Finger	4	62.8	Win8 Pro64	10/13
20B30027++	i3-4010U	4GBx1	15.6" HD	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 Pro64	10/13
20B3005D++	i5-4200U	8GBx1	15.6" HD	720p	500G 7200	7260 + BT	Ericsson	select	Black	Finger	4	62.8	Win7 P64 DG Win8	11/13
20B3005A++	i3-4010U	4GBx1	15.6" HD	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win7 P64 DG Win8	11/13
20B30065++	i5-4200U	8GBx1	15.6" FHD	720p	500G 5400	7260 + BT	None	None	Black	Finger	4	62.8	Win7 P64 DG Win8	01/14
20B3007C++	i5-4210U	8GBx1	15.6" FHD	720p	500G 5400	7260 ac + BT	None	None	Black	Finger	4	62.8	Win7 P64 DG Win8.1	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i3-4010U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology		Preloaded operating system ²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, two 204-pin SO-DIMM sockets		
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™		
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot		
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio		
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator		
Graphics	Intel HD Graphics 4400 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); Max external resolution: 1920x1200 (HDMI)@60Hz		
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	15.6W" (WxDxH): 14.92" x 9.94" x 0.81"; 379.0mm x 252.4mm x 20.7mm 4-cell: from 4.65 lb (2.11kg) Black (top); black bottom Sand Blast Aluminum Li-Polymer 4-cell (62.8Whr) MobileMark 2007: Windows 7: up to 10.5 hr MobileMark 2012: Windows 8: up to 7.0 hr		
Chipset ExpressCard Multicard Reader Ports	Intel 4th Generation core 1 chip (integrated chipset with processor) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)		
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Mini Card slot Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2		
M.2 Card M.2 WWAN SIM card Bluetooth™ Ethernet Audio support	One M.2 Card slot for support of WWAN card or SSD Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card Some: User selectable, contract required with service provider Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111GUS Gigabit Network Connection High Definition (HD) Audio, ALC283 codec / JBL® stereo speakers, Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

See footnotes for more detailed information

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(G-GINS2-1) June 2014

ThinkPad S540 20B3 (AMD HD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20B30024++	i5-4200U	8GBx1	15.6" HD	720p	1TB 5400	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 Pro64	10/13
20B3001W++	i7-4500U	8GBx1	15.6" HD	720p	256G SSD	7260 + BT	Ericsson	select	Black	Finger	4	62.8	Win8 Pro64	10/13
20B30059++	i5-4200U	8GBx1	15.6" FHD	720p	1TB 5400	7260 + BT	16G	None	Black	Finger	4	62.8	Win7 P64 DG Win8	11/13
20B3005C++	i7-4500U	8GBx1	15.6" HD	720p	256G SSD	7260 + BT	Ericsson	select	Black	Finger	4	62.8	Win7 P64 DG Win8	11/13
20B30077++	i7-4510U	8GBx1	15.6" FHD	720p	256G SSD	7260 ac + BT	None	None	Black	Finger	4	62.8	Win7 P64 DG Win8.1	06/14
20B30079++	i5-4210U	8GBx1	15.6" FHD	720p	1TB 5400	7260 ac + BT	16G	None	Black	Finger	4	62.8	Win7 P64 DG Win8.1	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-4500U processor (2 cores, 1.80GHz, 4MB cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology Intel Core i7-4510U processor (2 cores, 2.00GHz, 4MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology										Preloaded operating system ²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, two 204-pin SO-DIMM sockets													
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™													
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot													
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio													
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator													
Graphics	AMD Radeon™ HD 8670M Graphics, 2GB memory external digital monitor support via HDMI™; Max external resolution: 1920x1200 (HDMI)@60Hz													
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad													
Touchpad ThinkLight™	TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None													
Dimensions ³	15.6W" (WxDxH): 14.92" x 9.94" x 0.81"; 379.0mm x 252.4mm x 20.7mm													
Weight ²	4-cell: from 4.65 lb (2.11kg)													
Case color	Black (top); black bottom													
Case material	Sand Blast Aluminum													
Battery - type ³⁷	Li-Polymer 4-cell (62.8Whr)													
Battery - life ¹⁰	MobileMark 2007: Windows 7: up to 9.0 hr MobileMark 2012: Windows 8: up to 6.0 hr													
Chipset	Intel 4th Generation core 1 chip (integrated chipset with processor)													
ExpressCard	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)													
PCIe Mini Card	One PCI Express Mini Card slot													
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2													
M.2 Card	One M.2 Card slot for support of WWAN card or SSD													
M.2 WWAN	Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card													
SIM card	Some: User selectable, contract required with service provider													
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card													
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection													
Audio support	High Definition (HD) Audio, ALC283 codec / JBL® stereo speakers, Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information

ThinkPad S540 20B3 (TopSeller) - MultiTouch

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger print reader	Bat- tery cells	Bat- tery /Wh	Preload	Ann date (mm/yy)
20B3001X++	i5-4200U	8GBx1	15.6" FHD Touch	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 Pro64	10/13
20B30026++	i5-4200U	4GBx1	15.6" FHD Touch	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 64	10/13
20B3007D++	i5-4210U	8GBx1	15.6" FHD Touch	720p	500G 7200	7260 ac+ BT	16G	None	Black	Finger	4	62.8	Win8.1 Pro64	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology										Preloaded operating system²⁰ - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit - Some: Windows 8.1 Pro 64-bit			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, two 204-pin SO-DIMM sockets										Preloaded applications (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate			
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™													
M.2 SSD	M.2 Solid State Drive (SSD), via M.2 Card slot													
Widescreen display	15.6" (396mm) FHD (1920x1080) , anti-glare, 10-point touch screen													
Camera	LED backlight, 300 nits, 16:9 aspect ratio													
Graphics	Intel HD Graphics 4400 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); <i>Max external resolution: 1920x1200 (HDMI)@60Hz</i>													
Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad													
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³													
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch													
ThinkLight™	None													
Dimensions ³	15.6W" (WxDxH): 14.92" x 9.94" x 0.90"; 379.0mm x 252.4mm x 22.8mm													
Weight ²	4-cell: from 5.20 lb (2.36kg)													
Case color	Black (top); black bottom													
Case material	Sand Blast Aluminum													
Battery - type ³⁷	Li-Polymer 4-cell (62.8Whr)													
Battery - life ¹⁰	<i>MobileMark 2007:</i> Windows 7: up to 10.5 hr <i>MobileMark 2012:</i> Windows 8: up to 7.0 hr													
Chipset	Intel 4th Generation core 1 chip (integrated chipset with processor)													
ExpressCard	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)													
PCIe Mini Card	One PCI Express Mini Card slot													
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2													
M.2 Card	One M.2 Card slot for support of WWAN card or SSD													
M.2 WWAN	None													
SIM card	None													
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card													
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection													
Audio support	High Definition (HD) Audio, ALC283 codec / JBL® stereo speakers, Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information

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(G-GINS2-3) June 2014

ThinkPad S540 20B3 (AMD HD) - TopSeller (MultiTouch)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20B3001V++	i7-4500U	8GBx1	15.6" FHD Touch	720p	256G SSD	7260 + BT	None	None	Black	Finger	4	62.8	Win8 Pro64	10/13
20B30029++	i3-4010U	4GBx1	15.6" FHD Touch	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 64	10/13
20B30014++	i7-4500U	8GBx1	15.6" FHD Touch	720p	256G SSD	7260 + BT	None	None	Black	Finger	4	62.8	Win8 64	10/13
20B30023++	i5-4200U	8GBx1	15.6" FHD Touch	720p	500G 7200	7260 + BT	16G	None	Black	Finger	4	62.8	Win8 64	10/13
20B30078++	i7-4510U	8GBx1	15.6" FHD Touch	720p	256G SSD	7260 ac + BT	None	None	Black	Finger	4	62.8	Win8.1 Pro64	06/14
20B30076++	i7-4510U	8GBx1	15.6" FHD Touch	720p	256G SSD	7260 ac + BT	None	None	Black	Finger	4	62.8	Win8.1 64	06/14
20B3007E++	i5-4210U	8GBx1	15.6" FHD Touch	720p	500G 7200	7260 ac + BT	16G	None	Black	Finger	4	62.8	Win8.1 64	06/14

Country Code"++": AT (Austria), FR (France), GB (Germany w/ English OS), GE (Germany w/ German OS), IV (Israel), IW (Iceland), IX (Italy), MB (Belgium), MD (Denmark), MH (Netherlands), ML (Luxembourg), MN (Norway), MS (Sweden), MZ (Switzerland), NX (Netherlands), PG (Portugal), SP (Spain), UK (United Kingdom)

Note: models listed above might not be available in all WE countries

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i3-4010U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200U processor (2 cores, 1.60GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-4500U processor (2 cores, 1.80GHz, 4MB cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology Intel Core i7-4510U processor (2 cores, 2.00GHz, 4MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology										Preloaded operating system ²⁰ - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit - Some: Windows 8.1 64-bit - Some: Windows 8.1 Pro 64-bit Preloaded applications (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, two 204-pin SO-DIMM sockets														
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™														
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot														
Widescreen display	15.6" (396mm) FHD (1920x1080) , anti-glare, 10-point touch screen														
Camera	LED backlight, 300 nits, 16:9 aspect ratio HD720p resolution, low light sensitive, fixed focus, LED indicator														
Graphics	AMD Radeon™ HD 8670M Graphics, 2GB memory external digital monitor support via HDMI™; Max external resolution: 1920x1200 (HDMI) @60Hz														
Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight, numeric keypad														
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³														
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch														
ThinkLight™	None														
Dimensions ³	15.6W" (WxDxH): 14.92" x 9.94" x 0.90"; 379.0mm x 252.4mm x 22.8mm														
Weight ²	4-cell: from 5.20 lb (2.36kg)														
Case color	Black (top); black bottom														
Case material	Sand Blast Aluminum														
Battery - type ³⁷	Li-Polymer 4-cell (62.8Whr)														
Battery - life ¹⁰	MobileMark 2007: Windows 7: up to 9.0 hr MobileMark 2012: Windows 8: up to 6.0 hr														
Chipset	Intel 4th Generation core 1 chip (integrated chipset with processor)														
ExpressCard	None														
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
Ports	Two USB 3.0 (one powered), OneLink Docking port external monitor (HDMI), ethernet (RJ-45)														
PCIe Mini Card	One PCI Express Mini Card slot														
PCIe WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2														
M.2 Card	One M.2 Card slot for support of WWAN card or SSD														
M.2 WWAN	None														
SIM card	None														
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card														
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection														
Audio support	High Definition (HD) Audio, ALC283 codec / JBL® stereo speakers, Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor														
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information

Disclaimer

Lenovo provides the information in the Product Specifications Reference (PSREF) withdrawn product books on an "AS-IS" basis. Because the actual products have been withdrawn from marketing, the information in these withdrawn product books is no longer maintained or updated. The referenced footnote numbering may not correspond with the listed footnotes.

PSREF books for the withdrawn systems:

http://www.lenovo.com/psref/psrefs_withdrawn.html

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

³ **Thinness** may vary at certain points on the system.

⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.

⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2012 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.

¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.

¹⁷ **International Warranty Service (IWS)** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁹ **Depot repair service:** The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.

²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

²² **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See Lenovo Warranty Services terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

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