



Personal Systems Reference Lenovo® ThinkPad® Edge Series and SL Series Notebooks

September 2011 - Version 407



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ThinkPad®



Lenovo® ThinkPad Edge E220s



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Lenovo ThinkPad Edge E220s

ThinkPad® Edge E220s 5038 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Preload
5038-2NU	i7-2617M	4GBx1	12.5" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	8	Pro 64
5038-2MU	i7-2617M	4GBx1	12.5" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	8	Prem 64
5038-2LU	i5-2537M	4GBx1	12.5" HD	720p	320G 7200	TP 11b/g/n	None	None	Finger	Blue	8	Prem 64
5038-2KU	i5-2537M	4GBx1	12.5" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	8	Pro 64
5038-4DU	i3-2357M	4GBx1	12.5" HD	720p	320G 7200	TP 11b/g/n	None	None	Finger		8	Prem 64
5038-4EU	i3-2357M	4GBx1	12.5" HD	720p	320G 7200	TP 11b/g/n	None	None	Finger		8	Pro 64
5038-4MU	i5-2467M	4GBx1	12.5" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	8	Pro 64

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Elegant design with quality, reliability, and portability for SMB customers; one spindle</i> Intel® Core™ i3-2357M processor (dual-core, 1.30GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Hyper-Threading technology Intel Core i5-2467M processor (dual-core, 1.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.30GHz), HT technology Intel Core i5-2537M processor (dual-core, 1.40GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.30GHz), HT technology Intel Core i7-2617M processor (dual-core, 1.50GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology								Preloaded operating system²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe Acrobat® X Standard (bundled with Microsoft Office)
Memory	4GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, one 204-pin SO-DIMM socket								Supports ThinkVantage® technologies
Optical	None								
SATA disk	None Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ All: removable, upgradeable, Shock Mounted Hard Drive								
mSATA	None								
Widescreen display	12.5" (317.5mm) HD (1366x768) color , anti-glare display with glossy infinity glass, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio								
Camera	HD720p resolution, wide view angle, low light sensitive, fixed focus								
Graphics	Intel HD Graphics 3000 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 port)@60Hz								
Keyboard	6-row, spill-resistant, multimedia Fn keys								
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar ¹³								
Touch pad	UltraNav™, buttonless touchpad below keyboard, Tap Zones, scrolling regions, multi-touch								
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions								
Dimensions ³	12.5W" (WxDxH): 12.32" x 8.41" x 0.86"; 313mm x 213.5mm x 21.9mm								
Weight ²	starting at 3.23 lb (1.46kg)								
Case color	Moss Black soft touch finish, authentic metal accents								
Case material	Magnesium/Aluminum + PPS								
Battery - type ³⁷	Integrated Lithium Ion 8-cell, 1000 cycle battery								
Battery - life ¹⁰	up to 6.0 hr								
Chipset	Mobile Intel HM65 Express Chipset								
ExpressCard/34	None								
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)								
Ports	Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)								
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2								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 via 800-426-7378
WWAN	None								
Modem	None								
Bluetooth™	Some: Bluetooth 3.0 wireless								
Ethernet	Realtek® RTL8111E Gigabit Network Connection								
Intel AMT	None								
Audio support	High Definition (HD) Audio, Conexant 20671 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2/ mono digital microphone, combo audio/mic jack								
Security	Power-on password, hard disk password, supervisor password, security keyhole								For compatible accessories, please go to O-E220-S sheet; For ThinkPlus™, 22 service upgrade options, please go to S-EDGE sheet
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

US model announced July 5, 2011; previous models on April 19 or June 21, 2011

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(AMS1-1) July 2011

ThinkPad® Edge E220s Accessories

Personal Systems Reference (PSREF)

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵²	57Y6336	
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann 11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255	
Lenovo Wireless Mouse N30B (black)	55Y9360	

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Power adapters

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann 09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 13.3" widescreen models:		
ThinkPad Ultraportable Case	41U5062	ann 05/13/08

Up to 15.6" widescreen models:

Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08
Wenger Backpack for Lenovo	57Y4271	ann 01/07/10
Wenger Slim Case for Lenovo	57Y4273	ann 01/07/10
Wenger Deluxe Slim Case for Lenovo	57Y4272	ann 01/07/10

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo® ThinkPad Edge 14"



Lenovo ThinkPad Edge 14"
(Glossy black model)



Lenovo ThinkPad Edge 14"



USB Port Replicator with Digital Video
45K1610



Lenovo ThinkPad Edge 14"

ThinkPad® Edge 14" 0579 (Intel) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Preload	Avail date
0579-22U	i3-370M	2.40	2GB	14.0" HD	250G 5400	TP 11b/g/n	None	None	Matte black	None	None	Pro 64	May 11

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This system is Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3 processor i3-370M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache		Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Microsoft Research AutoCollage Touch
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available		
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™		
Widescreen display Camera	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus		
Integrated graphics	Intel 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:</i> 2048x1536@75Hz; 1920x1080 (HDMI port)		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 via 800-426-7378
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch		
ThinkLight™	None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	14.0W" (WxDxH): 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm <i>4-cell:</i> from 4.72 lb (2.14kg); <i>6-cell:</i> from 4.9 lb (2.22kg); <i>9-cell:</i> from 5.29 lb (2.40kg) Matte black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 2.9 hr; <i>6-cell:</i> up to 4.5 hr		
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 None None None Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole		
Security Security chip Fingerprint reader	None None None		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US model announced May 10, 2011

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(BER1-7) May 2011

Type-model	Processor	GHz	Memory	Wide-screen display	Screen type	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	Top color	Finger print reader	Blue-tooth	Battery cells	Preload	Avail date
☞ 0199-4GU	P340	2.20	2GB	14.0" HD		0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
☞ 0199-4HU	P340	2.20	2GB	14.0" HD		0.3M	320G 7200	11b/g/n	Glossy red	None	None	6	Pro 64	Sep 10
☞ 0199-4JU	P540	2.40	2GB	14.0" HD		0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
☞ 0199-6PU	P560	2.50	2GB	14.0" HD	Glossy	0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Mar 11
☞ 0199-6QU	P360	2.30	2GB	14.0" HD	Glossy	0.3M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Mar 11

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- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles AMD® Athlon™ II Dual-Core Mobile Processor P340 or P360 with dual-core , virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or AMD Turion™ II Dual-Core Mobile Processor P540 or P560 with dual-core , virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache		Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• ThinkVantage Toolbox• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft Office 2010 preloaded; purchase product key to activate• Microsoft Research AutoCollage Touch
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available		
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 320GB ⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™		
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio		
Camera	Camera on top of screen, 0.3-megapixel, fixed focus		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 via 800-426-7378 ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Integrated graphics	ATI™ Radeon™ HD 4250 graphics , in RS880M, 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> 2456x1536@60Hz		
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch		
ThinkLight™	None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	<i>14.0W" (WxDxH):</i> 13.54" x 9.17" x 1.25-1.46"; 344 x 233mm x 31.8-37.0mm <i>4-cell:</i> from 4.78 lb (2.17kg); <i>6-cell:</i> from 4.96 lb (2.25kg); <i>9-cell:</i> from 5.36 lb (2.43kg) Matte black (top) or glossy red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 2.6 hr; <i>6-cell:</i> up to 4 hr; <i>9-cell:</i> up to 6 hr		
Chipset ExpressCard/34 Multicard Reader Ports	AMD RS880M Chipset , SB820M south bridge One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card 11b/g/n Modem Bluetooth™ Ethernet Audio support	One PCI Express Half Mini Card slot 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 None None Realtek® RTL8111DL Gigabit Network Connection High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information

☞ US models announced March 1, 2011, previous models on September 28, 2010

☞ US models withdrawn effective April 2011

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(BER1-5) March 2011

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann	03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann	03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann	06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann	03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336		
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann	11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann	11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

Security

3M 14.0W Privacy Filter from Lenovo	0A61769	ann	04/05/11
Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Headphone P550	55Y2065		

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann	10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann	10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann	10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05

⁴⁴ Requires the *ThinkPad 90W AC Adapter*

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputingThinkPad 65W AC Adapter⁴⁵ 40Y7696 ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter 40Y7659 ann 09/20/05

ThinkPad 65W AC Adapter with USB Hub 57Y4600 ann 09/07/10

90W Ultraslim AC/DC Combo Adapter 41R4493 ann 09/22/09

More info at www.lenovo.com/support/poweradapters*Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493*

• iPod and iPhone Charge Tip (L10a) 41R4481 ann 12/18/07

• Generic Micro USB charge tip (L18) 41R4490 ann 01/06/09

More information at www.lenovopowertips.com**Carrying Cases**

ThinkPad 14W Case Sleeve	57Y4294	ann	03/16/10
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

More information at www.lenovo.com/support/cases**Monitors**

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

More information at www.lenovo.com/support/monitors**Monitor Accessories⁴⁶**

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad Edge E420



Lenovo ThinkPad Edge E420



Lenovo ThinkPad Edge E420



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Lenovo ThinkPad Edge E420



Lenovo ThinkPad Edge E420

ThinkPad® Edge E420 1141 (Intel) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	Carrier	Top color	Finger print reader	Blue-tooth	Battery cells	Preload
1141-55U	i3-2310M	4GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n	None	None	Matte black			6	Pro 64
1141-56U	i3-2310M	4GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n	None	None	Matte black			6	Prem 64
1141-57U	i3-2310M	4GBx1	14.0" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Pro 64
1141-58U	i3-2310M	4GBx1	14.0" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Prem 64
1141-9BU	i5-2520M	2GBx2	14.0" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Pro 64

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3-2310M processor (dual-core, 2.10GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology		Preloaded operating system²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64	
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets		Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox	
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, Shock Mounted Hard Drive, Active Protection System™		Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe Acrobat® X Standard (bundled with Microsoft Office) • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)	
mSATA™ SSD	None			
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio			
Camera	HD720p resolution, wide view angle, low light sensitive, fixed focus, LED indicator			
Graphics	Intel HD Graphics 3000 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: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>			
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³		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 via 800-426-7378	
Touchpad ThinkLight™	UltraNav™, wide touchpad below keyboard, Tap Zones, multi-touch None			
Dimensions ³	14.0W" (WxDxH): 13.52" x 9.20" x 1.13-1.43"; 343.4 x 233.6mm x 28.7-36.4mm			
Weight ²	6-cell: from 4.85 lb (2.2kg); 9-cell: from 5.2 lb (2.36kg)			
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom			
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic		For compatible accessories, please go to O-E420 sheet; For ThinkPlus™, 22 service upgrade options, please go to S-EDGE sheet	
Battery - type ³⁷	Lithium Ion 6-cell or 9-cell			
Battery - life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.7 hr			
Chipset	Mobile Intel HM65 Express Chipset			
ExpressCard	One ExpressCard/34			
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)			
PCIe Mini Card	Two PCI Express Mini Card slots			
WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2			
WWAN	None			
Modem	None			
Bluetooth™	<i>Some:</i> Bluetooth 3.0 wireless			
Ethernet	Realtek® RTL8111E Gigabit Network Connection			
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1 watt x 2/ mono digital microphone, combo audio/mic jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	None			
Fingerprint reader	<i>Some:</i> 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

US model announced June 21, 2011; previous models on April 19, 2011

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(LW1-1) June 2011

ThinkPad® Edge E425 1198 (AMD) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN	Top color	Finger print reader	Blue-tooth	Battery cells	Preload
1198-3FU	E2-3000M	4GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n	Matte black	None	None	6	Pro 64
1198-3EU	A4-3300M	4GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n	Matte black	None	None	6	Pro 64

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor E2-3000M (dual-core, 1.80GHz, 1MB L2 cache), integrated AMD Radeon™ HD 6380G Graphics, AMD Turbo Core technology (up to 2.40GHz), integrated DDR3 memory controller (up to 1333MHz) AMD Accelerated Processor A4-3300M (dual-core, 1.90GHz, 2MB L2 cache), integrated AMD Radeon HD 6480G Graphics, AMD Turbo Core technology (up to 2.50GHz), integrated DDR3 memory controller (up to 1333MHz)		Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Adobe® Reader®• Skype™ for Windows• Microsoft Office 2010 preloaded; purchase product key to activate• Adobe Acrobat® X Standard (bundled with Microsoft Office)• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, 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, Shock Mounted Hard Drive, Active Protection System™		
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio		
Camera	HD720p resolution, wide view angle, low light sensitive, fixed focus, LED indicator		
Graphics	Dynamic switching between discrete and integrated graphics (user selectable), AMD Radeon HD Graphics in processor, and AMD Radeon™ HD 6470M Graphics , PCI Express® x16, 1GB 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: 1920x1600 (VGA)@60Hz; 1920x1080p (HDMI)@60Hz</i>		
Keyboard	6-row, spill-resistant, multimedia Fn keys		
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar ¹³		
Touchpad	UltraNav™, wide touchpad below keyboard, Tap Zones, multi-touch		
ThinkLight™	None		
Dimensions ³	14.0W" (WxDxH): 13.52" x 9.20" x 1.13-1.43"; 343.4 x 233.6mm x 28.7-36.4mm		
Weight ²	6-cell: from 4.85 lb (2.2kg); 9-cell: from 5.2 lb (2.36kg)		
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 or 9-cell		
Battery - life ¹⁰	6-cell: up to 4.2 hr; 9-cell: up to 8.3 hr		
Chipset	AMD A60M FCH		
ExpressCard	One ExpressCard/34		
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card	One PCI Express Half Mini Card slot		
WLAN ⁴	ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x1		
Modem	None		
Bluetooth™	None		
Ethernet	Realtek® RTL8111E Gigabit Network Connection		
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1 watt x 2/ 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		
90-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 via 800-426-7378		
For compatible accessories, please go to O-E420 sheet; For ThinkPlus™, ²² service upgrade options, please go to S-EDGE sheet		

See footnotes for more detailed information
 US model(s) announced September 6, 2011

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ThinkPad® Edge E420, E425 Accessories

Personal Systems Reference (PSREF)

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336	
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann 11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255	
Lenovo Wireless Mouse N30B (black)	55Y9360	

Security

3M 14.0W Privacy Filter from Lenovo	0A61769	ann 04/05/11
Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann 10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann 10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann 10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05

⁴⁴ Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann 09/07/10
90W Ultrastim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultrastim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.6" widescreen models:

Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08
Wenger Backpack for Lenovo	57Y4271	ann 01/07/10
Wenger Slim Case for Lenovo	57Y4273	ann 01/07/10
Wenger Deluxe Slim Case for Lenovo	57Y4272	ann 01/07/10

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad Edge E420s



Lenovo ThinkPad Edge E420s



ThinkVision® LT1421 with ThinkPad Edge E420s



Lenovo ThinkPad Edge E420s



Lenovo ThinkPad Edge E420s

ThinkPad® Edge E420s 4401 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	Carrier	Finger print reader	Blue-tooth	Bat-tery cells	Preload
4401-27U	i5-2410M	4GBx1	14.0" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	4	Prem 64
4401-28U	i5-2410M	4GBx1	14.0" HD	720p	320G 7200	Intel 1000	None	None	Finger	Blue	4	Pro 64
4401-29U	i3-2310M	4GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n	None	None	Finger		4	Pro 64

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Elegant design with quality, reliability, and portability for SMB customers; two spindles Intel® Core™ i3-2310M processor (dual-core, 2.10GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-2410M processor (dual-core, 2.30GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology	Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64 Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox Preloaded applications ¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe Acrobat® X Standard (bundled with Microsoft Office) • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, slot-in Some: Solid State Drive (SSD) / SATA 3.0Gb/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	
mSATA	None	
Widescreen display Camera	14.0" (355mm) HD (1366x768) color , anti-glare display with glossy infinity glass, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wide view angle, low light sensitive, fixed focus	
Graphics	Intel HD Graphics 3000 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	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 via 800-426-7378 For compatible accessories, please go to O-E420-S sheet; For ThinkPlus™, ²² service upgrade options, please go to S-EDGE sheet
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar ¹³	
Touch pad	UltraNav™, buttonless touchpad below keyboard, Tap Zones, scrolling regions, multi-touch	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.0W" (WxDxH): 13.74" x 9.29" x 0.91-1.23"; 349mm x 236mm x 23.1-31.2mm	
Weight ²	starting at 4.14 lb (1.88kg)	
Case color	Moss Black soft touch finish, authentic metal accents	
Case material	Magnesium/Aluminum + PPS	
Battery - type ³⁷	Integrated Lithium Ion 4-cell, 1000 cycle battery	
Battery - life ¹⁰	up to 7.0 hr	
Chipset	Mobile Intel HM65 Express Chipset	
ExpressCard/34	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	Two PCI Express Mini Card slots	
WLAN ⁴	Some: 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	
WWAN	None	
Modem	None	
Bluetooth™	Some: Bluetooth 3.0 wireless	
Ethernet	Realtek® RTL8111E Gigabit Network Connection	
Intel AMT	None	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1 watt x 2/ mono digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
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
US models announced March 22, 2011

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(PCD1-1) March 2011

ThinkPad® Edge E420s Accessories

Personal Systems Reference (PSREF)

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09
Lenovo Mini Wireless Keyboard N5901 ⁵²	57Y6336	

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann 11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255	
Lenovo Mini Optical Mouse M20B	55Y2091	
Lenovo Wireless Mouse N30B (black)	55Y9360	

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Power adapters

ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

ThinkPad 14W Case Sleeve	57Y4294	ann 03/16/10
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08
Wenger Backpack for Lenovo	57Y4271	ann 01/07/10
Wenger Slim Case for Lenovo	57Y4273	ann 01/07/10
Wenger Deluxe Slim Case for Lenovo	57Y4272	ann 01/07/10

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad Edge 15"



Lenovo ThinkPad Edge 15"
(Glossy black model)



Lenovo ThinkPad Edge 15"



Lenovo ThinkPad Edge 15"
(Glossy red model)



Lenovo ThinkPad Edge 15"

Type-model	Processor	GHz	Memory	Wide-screen display	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
0319-26U	i3-370M	2.40	4GB	15.6" HD	500G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Pro 64	May 11
0319-25U	i3-370M	2.40	2GB	15.6" HD	250G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Pro 64	May 11
0319-24U	i3-370M	2.40	2GB	15.6" HD Glossy	250G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Prem 64	May 11
0319-23U	P6100	2.00	4GB	15.6" HD Glossy	500G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Prem 64	May 11
0319-22U	P6100	2.00	2GB	15.6" HD Glossy	250G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Prem 64	May 11
0319-3NU	P6200	2.13	2GB	15.6" HD	250G 5400	TP 11b/g/n	None	None	Matte black	None	None	6	Prem 64	Aug 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Pentium® processor P6100 or P6200 with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), 3MB cache or Intel Core™ i3 processor i3-370M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache		Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Home Premium 64 - <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Microsoft Research AutoCollage Touch	
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket 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 via 800-426-7378	
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm) or 500GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™			
Widescreen display	<i>Some:</i> 15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus			
Integrated graphics	Intel 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:</i> 2048x1536@75Hz; 1920x1080 (HDMI port)			
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch		ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
ThinkLight™	None			
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	<i>15.6W"</i> (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm <i>4-cell:</i> from 5.32 lb (2.42kg); <i>6-cell:</i> from 5.50 lb (2.50kg); <i>9-cell:</i> from 5.89 lb (2.67kg) Matte black (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 2.9 hr; <i>6-cell:</i> up to 4.5 hr			
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel HM55 Express Chipset One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)			
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 None None None Realtek® RTL8111DL Gigabit Network Connection None High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available			

See footnotes for important warranty information

US model announced August 30, 2011; previous models on May 10, 2011

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(LDN1-8) September 2011

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Screen type	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	Top color	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
✂ 0302-44U	P340	2.20	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
✂ 0302-45U	P540	2.40	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Sep 10
✂ 0302-4LU	P840	1.90	4GB	15.6" HD	Glossy	0.3M	500G 5400	11b/g/n	Glossy black	None	None	6	Home P	Jan 11
☞ 0302-54U	P560	2.50	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Mar 11
☞ 0302-55U	P360	2.30	2GB	15.6" HD		2.0M	320G 7200	11b/g/n	Matte black	None	None	6	Pro 64	Mar 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles AMD® Athlon™ II Dual-Core Mobile Processor P340 or P360 with dual-core, virtualization technology, integrated DDR3 memory controller, and 1MB L2 cache or AMD Turion™ II Dual-Core Mobile Processor P540 or P560 with dual-core, virtualization technology, integrated DDR3 memory controller, and 2MB L2 cache or AMD Phenom™ II Triple-Core Mobile Processor P840 with triple-core, virtualization technology, integrated DDR3 memory controller, and 1.5MB L2 cache		Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Microsoft Research AutoCollage Touch
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available		
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 320GB ⁸ (7200 rpm) or 500GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™		
Widescreen display	<i>Some:</i> 15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio		
Camera	Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus		
Integrated graphics	ATI™ Radeon™ HD 4250 graphics , in RS880M, 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> 2456x1536@60Hz		
Keyboard TrackPoint® Touch pad	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touch pad below keyboard, Tap Zones, multi-touch		
ThinkLight™	None		
Dimensions ³ Weight ² Case color	15.6W" (WxDxH): 14.96" x 9.72" x 1.27-1.48"; 380 x 247mm x 32.3-37.5mm <i>4-cell:</i> from 5.40 lb (2.45kg); <i>6-cell:</i> from 5.58 lb (2.53kg); <i>9-cell:</i> from 5.95 lb (2.70kg) Matte black (top) or glossy black (top), trimmed with a thin silver band (side); black bottom		
Case material Battery - type ³⁷ Battery - life ¹⁰	Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell <i>4-cell:</i> up to 2.6 hr; <i>6-cell:</i> up to 4 hr; <i>9-cell:</i> up to 6 hr		
Chipset ExpressCard/34 Multicard Reader Ports	AMD RS880M Chipset , SB820M south bridge One ExpressCard/34 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card 11b/g/n Modem Bluetooth™ Ethernet Audio support	One PCI Express Half Mini Card slot 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 None None Realtek® RTL8111DL Gigabit Network Connection High Definition (HD) Audio, Realtek ALC269 codec / stereo speakers, 1.5 watt x 2/ mono digital microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None		
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 via 800-426-7378
ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968
ThinkPlus 2-year LOR 9x5 NBD 45K5969
ThinkPlus 3-year LOR 9x5 NBD 45K5970
ThinkPlus 4-year LOR 9x5 NBD 45K5973
ThinkPlus 2-year P&L P/U Depot 45K5971
ThinkPlus 3-year P&L P/U Depot 45K5972
ThinkPlus 4-year P&L P/U Depot 45K5974
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

☞ US models announced March 1, 2011; previous models on September 28, 2010 or January 11, 2011

✂ US models withdrawn effective June 2011

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Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann	03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann	03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann	06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann	03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336		
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann	11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann	11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

Security

3M 15.6W Privacy Filter from Lenovo	0A61771	ann	04/05/11
Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Headphone P550	55Y2065		

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann	10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann	10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann	10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05

⁴⁴ Requires the *ThinkPad 90W AC Adapter*

40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann	01/05/06
⁴⁵ Only compatible with the integrated graphics models.			

ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann	09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad Edge E520



Lenovo ThinkPad Edge E520



Lenovo ThinkPad Edge E520



Lenovo ThinkPad Edge E520



Lenovo ThinkPad Edge E520



Lenovo ThinkPad Edge E520

ThinkPad® Edge E520 1143 (Intel) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN /mSATA	Carrier	Top color	Finger print reader	Blue-tooth	Battery cells	Preload
1143-3BU	i3-2310M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	None	None	Matte black			6	Pro 64
1143-3CU	i3-2310M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	None	None	Matte black			6	Prem 64
1143-3DU	i3-2310M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Prem 64
1143-3EU	i3-2310M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Pro 64
1143-3FU	i5-2410M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Pro 64
1143-3GU	i5-2410M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Prem 64
1143-7RU	i5-2520M	2GBx2	15.6" HD	720p	500G 7200	Intel 1000	None	None	Matte black	Finger	Blue	6	Pro 64

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Core™ i3-2310M processor (dual-core, 2.10GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-2410M processor (dual-core, 2.30GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i5-2520M processor (dual-core, 2.50GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology								Preloaded operating system²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe Acrobat® X Standard (bundled with Microsoft Office) • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, 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, Shock Mounted Hard Drive, Active Protection System™												
mSATA™ SSD	None												
Widescreen display	15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio												
Camera	HD720p resolution, wide view angle, low light sensitive, fixed focus, LED indicator												
Graphics	Intel HD Graphics 3000 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: 2048x1536 (VGA) @75Hz; 1920x1200 (HDMI) @60Hz</i>												
Keyboard	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	15.6" (WxDxH): 14.96" x 9.78" x 1.15-1.33"; 380 x 248.5mm x 29.3-33.7mm												
Weight ²	6-cell: from 5.51 lb (2.5kg); 9-cell: from 5.86 lb (2.66kg)												
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 or 9-cell												
Battery - life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.7 hr												
Chipset	Mobile Intel HM65 Express Chipset												
ExpressCard	One ExpressCard/34												
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)												
Ports	Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)												
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2												
WWAN	None												
Modem	None												
Bluetooth™	<i>Some:</i> Bluetooth 3.0 wireless												
Ethernet	Realtek® RTL8111E Gigabit Network Connection												
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1 watt x 2/ mono digital microphone, combo audio/mic jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	None												
Fingerprint reader	<i>Some:</i> 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

US model announced June 21, 2011; previous models on April 19, 2011

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(GGR1-1) June 2011

ThinkPad® Edge E525 1200 (AMD) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN	Top color	Finger print reader	Blue-tooth	Bat-tery cells	Preload
1200-38U	E2-3000M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	Matte black			6	Pro 64
1200-39U	E2-3000M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	Matte black			6	Prem 64
1200-2MU	A4-3300M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n	Matte black	Finger	Blue	6	Pro 64
1200-2LU	A4-3300M	4GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n	Matte black			6	Pro 64

- **Small and medium business (SMB) model(s), part of the US TopSeller™ Program**
- **Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor E2-3000M (dual-core, 1.80GHz, 1MB L2 cache), integrated AMD Radeon™ HD 6380G Graphics, AMD Turbo Core technology (up to 2.40GHz), integrated DDR3 memory controller (up to 1333MHz) AMD Accelerated Processor A4-3300M (dual-core, 1.90GHz, 2MB L2 cache), integrated AMD Radeon HD 6480G Graphics, AMD Turbo Core technology (up to 2.50GHz), integrated DDR3 memory controller (up to 1333MHz)		Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® 7 Home Premium 64 - <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox Preloaded applications¹⁴ (only some listed) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe Acrobat® X Standard (bundled with Microsoft Office) • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, 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, Shock Mounted Hard Drive, Active Protection System™		
Widescreen display Camera	15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio HD720p resolution, wide view angle, 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: 1920x1600 (VGA) @60Hz; 1920x1080p (HDMI)@60Hz</i>		
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device, Internet Scroll Bar ¹³		
Touchpad ThinkLight™	UltraNav™, wide touchpad below keyboard, Tap Zones, multi-touch None		
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	15.6W" (WxDxH): 14.96" x 9.78" x 1.2-1.51"; 380mm x 248.5mm x 30.6-38.3mm <i>6-cell:</i> from 5.69 lb (2.58kg); <i>9-cell:</i> from 6.04 lb (2.74kg) Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell or 9-cell <i>6-cell:</i> up to 3.75 hr; <i>9-cell:</i> up to 7.4 hr		
Chipset ExpressCard Multicard Reader Ports	AMD A60M FCH One ExpressCard/34 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)		
PCIe Mini Card WLAN ⁴ Modem Bluetooth™ Ethernet Audio support	One PCI Express Half Mini Card slot 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 None <i>Some:</i> Bluetooth 3.0 wireless Realtek® RTL8111E Gigabit Network Connection High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1 watt x 2/ mono digital microphone, combo audio/mic jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None <i>Some:</i> 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 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 via 800-426-7378		
For compatible accessories, please go to O-E520 sheet; For ThinkPlus™, ²² service upgrade options, please go to S-EDGE sheet		

See footnotes for more detailed information

US models announced September 6, 2011; previous models on August 30, 2011

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ThinkPad® Edge E520, E525 Accessories

Personal Systems Reference (PSREF)

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Storage and removable storage

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336	
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann 11/25/08
Lenovo Optical Mouse A6010 (black)	57Y6255	
Lenovo Wireless Mouse N30B (black)	55Y9360	

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann 10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann 10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann 10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05

⁴⁴ Requires the *ThinkPad 90W AC Adapter 40Y7659* or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann 09/07/10
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.6" widescreen models:

Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08
Wenger Backpack for Lenovo	57Y4271	ann 01/07/10
Wenger Slim Case for Lenovo	57Y4273	ann 01/07/10
Wenger Deluxe Slim Case for Lenovo	57Y4272	ann 01/07/10

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410



Lenovo ThinkPad SL410 buttons



Lenovo ThinkPad SL410 lights

ThinkPad® SL410 2842 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Screen type	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue- tooth	Finger print reader	Bat- tery cells	Preload	Avail date
⌘ 2842-F7U	T6570	2.10	2GB	14.0" HD	LED	Glossy	2.0M	GMA	250G 5400	DVD±RW	* Intel 1000	None			6	Pro 32	Jan 10
⌘ 2842-F8U	T6570	2.10	3GB	14.0" HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW	* Intel 1000	None			6	Pro 32	Jan 10
⌘ 2842-F9U	T6670	2.20	4GB	14.0" HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW	* Intel 1000	None	Blue	Fing	6	Pro 64	Jan 10
⌘ 2842-K3U	T6670	2.20	2GB	14.0" HD	LED	Glossy	0.3M	GMA	250G 5400	DVD±RW	* Intel 1000	None			6	Pro 64	Sep 10
⌘ 2842-K4U	T6670	2.20	3GB	14.0" HD	LED	Glossy	0.3M	GMA	500G 7200	DVD±RW	* Intel 1000	None			6	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	Intel® Core™ 2 Duo processor T6570 or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache	Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Microsoft Office 2010 preloaded; purchase product key to activate • Adobe® Reader® • Adobe Flash® Player • Roxio® Creator® Business Edition (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) 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 via 800-426-7378 ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB ⁸ (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	14.0" (355mm) HD (1366x768) color, VibrantView (glossy), LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, HDMI port supporting HDCP to output protected content; <i>Max external resolution:</i> 2048x1536 @ 75Hz (VGA DB-15 port); 1920x1080 (HDMI port)	
Keyboard TrackPoint® Touch pad	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch	
Lighting FX	Illuminated power button	
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	<i>4/6-cell 14.0W" (WxDxH):</i> 13.54" x 9.17" x 1.26–1.42"; 344mm x 233mm x 32–36mm <i>4-cell:</i> starting at 4.59 lb (2.08kg); <i>6-cell:</i> starting at 5.1 lb (2.3kg) ThinkPad Matte Black Scratch-resistant ABS plastic Lithium Ion 6-cell <i>6-cell:</i> up to 4.0 hr; <i>9-cell:</i> up to 6 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752) One slot (ExpressCard/34)	
ExpressCard Multicard Reader PC Card Smart Card Read Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
Mini PCI Express Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	One Mini PCI Express slot 11b/g/n wireless ⁴ , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Realtek RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole	
Security Security chip Fingerprint reader	None None <i>Some:</i> Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for important warranty information * Intel Centrino® processor technology

⌘ US models announced September 28, 2010; previous models on December 15, 2009

⌘ US models withdrawn effective December 2010 or January 2011

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(JAD1-3) October 2010

lenovo.com/thinkplus/warranty

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Storage and removable storage

SL410/510 500GB Disk SATA 3G/s (5400 rpm)	43N3422	ann 10/22/09
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336	
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Optical Mouse A6010 (black)	57Y6255	
Lenovo Mini Optical Mouse M20B	55Y2091	
Lenovo Wireless Mouse N30B (black)	55Y9360	

Security

3M 14.0W Privacy Filter from Lenovo	0A61769	ann 04/05/11
Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Headphone P550	55Y2065	

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann 10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann 10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann 10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05

⁴⁴ Requires the *ThinkPad 90W AC Adapter* 40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann 09/07/10
90W Ultraslim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

<i>Up to 14" widescreen models:</i>		
ThinkPad 14W Case Sleeve	57Y4294	ann 03/16/10

<i>Up to 15.4" widescreen models:</i>		
ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

<i>Up to 15.6" widescreen models:</i>		
Wenger Backpack for Lenovo	57Y4271	ann 01/07/10
Wenger Slim Case for Lenovo	57Y4273	ann 01/07/10
Wenger Deluxe Slim Case for Lenovo	57Y4272	ann 01/07/10

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann 06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Security Cable Lock	57Y4303	ann 08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

ThinkPad®



Lenovo® ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo ThinkPad SL510



Lenovo Essential Notebook Stand
45J9292



ThinkPad SL510 Touchpad

ThinkPad® SL510 2847 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Screen type	Cam- era	Inte- grated graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue- tooth	Finger print reader	Bat- tery cells	Preload	Avail date
☞ 2847-2KU	T5870	2.00	2GB	15.6"	HD	LED		GMA	160G 5400	DVD±RW *	Intel 5100 ²⁸				6	Pro 32	Oct 09
☞ 2847-2LU	T5870	2.00	4GB	15.6"	HD	LED	2.0M	GMA	250G 5400	DVD±RW *	Intel 5100		Blue		6	Home P	Oct 09
☞ 2847-2QU	P8700	2.53	4GB	15.6"	HD	LED	2.0M	GMA	320G 5400	DVD±RW *	Intel 5100		Blue	Fing	6	Pro 64	Oct 09
☞ 2847-6GU	T6670	2.20	2GB	15.6"	HD	LED	2.0M	GMA	250G 5400	DVD±RW *	WiMAX				6	Pro 32	Nov 09
☞ 2847-6HU	T6670	2.20	3GB	15.6"	HD	LED	2.0M	GMA	250G 5400	DVD±RW *	Intel 5100	Verizon ¹⁶			6	Pro 32	Nov 09
☞ 2847-9VU	T6570	2.10	4GB	15.6"	HD	LED	Glossy	2.0M	GMA	320G 7200	DVD±RW *	Intel 1000 ²⁸	Blue		6	Home P	Jan 10
☞ 2847-9YU	T6670	2.20	4GB	15.6"	HD	LED	2.0M	GMA	320G 7200	DVD±RW *	Intel 1000		Blue	Fing	6	Pro 64	Jan 10
☞ 2847-9UU	T6570	2.10	2GB	15.6"	HD	LED	2.0M	GMA	250G 5400	DVD±RW *	Intel 1000				6	Pro 32	Jan 10
☞ 2847-9XU	T6570	2.10	3GB	15.6"	HD	LED	2.0M	GMA	320G 7200	DVD±RW *	Intel 1000				6	Pro 32	Jan 10
☞ 2847-9ZU	T6670	2.20	3GB	15.6"	HD	LED	2.0M	GMA	320G 7200	DVD±RW *	Intel 1000	AT&T ²³			6	Pro 32	Jan 10
☞ 2847-AZU	T6570	2.10	2GB	15.6"	HD	LED	Glossy	2.0M	GMA	250G 5400	DVD±RW *	Intel 1000			6	Home P	Apr 10
☞ 2847-CZU	T6670	2.20	2GB	15.6"	HD	LED	0.3M	GMA	250G 5400	DVD±RW *	Intel 1000				6	Pro 64	Sep 10
☞ 2847-D2U	T6670	2.20	3GB	15.6"	HD	LED	0.3M	GMA	500G 7200	DVD±RW *	Intel 1000				6	Pro 64	Sep 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	Intel® Core™ 2 Duo processor T5870, T6570, or T6670 with dual-core, 800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Home Premium 64 - Some: Genuine Windows 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in	
SATA disk	160GB ⁸ (5400 rpm), 250GB (5400 rpm), 320GB (5400 or 7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	Some: 15.6" (395mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (395mm) HD (1366x768) color, VibrantView (glossy), LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	Some: camera on top of screen, 0.3-megapixel or 2.0-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, HDMI port supporting HDCP to output protected content Max external resolution: 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)	
Keyboard	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys	
TrackPoint®	TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch	
Lighting FX	Illuminated power button	
Dimensions ³	4/6-cell 15.6W" (WxDxH): 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm	
Weight ²	4-cell: starting at 5.17 lb (2.35kg); 6-cell: starting at 5.64 lb (2.56kg)	
Case	Color: ThinkPad Matte Black; Material: Scratch-resistant ABS plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell: up to 4.0 hr; 9-cell: up to 6 hr	Supports ThinkVantage® technologies
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)	65-watt (GMA graphics) AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant
ExpressCard	One slot (ExpressCard/34)	International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)	
PC Card	None	
Smart Card read	None	
Ports	Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
Mini PCI Express	One or two Mini PCI Express slots	ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD
Intel 1000 ²⁸	Some: 11b/g/n wireless ⁴ , Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2	45K5968
Intel 5100 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)	45K5969
WiMAX	Some: 11a/b/g/n and WiMAX wireless, Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)	45K5970
Verizon ¹⁶	Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adaptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon®	45K5973
AT&T ²³	Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®	45K5975
Modem	None	ThinkPlus 2-year P&L P/U Depot
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator	45K5971
Ethernet	Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1	ThinkPlus 3-year P&L P/U Depot
Intel AMT	None	45K5972
Audio support	High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack	ThinkPlus 4-year P&L P/U Depot
Security	Power-on password, hard disk password, supervisor password, security keyhole	45K5974
Security chip	None	ThinkPlus 5-year P&L P/U Depot
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor	45K5976
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

* Intel Centrino® processor technology

☞ US models announced September 28, 2010;

☞ Intel Centrino 2 processor technology

previous models on October 22, November 17, or December 15, 2009, or April 6, 2010

☞ US models withdrawn effective February or December 2010 or January 2011

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(TOP1-3) October 2010

Type-model	proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Inte- grated graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue- tooth	Finger print reader	Bat- tery cells	Preload	Avail date
2847-DJU	T6670	2.20	4GB	15.6" HD	LED	0.3M	GMA	500G 7200	DVD±RW	* 11n ²⁸	None	None	None	6	Home P	Jan 11
2847-DKU	T6670	2.20	2GB	15.6" HD	LED	0.3M	GMA	250G 5400	DVD±RW	* Intel 1000 ²⁸	None	None	None	6	Home P	Jan 11

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Processor	Intel® Core™ 2 Duo processor T6670 with dual-core, 800MHz system bus, and 2MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® 7 Home Premium 64				
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable, tray-in 250GB⁸ (5400 rpm) or 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display Camera	15.6" (395mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, HDMI port supporting HDCP to output protected content <i>Max external resolution:</i> 2048x1536@75Hz (VGA DB-15 port); 1920x1080 (HDMI port)															
Keyboard TrackPoint® Touch pad	6-row, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch															
Lighting FX	Illuminated power button											Supports ThinkVantage® technologies				
Dimensions ³ Weight ² Case Battery - type ³⁷ Battery - life ¹⁰	<i>4/6-cell 15.6W" (WxDxH):</i> 14.9" x 9.72" x 1.26–1.42"; 380 x 247mm x 32–36mm <i>4-cell:</i> starting at 5.17 lb (2.35kg); <i>6-cell:</i> starting at 5.64 lb (2.56kg) <i>Color:</i> ThinkPad Matte Black; <i>Material:</i> Scratch-resistant ABS plastic Lithium Ion 6-cell <i>6-cell:</i> up to 4.0 hr; <i>9-cell:</i> up to 6 hr											65-watt (GMA graphics) 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 via 800-426-7378				
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, ethernet MAC), LPC bus (IT8752)															
ExpressCard Multicard reader PC Card Smart Card read Ports	One slot (ExpressCard/34) 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) None None Three USB 2.0, one eSATA/USB combo port, external monitor (VGA DB-15, HDMI), ethernet (RJ-45)											ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976				
Mini PCI Express 11n ²⁸ Intel 1000 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	One Mini PCI Express slot <i>Some:</i> 11b/g/n wireless ⁴ , Mini-PCIe Adapter II <i>Some:</i> 11b/g/n wireless, Mini PCIe adapter, Intel Centrino® Wireless-N 1000, 1x2 None None None None Realtek® RTL8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, ALC269Q codec / stereo speakers, 1.5 watt / speaker volume up, down and mute buttons / mono microphone, mic mute button, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole															
Security Security chip Fingerprint reader	None None None															
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US models announced January 11, 2011

* Intel Centrino® processor technology
✦ Intel Centrino 2 processor technology

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(TOP1-4) January 2011

Memory

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann	03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann	03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann	03/02/10

Storage and removable storage

SL410/510 500GB Disk SATA 3G/s (5400 rpm)	43N3422	ann	10/22/09
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
Lenovo Slim USB Portable DVD Burner	0A33988	ann	06/14/11

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB 2.0 Port Replicator with Digital Video	0A33942	ann	03/22/11

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Lenovo Mini Wireless Keyboard N5901 ⁵² (blk)	57Y6336		
UltraSlim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Preferred Pro USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08
Lenovo Optical Mouse A6010 (black)	57Y6255		
Lenovo Mini Optical Mouse M20B	55Y2091		
Lenovo Wireless Mouse N30B (black)	55Y9360		

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Headphone P550	55Y2065		

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Batteries³⁷

ThinkPad Battery 25 (4-cell)	51J0498	ann	10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann	10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann	10/22/09
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter</i>			
40Y7659 or the adapter provided with the system.			

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696		
⁴⁵ Only compatible with the integrated graphics models.			
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
ThinkPad 65W AC Adapter with USB Hub	57Y4600	ann	09/07/10
90W UltraSlim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W UltraSlim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.6" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
ThinkPad Business Backpack	43R2482	ann	05/13/08

More information at www.lenovo.com/support/cases

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2321x Wide 23" Monitor	4014HB6	ann	06/10/10
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Security Cable Lock	57Y4303	ann	08/24/10
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

The TopSeller™ services are designed to make selling the popular services with TopSeller systems faster and easier. Channel partners should always use TopSeller services with TopSeller systems. TopSeller services part numbers typically provide enhanced discounts and incentives for channel partners. The TopSeller service delivered to the customer is identical to the service delivered using a standard service part number. In situations where a desired service is not offered under a TopSeller service part number or the sale requires a special bid process, use available standard service part numbers.

TopSeller services should always be offered by channel business partners with TopSeller hardware, unless the sale requires special bid pricing or the desired service is not offered as a TopSeller service part.

For more information see:

<http://www1.partnerinfo.lenovo.com/us/en/salestoolkit.shtml>

TopSeller service upgrade options for ThinkPad Edge & SL Series

ThinkPad Edge E220s/E420s Sealed Battery notebooks with 1-year Depot warranty

3 YEAR Depot Warranty with Battery Replacement	04W8702
3 YEAR Depot Warranty with Battery Replacement & ThinkPad Protection	04W8704
3 YEAR Onsite Warranty with Battery Replacement	04W8703
3 YEAR Onsite Warranty with Battery Replacement & ThinkPad Protection	04W8705

ThinkPad Edge & SL notebooks with 1-year Depot warranty

3 YEAR Depot Warranty	04W8706
3 YEAR Depot Warranty & ThinkPad Protection	04W8708
3 YEAR Onsite Warranty	04W8707
3 YEAR Onsite Warranty & ThinkPad Protection	04W8709

TopSeller Priority Support

- 24x7 support with priority routing and advanced level technicians

ThinkPad Edge & SL notebooks with 1-year Depot warranty

Add to 3-year warranty coverage - 3-year Priority Support*	04W8720
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* Covered machine must have concurrent warranty coverage.

Partial list of Lenovo® ThinkPlus Services²² for ThinkPad Edge notebooks

For more information see: http://www.lenovo.com/services_warranty/us/en/index.html

ThinkPlus service upgrade options for ThinkPad Edge series

ThinkPad Edge notebook with 1-year Depot warranty

2 YEAR Depot Warranty	45K5971
3 YEAR Depot Warranty	45K5972
4 YEAR Depot Warranty	0A34460
1 YEAR Onsite Warranty	45K5968
2 YEAR Onsite Warranty	45K5969
3 YEAR Onsite Warranty	45K5970
4 YEAR Onsite Warranty	0A34462

ThinkPlus service upgrade options for ThinkPad SL series

ThinkPad SL notebook with 1-year Depot warranty

2 YEAR Depot Warranty	45K5971
3 YEAR Depot Warranty	45K5972
4 YEAR Depot Warranty	45K5974
1 YEAR Onsite Warranty	45K5968
2 YEAR Onsite Warranty	45K5969
3 YEAR Onsite Warranty	45K5970
4 YEAR Onsite Warranty	45K5973

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, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. 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.

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® 2007 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.

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

¹³ **Internet access not included.**

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** 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.

¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

¹⁹ **EasyServ depot repair service:** In the United States call 1-800-426-7378. 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 **ThinkPlus 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 ThinkPlus 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.

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. In the United States call 1-800-426-7378. 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.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

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

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁵ **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/think/support and enter your machine type and model number for more information.

³⁷ **Battery:** The ThinkPad Edge and ThinkPad SL series do not support batteries that are not genuine Lenovo-made or authorized. These systems will continue to boot, but may not charge unauthorized batteries.

Warning: Lenovo has no responsibility for the performance or safety of unauthorized batteries, and provides no warranties for failures or damage arising out of their use.

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