



Personal Systems Reference Lenovo® ThinkPad® Notebooks

December 2009 - Version 367



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PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707



ThinkPad Advanced Dock
250310U



USB 2.0 Portable Secure Hard Disk
160GB 43R2018
320GB 43R2019



ThinkPad Bluetooth Laser Mouse
41U5008



ThinkPad Checkpoint Friendly
Business Topload Case
51J0418



90W Ultraslim AC/DC Combo Adapter
41R4493

ThinkPad®



Lenovo® ThinkPad R400



ThinkLight on



Lenovo USB-to-DVI Monitor Adapter
45K5296



Lenovo ThinkPad R400



Lenovo ThinkPad R400



T/R 14W High Capacity Battery 9-cell
43R2499

ThinkPad® R400 7438 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
7438-T6U	P8400	2.26	2GB	14.1" WXGA		GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Finger		6	XP Pro	Aug 08
7438-T7U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA	160G 7200	DVD±RW	Intel 5100	None	None	Finger	Blue	6	XP Pro	Aug 08
7438-PAU	P8600	2.40	2GB	14.1" WXGA		GMA	160G 5400	DVD±RW	Intel 5100	None	None	Finger		6	XP Pro	Mar 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™,19 depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400/P8600:</i> 3MB L2 cache; <i>T9400:</i> 6MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business ◇ <i>Vista logo:</i> None Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 4GB 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; *Standard memory in one or two sockets (variable DIMMs)			
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus			
Camera				
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz			
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm			
Weight ²	6-cell: starting at 5.1 lb (2.3kg)			
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic			
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced			
Battery - life ¹⁰	6-cell: up to 5 hr; 6-cell plus Ultrabay battery: up to 6.5 hr; 9-cell: up to 7.5 hr			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)			
PC Card	One slot (Type I, Type II), CardBus 32-bit			
Smart Card Read	None			
Multicard Reader	None			
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express	Three Mini PCI Express slots			
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)			
WWAN	None			
2G Turbo	None			
UWB	None			
Modem	56K V.92 ⁶ modem			
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1			
Intel AMT	None			
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196	
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198	
ThinkPad Advanced Dock	250310U	T/R 14W High Capacity Battery 9-cell	43R2499	
Other accessories on O-R400 sheet	Other accessories at lenovo.com/accessories			

Supports ThinkVantage® technologies
65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

US models announced August 5, 2008 or March 24, 2009

⚡ US models withdrawn effective June or December 2009

✦ Intel Centrino® 2 processor technology

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(LAG3-1) October 2009

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
ThinkPad Roll Cage and Top Cover
Roll Cage (one-piece magnesium)
EPEAT™ Silver 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

ThinkPlus™, 22 3-year LOR²⁴ 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance
agreements at
lenovo.com/thinkplus/warranty

ThinkPad® R400 7438 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
7438-68U	P8700	2.53	2GB	14.1" WXGA	Cam	GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	6	XP Pro	Oct 09

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**
- **This model has an EasyServ™¹⁹ depot repair service 3-year limited warranty**

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
Memory	2GB std / 4GB 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 Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz			Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm					
Weight ²	6-cell: starting at 5.1 lb (2.3kg)					
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced					
Battery - life ¹⁰	6-cell: up to 5 hr; 6-cell plus Ultrabay battery: up to 6.5 hr; 9-cell: up to 7.5 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN	None					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198			
ThinkPad Advanced Dock	250310U	T/R 14W High Capacity Battery 9-cell	43R2499			
Other accessories on O-R400 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US model announced October 22, 2009

Intel Centrino® 2 processor technology

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(LAG3-7) October 2009

ThinkPad® R400 7443 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ^s rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Avail date
7443-31U	T6670	2.20	2GB	14.1" WXGA	Cam	GMA	250G 5400	DVD+RW	11n ²⁸	None	None	Finger	Blue	6	XP Pro	Oct 09

- ***This small and medium business (SMB) model is part of the US TopSeller™ Program***

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core Intel HD Boost, 800MHz system bus, and 2MB L2 cache		
Memory	2GB std / 4GB 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 Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™		
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus		
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz		
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr		
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)		
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)		
Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip		
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available		
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R400 sheet	55Y3706 55Y3707 250310U	T/R 14W Standard Battery 4-cell 41U3196 T/R 14W Enhanced Battery 6-cell 41U3198 T/R 14W High Capacity Battery 9-cell 43R2499	Other accessories at lenovo.com/accessories

Preloaded operating system²⁰
- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32

Preloaded applications¹⁴ (only some listed)

- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage Productivity Center
- ThinkVantage System Update
- Fingerprint Software
- Lenovo System Toolbox
- ThinkPad Utilities (Power Manager and Presentation Director)
- Adobe® Reader®
- Windows Live™ Toolbar
- Microsoft® Office 2007 Trial (60-day)
- Roxio® Creator® Business Edition (DVD±RW)
- Corel® MyDVD® (DVD±RW)
- Corel® WinDVD® (DVD±RW)

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
ThinkPad Roll Cage and Top Cover
Roll Cage (one-piece magnesium)
EPEAT™ Silver 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

ThinkPlus™. ²² 1-year LOR²⁴ 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**

See footnotes for important warranty information
US model announced October 22, 2009

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(LAG3-8) October 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger Card slot	Blue- tooth	Bat- tery	Whorse (W) Gbl (G) Avail date				
7439-1WUCel 575	2.00	2GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5100 ²⁸	None	PC	Fing	Blue	6	Bus 32	Sep08					
7439-11UP8400	2.26	1GB	14.1" WXGA			GMA 80G 5400 Combo	Intel 5100	None	PC	Fing	Blue	6	Bus 32	G Aug08					
7439-12UT9400	2.53	1GB	14.1" WXGA			GMA 160G 5400 Combo	Intel 5100	None	PC	Fing	Blue	6	Bus 32	WG Aug08					
7439-V1UT9400	2.53	2GB	14.1" WXGA		Cam	GMA 160G 7200 DVD±RW	Intel 5100	None	2G Turbo	7-in-1	Fing	Blue	6	Bus 32	WG Aug08				
7439-V2UP8400	2.26	1GB	14.1" WXGA		Cam	GMA 160G 5400 Combo	Intel 5100	None	7-in-1	Fing	Blue	6	Bus 32	WG Aug08					
7439-V5UT9400	2.53	1GB	14.1" WXGA		Cam	GMA 160G 5400 DVD±RW	Intel 5100	None	7-in-1	Fing	Blue	6	Bus 32	WG Aug08					
7439-1BUP8600	2.40	2GB	14.1" WXGA+			GMA 160G 5400 DVD±RW	Intel 5100	None	2G Turbo	7-in-1	Fing	Blue	6	Bus 32	WG Aug08				
7439-1CUT9400	2.53	2GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5300 ²⁸	None	2G Turbo	7-in-1	Fing	Blue	6	Bus 32	WG Aug08				
7439-1TUP8600	2.40	1GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5100	None	Smart				6	Bus 32	TAA Aug08				
7439-PAUP8600	2.40	2GB	14.1" WXGA			GMA 160G 5400 Combo	Intel 5100	None	PC	Fing	Blue	6	XP Pro	G Sep08					
7439-PCUP8600	2.40	2GB	14.1" WXGA+			GMA 160G 5400 DVD±RW	Intel 5100	None	2G Turbo	7-in-1	Fing	Blue	6	XP Pro	G Sep08				
7439-T1UP8600	2.40	2GB	14.1" WXGA			GMA 160G 5400 Combo	Intel 5100	None	PC	Fing	Blue	6	XP Pro	G Sep08					
7439-V3UT9400	2.53	2GB	14.1" WXGA		Cam	GMA 160G 7200 DVD±RW	Intel 5100	None	UWB	7-in-1	Fing	Blue	9	Bus 32	W Oct08				
7439-T2UP8600	2.40	1GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5100	None	Smart				6	Bus 32	TAA Oct08				
7439-PDUP8600	2.40	2GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5100	None	PC	Fing	Blue	6	Bus 32	WG Dec08					
US Govt (TAA) ⁵ Processor												1TU/2TU: US Government model (Trade Act Agreement-compliant) Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache				Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ♦ Vista models: Vista Premium logo			
Memory												1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in one socket; one socket available				Preloaded applications ¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk												Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB ⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™							
Widescreen display												Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio							
Camera												Some: camera on top of screen, 1.3-megapixel, fixed focus							
Integrated graphics												Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock Maximum external resolution: 2048x1536@75Hz (VGA DB-15)							
Keyboard TrackPoint® Touch pad ThinkLight™												89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions							
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰												6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm 6-cell: starting at 5.1 lb (2.3kg) Black Top: Super-Elastic Polycarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 5 hr; 6-cell plus Ultrabay battery: up to 6.5 hr; 9-cell: up to 7.5 hr							
Chipset												Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)				Supports ThinkVantage® technologies			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports												One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit Some: Smart Card reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support												Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) None Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator Some: Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter 56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack				ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Security Security chip Fingerprint reader												Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²												3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available							
2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-R400 sheet												55Y3707 T/R 14W High Capacity Battery 9-cell 43R2499 Other accessories at lenovo.com/accessories							

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

Ⓜ US models announced December 2, 2008; previous models on Aug 5, Sep 2, Sep 30, or October 7, 2008

✗ US models withdrawn effective August or October 2009

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(LAG3-2) December 2008

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam-Integrated era graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card slot	Blue/ Fing	Bat- tery cells	Whorse (W) Gbl (G) Avail date
7440-11U	P8400	2.26	1GB	14.1" WXGA		GMA 80G 5400 Combo		Intel 5100 ²⁸	None		PC	Yes	6	Bus 32 G P Aug 08
7440-12U	T9400	2.53	1GB	14.1" WXGA		GMA 160G 5400 Combo		Intel 5100	None		PC	Yes	6	Bus 32 W G P Aug 08
7440-V1U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200 DVD±RW		Intel 5100	None	2G Turbo	7-in-1	Yes	6	Bus 32 W G P Aug 08
7440-V5U	T9400	2.53	1GB	14.1" WXGA	Cam	GMA 160G 5400 DVD±RW		Intel 5100	None		7-in-1	Yes	6	Bus 32 W G P Aug 08
7440-T1U	P8600	2.40	2GB	14.1" WXGA		GMA 160G 5400 Combo		Intel 5100	None		PC	Yes	6	XP Pro G P Sep 08
7440-PDUP	P8600	2.40	2GB	14.1" WXGA		GMA 160G 5400 DVD±RW		Intel 5100	None		PC	Yes	6	Bus 32 W G P Dec 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ♦ Vista models: Vista Premium logo			
Memory	1GB or 2GB std / 4GB 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 (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)			
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™													
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: camera on top of screen, 1.3-megapixel, fixed focus													
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock Maximum external resolution: 2048x1536@75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm 6-cell: starting at 5.1 lb (2.3kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 5 hr; 6-cell plus Ultrabay battery: up to 6.5 hr; 9-cell: up to 7.5 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub) / ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit													
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										Supports ThinkVantage® technologies			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver 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			
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										ThinkPlus™. 22 4-year LOR 9x5 NBD 45K6038			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R400 sheet	55Y3706 55Y3707 250310U T/R 14W Standard Battery 4-cell T/R 14W Enhanced Battery 6-cell T/R 14W High Capacity Battery 9-cell Other accessories at lenovo.com/accessories										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information

✧ Intel Centrino® 2 processor technology

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US model announced December 2, 2008; previous models on August 5 or September 2, 2008

(LAG3-3) December 2008

US model withdrawn effective August 2009

ThinkPad® R400 7439 (Education) - EasyServ

Personal Systems Reference (PSREF)

	Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam-Integrated era graphics	Disk SATA GB ⁸	SATA rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card slot	Finger print reader	Bat- tery cells	Whorse (W) Gbl (G) Avail date		
⚡	7439-E1U	Cel 585	2.16	1GB	14.1" WXGA	Cam GMA	80G	5400	Combo	Intel 5100 ²⁸	None	2G Turbo	7-in-1		6	Bus 32	W	Sep 08
⚡	7439-E2U	T9400	2.53	1GB	14.1" WXGA	Cam GMA	80G	5400	Combo	⚡Intel 5100	None	2G Turbo	7-in-1		6	Bus 32	W	Aug 08
	7439-E3U	T9400	2.53	1GB	14.1" WXGA	Cam GMA	160G	5400	DVD±RW	⚡Intel 5100	None	2G Turbo	7-in-1	Fing	6	Bus 32	W	Aug 08
	7439-E4U	T9400	2.53	2GB	14.1" WXGA+	Cam GMA	160G	7200	DVD±RW	⚡Intel 5100	None	2G Turbo	7-in-1	Fing	9	Bus 32	W	Aug 08
	7439-E5U	P8600	2.40	2GB	14.1" WXGA	Cam GMA	160G	5400	DVD±RW	⚡Intel 5100	None		7-in-1		6	Bus 32	W	Dec 08
🔋	7439-E9U	P8700	2.53	2GB	14.1" WXGA	Cam GMA	250G	5400	DVD±RW	⚡Intel 5100	None		7-in-1	Fing	6	Bus 32		Mar 09
🔋	7439-EAU	T9600	2.80	3GB	14.1" WXGA	Cam GMA	160G	7200	DVD±RW	⚡Intel 5100	None		7-in-1	Fing	6	Bus 32		Mar 09

• These models have an EasyServ™, 19 depot repair service 3-year limited warranty

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Mainstream business performance; two spindles Intel® Celeron® Processor 585 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8600, P8700, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600/P8700: 3MB L2 cache; T9400/T9600: 6MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 - Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)				
Memory	1GB, 2GB, or 3GB std / 4GB 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 Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W"</i> (WxDxH): 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr														
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54)										Supports ThinkVantage® technologies				
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus™. 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - EasyServ™. 19 depot repair service / service upgrades²² available														
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R400 sheet	55Y3706 55Y3707 250310U T/R 14W Standard Battery 4-cell 41U3196 T/R 14W Enhanced Battery 6-cell 41U3198 T/R 14W High Capacity Battery 9-cell 43R2499 Other accessories at lenovo.com/accessories														

See footnotes for important warranty information

• Intel Centrino® 2 processor technology

US models announced March 24, 2009; previous models on Aug 5, Sep 30, or December 2, 2008

US models withdrawn effective August 2009

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(LAG3-4) April 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann	08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Enh SATA	43R9148	ann	08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann	08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay or (in the ThinkPad Advanced Dock 250310U with Serial Hard Drive Ultrabay Slim Adapter 40Y8725)

USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05
ThinkPad Advanced Dock	250310U	ann	09/20/05

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
Ultralim 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
Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
T400/R400 Series 14W Privacy Filter	43R2472	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

T/R 14W Standard Battery 4-cell	41U3196	ann	05/09/07
T/R 14W Enhanced Battery 6-cell	41U3198	ann	05/09/07
T/R 14W High Capacity Battery 9-cell	43R2499	ann	03/04/08
Advanced Ultrabay Battery III ⁴³	57Y4536	ann	08/25/09

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger⁴⁴

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 Adapter⁴⁵

⁴⁵ Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter

90W Ultralim AC/DC Combo Adapter

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

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

•BlackBerry charge tip (L8a)

•iPod and iPhone Charge Tip (L10a)

•Generic Micro USB charge tip (L18)

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

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 L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad R500



T/R/W/SL Series Li-Ion Battery 9-cell
40Y6797



Lenovo ThinkPad R500



Lenovo USB Fingerprint Keyboard
73P4730



Lenovo ThinkPad R500



ThinkPad Essential Port Replicator
250510W

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Whorse (W) Gbl (G) Preload Educ	Avail date
2714-96U	T6570	2.10	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	*Intel 5100 ²⁸	None	Finger	Blue	6	Ult 32	Mar 09
2714-A7U	T6670	2.20	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	11n ²⁸	None	Finger	Blue	6	XP Pro	Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6570 or T6670 with dual-core , Intel HD Boost, 800MHz system bus, and 2MB L2 cache			Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)
Memory	2GB std / 4GB 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 Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio			
Camera	Camera on top of screen, 1.3-megapixel, fixed focus			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz			
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm			
Weight ²	6-cell: starting at 6.4 lb (2.93kg)			
Case color	black			
Case material	Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced			
Battery - life ¹⁰	6-cell: up to 4.5 hr; 6-cell plus Ultrabay battery: up to 6.0 hr; 9-cell: up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)			
PC Card	One slot (Type I, Type II), CardBus 32-bit			
Smart Card Read	None			
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)			
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express	Two Mini PCI Express slots			
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)			
11n ²⁸	<i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II			
WWAN	None			
2G Turbo	None			
UWB	None			
Modem	56K V.92 ⁶ modem			
Bluetooth™	Bluetooth 2.1 wireless, LED indicator			
Ethernet	Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE			
Intel AMT	None			
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799	
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797	
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536	
Other accessories on O-R500 sheet	Other accessories at lenovo.com/accessories			

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	

See footnotes for important warranty information

US models announced March 17 or July 7, 2009

⚡ US models withdrawn effective December 2009

* Intel Centrino® processor technology

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ThinkPad® R500 2714 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Workhorse (W) Global (G) Avail date		
2714-AFU	T6670	2.20	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD+RW	11n ²⁸	None	Finger	Blue	6	XP Pro	No	Oct 09

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 800MHz system bus, and 2MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver 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 std / 4GB 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 Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92® modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	1-year - EasyServ™, ¹⁹ depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R500 sheet	55Y3706 55Y3707 250310U	T/R/W/SL Series Li-Ion Battery 6-cell T/R/W/SL Series Li-Ion Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories	40Y6799 40Y6797 57Y4536	

See footnotes for important warranty information
US model announced October 22, 2009

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(WKK3-8) October 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Bat- tery Blue- tooth cells	Workhorse (W) Global (G) Avail Preload Educ date
2717-5GU	P8400	2.26	2GB	15.4" WXGA		GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	Finger	6	XP Pro Aug 08
2717-5HU	T9400	2.53	2GB* 15.4" WXGA		Cam	GMA	160G 7200	DVD±RW	Intel 5100	None	Finger	6	XP Pro Aug 08
2717-8VU	T6570	2.10	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	Intel 5100	None	Finger	6	Ult 32 Educ Mar 09
2717-8WU	P8600	2.40	2GB	15.4" WXGA		GMA	160G 5400	DVD±RW	Intel 5100	None	Finger	6	XP Pro Mar 09
2717-A8U	T6670	2.20	3GB	15.4" WXGA	Cam	GMA	320G 5400	DVD±RW	11n ²⁸	None	Finger	6	XP Pro Jul 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™, 19 depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6570 or T6670 with dual-core , Intel HD Boost, 800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8400, P8600 or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400/P8600</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
Memory	2GB or 3GB std / 4GB 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; *Standard memory in one or two sockets (variable DIMMs)					
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 160GB ⁸ (5400 or 7200 rpm), 250GB (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradeable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹² 3-years/1-yr battery - EasyServ™, 19 depot repair service / service upgrades ²² available						
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell			
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797		
ThinkPad Advanced Dock		250310U	Advanced Ultrabay Battery III	57Y4536		
Other accessories on O-R500 sheet			Other accessories at lenovo.com/accessories			

See footnotes for important warranty information

US models announced August 5, 2008,

March 24, 2009, or July 7, 2009;

US models withdrawn effective June or December 2009

* Intel Centrino® processor technology

Intel Centrino 2 processor technology

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(WKK3-1) October 2009

ThinkPad® R500 2717 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Bat- tery Blue- tooth cells	Workhorse (W) Global (G) Avail date
2717-ASU	T6670	2.20	3GB	15.4" WXGA	Cam	GMA	320G 5400	DVD±RW	11n ²⁸	None	Finger	Blue	6 XP Pro No Oct 09
2717-ATU	P8700	2.53	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	Finger	Blue	6 XP Pro No Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™,19 depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 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 system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32		
Memory	2GB or 3GB std / 4GB 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™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™												
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)												
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										Supports ThinkVantage® technologies		
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver 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		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R500 sheet	55Y3706 T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799 55Y3707 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797 250310U Advanced Ultrabay Battery III 57Y4536 Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US models announced October 22, 2009

✚ Intel Centrino® 2 processor technology

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(WKK3-7) October 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Workhorse (W) Global (G) Avail date
2716-EBU	Cel 575	2.00	2GB	15.4" WXGA	Cam	GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	Finger	Blue	9	Bus 32 Sep 08
2716-3KU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	Combo	Intel 5100	None	Finger	Blue	6	Bus 32 G Aug 08
2716-3LU	T9400	2.53	1GB	15.4" WXGA		GMA	160G 5400	DVD±RW	Intel 5100	None	Finger	Blue	6	Bus 32 W G Aug 08
2716-3MU	T9400	2.53	2GB	15.4" WXGA	Cam	GMA	160G 5400	DVD±RW	Intel 5100	None	Finger	Blue	9	Bus 32 W G Aug 08
2716-6JU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	Combo	Intel 5100	None	Finger	Blue	6	XP Pro G Sep 08
2716-6LU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	DVD±RW	Intel 5100	None	Finger	Blue	6	XP Pro G Sep 08

• These models have an EasyServ™,19 depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8400 or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista Business 32 - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)		
Memory	1GB or 2GB std / 4GB 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 Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB ⁸ (5400 rpm) or 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Camera						
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit					
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express Intel 5100 ²⁸ 2G Turbo WWAN UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-R500 sheet	55Y3706 55Y3707 250310U	T/R/W/SL Series Li-Ion Battery 6-cell T/R/W/SL Series Li-Ion Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories	40Y6799 40Y6797 57Y4536			
				Supports ThinkVantage® technologies		
				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) 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 3-year LOR ²⁴ 9x5 NBD 45K6021		
				ThinkPlus 4-year LOR 9x5 NBD 45K6022		
				ThinkPlus 5-year LOR 9x5 NBD 45K6024		
				ThinkPlus 4-year P&L P/U Depot 45K6023		
				ThinkPlus 5-year P&L P/U Depot 45K6025		
				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

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☞ US model announced September 30, 2008; previous models on August 5 or September 2, 2008

(WKK3-2) September 2008

✗ US models withdrawn effective August or October 2009

• *These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty*

See footnotes for important warranty information ✧ Intel Centrino® 2 processor technology
US models announced on August 5 or September 2, 2008
✧ ~~US models withdrawn effective August 2009~~

ThinkPad® R500 2716 (Education) - EasyServ

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Workhorse (W) Global (G) Avail date
2716-ECU	Cel 575	2.00	1GB	15.4" WXGA	Cam	GMA 80G	5400	Combo	Intel 5100 ²⁸	None	Finger	Blue	6	Bus 32 No Sep 08
2716-5PU	P8400	2.26	1GB	15.4" WXGA	Cam	GMA 80G	5400	Combo	Intel 5100	None	Finger	Blue	6	Bus 32 No Aug 08
2716-5QU	T9400	2.53	2GB	15.4" WXGA	Cam	GMA 160G	5400	DVD±RW	Intel 5100	None	Finger	Blue	6	Bus 32 No Aug 08
2716-8SU	P8600	2.40	2GB	15.4" WXGA	Cam	GMA 160G	7200	DVD±RW	Intel 5100	None	Finger	Blue	6	Ult 32 No Feb 09
2716-8YU	Cel T1600	1.66	1GB	15.4" WXGA	Cam	GMA 160G	5400	Combo	Intel 5100	None	Finger	Blue	6	Bus 32 No Mar 09
2716-8ZU	P8700	2.53	2GB	15.4" WXGA	Cam	GMA 250G	5400	DVD±RW	Intel 5100	None	Finger	Blue	6	Bus 32 No Mar 09

- **These models have an EasyServ™, 19 depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	Mainstream business performance; two spindles Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache or Intel Celeron Processor T1600 with dual-core, 667MHz system bus, and 1MB L2 cache or Intel Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2 cache</i>			Preloaded operating system ²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Ultimate 32 ◇ Vista Premium logo Preloaded applications¹⁴ (all OSES, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
Memory	1GB or 2GB std / 4GB 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 Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536 @ 75Hz</i>					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm</i>					
Weight ²	<i>6-cell: starting at 6.4 lb (2.93kg)</i>					
Case	<i>Color: black; Material: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i>					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced					
Battery - life ¹⁰	<i>6-cell: up to 4.5 hr; 6-cell plus Ultrabay battery: up to 6.0 hr; 9-cell: up to 7.1 hr</i>					
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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54					
ExpressCard slot	One Type I or Type II slot, CardBus 32-bit					
PC Card Std slot	None					
Smart Card Read	None					
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Two Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
Intel 5100 ²⁸	None					
2G Turbo	None					
WWAN	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, 19 depot repair service / service upgrades²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-R500 sheet	Other accessories at lenovo.com/accessories					
				Supports ThinkVantage® technologies		
				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) 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 3-year LOR ²⁴ 9x5 NBD 45K6021		
				ThinkPlus 4-year LOR 9x5 NBD 45K6022		
				ThinkPlus 5-year LOR 9x5 NBD 45K6024		
				ThinkPlus 4-year P&L P/U Depot 45K6023		
				ThinkPlus 5-year P&L P/U Depot 45K6025		
				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

✦ US models announced March 24, 2009; previous models on August 5, September 30, 2008 or February 17, 2009

✦ US models withdrawn effective August 2009

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(WKK3-4) April 2009

ThinkPad® R500 2718 (Education) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue- tooth	Bat- tery cells	Preload	Whorse (W) Gbl (G) GMP (P)	Avail date
2718-8SU	P8600	2.40	2GB	15.4" WXGA	Cam	GMA	160G 7200	DVD±RW	Intel 5100 ²⁸	None	Finger	Blue	6	Ult 32	No	Feb 09
<ul style="list-style-type: none">• This model has a limited onsite service²⁴ 3-year limited warranty• Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.• Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.																
Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Ultimate 32 ◇ Vista Premium logo				
Memory	2GB std / 4GB 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™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio															
Camera	Camera on top of screen, 1.3-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz															
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm															
Weight ²	6-cell: starting at 6.4 lb (2.93kg)															
Case	Color: black; Material: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic															
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced															
Battery - life ¹⁰	6-cell: up to 4.5 hr; 6-cell plus Ultrabay battery: up to 6.0 hr; 9-cell: up to 7.1 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, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
PC Card	One slot (Type I, Type II), CardBus 32-bit															
Smart Card Read	None															
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)															
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)															
Mini PCI Express	Two Mini PCI Express slots															
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
2G Turbo	None															
WWAN	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator															
Ethernet	Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE															
Intel AMT	None															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM				55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell			40Y6799								
2GB PC3-8500 DDR3 L-H SODIMM				55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell			40Y6797								
ThinkPad Advanced Dock				250310U	Advanced Ultrabay Battery III			57Y4536								
Other accessories on O-R500 sheet					Other accessories at lenovo.com/accessories											
													ThinkPlus™. ²² 4-year LOR 9x5 NBD 45K6038			
													Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US model announced February 17, 2009

✦ Intel Centrino® 2 processor technology

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(WKK3-5) February 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann	08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Enh SATA	43R9148	ann	08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann	08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay or (in the ThinkPad Advanced Dock 250310U with Serial Hard Drive Ultrabay Slim Adapter 40Y8725)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05
ThinkPad Advanced Dock	250310U	ann	09/20/05

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
T500/R500/W500 Series 15W Privacy Filter	43R2474	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799	ann	01/05/06
T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797	ann	09/20/05
Advanced Ultrabay Battery III ⁴³	57Y4536	ann	08/25/09

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
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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
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

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•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 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann	09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08
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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

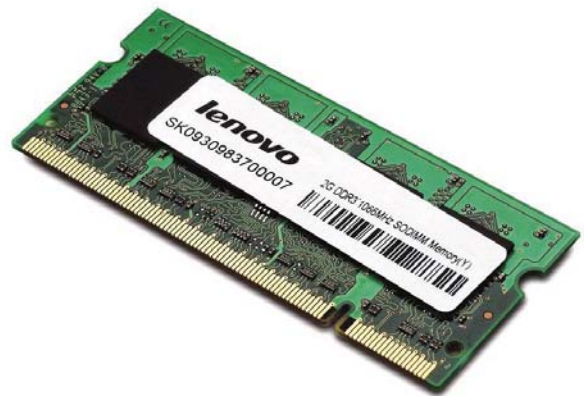
For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad T400



PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707
4GB 55Y3708



Lenovo ThinkPad T400 with
T400/R400 Series 14W Privacy Filter
43R2472



Lenovo ThinkPad T400



Lenovo ThinkPad T400



Lenovo ThinkPad T400

ThinkPad® T400 6473 (GMA) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Whorse (W) Global (G) Avail date
6473-P1U	P8400	2.26	2GB	14.1" WXGA			GMA 160G 5400 DVD±RW	Intel 5100 ²⁸	None	None	None	Finger	PC	XP Pro		Sep 08
6473-E1U	P8700	2.53	2GB	14.1" WXGA			Cam GMA 250G 5400 DVD±RW	Intel 5100	None	None	None	Finger	Blue 7-in-1	Ult 32	Edu	Mar 09
6473-PVU	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA 320G 7200 DVD±RW	Intel 5100	None	None	None	Finger	Blue PC	XP Pro		Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8400 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (5400 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit None <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Security Security chip Fingerprint reader Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-T400 sheet	55Y3706 55Y3707 55Y3708 250310U	T/R 14W Standard Battery 4-cell T/R 14W Enhanced Battery 6-cell T/R 14W High Capacity Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories	41U3196 41U3198 43R2499 57Y4536			

See footnotes for important warranty information
US model announced September 2, 2008, March 24, 2009, or July 7, 2009
✗ US models withdrawn effective June or December 2009

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ThinkPad® T400 6473 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date
6473-41U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	PC XP Pro	Oct 09	
6473-43U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	128G SSD	DVD±RW	Intel 5100	None	None	Finger	Blue	PC XP Pro	Oct 09	

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable					
SATA disk	One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>6-cell 14.1W"</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm					
Weight ²	<i>6-cell:</i> starting at 5.0 lb (2.3kg)					
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	<i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	None					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499			
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories					
Supports ThinkVantage® technologies						
65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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 3-year LOR ²⁴ 9x5 NBD 45K6021						
ThinkPlus 4-year LOR 9x5 NBD 45K6022						
ThinkPlus 5-year LOR 9x5 NBD 45K6024						
ThinkPlus 4-year P&L P/U Depot 45K6023						
ThinkPlus 5-year P&L P/U Depot 45K6025						
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						

See footnotes for important warranty information
US models announced October 22, 2009

✦ Intel Centrino® 2 processor technology

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(ML3-17) October 2009

ThinkPad® T400 6473 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-Card tooth slot	Preload	Avail date
6473-4FU	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA 320G 7200	DVD±RW	Intel 5100 ²⁸			None	Finger	Blue PC Pro 32	Oct 09
6473-5BU	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA 320G 7200	DVD±RW	Intel 5100	Verizon ¹⁶	None	Finger	Blue PC Pro 32	Nov 09	

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 with dual-core Intel HD Boost,1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 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 • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz			Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm					
Weight ²	6-cell: starting at 5.0 lb (2.3kg)					
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
Verizon ¹⁶	<i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with <u>Verizon</u>					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	4FU model: Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499			
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T400 sheet Other accessories at lenovo.com/accessories						

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

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US model announced November 3, 2009; previous model on October 22, 2009

(ML3-18) November 2009

ThinkPad® T400 7417 (GMA) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam-Integrated era graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Mini PCIe Finger print reader	Blue-Card tooth slot	Whorse (W) Pre-Gbl (G) Avail load Educ date
✕ 7417-T1U	P8400	2.26	2GB	14.1" WXGA		GMA 160G 5400	DVD±RW	✚ Intel 5100 ²⁸	AT&T ²³		Fing	PC	B32 Aug08
✕ 7417-T2U	P8400	2.26	2GB	14.1" WXGA		GMA 160G 7200	DVD±RW	✚ Intel 5100	AT&T		Fing	Blue PC	B32 Aug08
✕ 7417-TNU	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	✚ Intel 5100	AT&T	2G Turbo	Fing	Blue PC	XP Aug08
✕ 7417-TPU	P8400	2.26	2GB	14.1" WXGA		GMA 160G 5400	DVD±RW	✚ Intel 5100			Fing	PC	XP Aug08
✕ 7417-TRU	P8400	2.26	2GB	14.1" WXGA		GMA 160G 7200	DVD±RW	✚ Intel 5100			Fing	Blue PC	XP Aug08
✕ 7417-TSU	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	✚ Intel 5100		2G Turbo	Fing	Blue PC	B32 Aug08
✕ 7417-TTU	P8400	2.26	1GB	14.1" WXGA		GMA 160G 5400	Combo	✚ Intel 5100	AT&T			PC	B32 Aug08
✕ 7417-TUU	P8400	2.26	1GB	14.1" WXGA		GMA 160G 5400	Combo	✚ Intel 5100				PC	XP Aug08
✕ 7417-P5U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	✚ Intel 5100			Fing	Blue PC	XP Sep08
✕ 7417-11U	P8400	2.26	1GB	14.1" WXGA		GMA 160G 5400	DVD±RW	✚ Intel 5100				PC	XP Oct 08
✕ 7417-P9U	P8600	2.40	2GB	14.1" WXGA		GMA 160G 7200	DVD±RW	✚ WiMAX			Fing	Blue PC	B32 Jan 09
✕ 7417-PAU	P8600	2.40	2GB	14.1" WXGA	Cam	GMA 128G SSD	DVD±RW	✚ Intel 5100			Fing	Blue PC	XP Jan 09
✕ 7417-E1U	P8700	2.53	2GB	14.1" WXGA	Cam	GMA 250G 5400	DVD±RW	✚ Intel 5100			Fing	Blue 7-in-1 U32 Edu	Mar 09
• These small and medium business (SMB) models are part of the US TopSeller™ Program													
Processor	Intel® Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core, 1066MHz system bus; P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2 cache										Preloaded operating system ²⁰		
Memory	1GB or 2GB 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										- Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Ultimate 32 ✦ Vista models: Vista Premium logo		
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)		
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio										Supports ThinkVantage® technologies		
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536 @75Hz (VGA DB-15)												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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		
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit None <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												
Mini PCI Express Intel 5100 ²⁸ WiMAX	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)										ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968		
WWAN upg AT&T ²³	None <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T										ThinkPlus 2-year LOR 9x5 NBD 45K5969		
2G Turbo UWB	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None										ThinkPlus 3-year LOR 9x5 NBD 45K5970		
Modem	56K V.92 ⁶ modem										ThinkPlus 4-year LOR 9x5 NBD 45K5973		
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator										ThinkPlus 5-year LOR 9x5 NBD 45K5975		
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										ThinkPlus 2-year P&L P/U Depot 45K5971		
Intel AMT	None										ThinkPlus 3-year P&L P/U Depot 45K5972		
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack										ThinkPlus 4-year P&L P/U Depot 45K5974		
Security	Power-on password, hard disk password, supervisor password, security keyhole										ThinkPlus 5-year P&L P/U Depot 45K5976		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		T/R 14W Standard Battery 4-cell		41U3196								
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198								
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499								
Other accessories on O-T400 sheet			Other accessories at lenovo.com/accessories										

See footnotes for important warranty information

✚ Intel Centrino® 2 processor technology

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US models announced August 5, September 2, or October 7, 2008, January 6, 2009, or March 17, 2009

(ML3-1) June 2009

< US models withdrawn effective June, August, September, or December 2009

ThinkPad® T400 7417 (GMA) - TopSeller (April 2009)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Pre- load	Avail date
< 7417-PBU	P8600	2.40	1GB	14.1" WXGA	LED		GMA 160G	5400	DVD±RW	Intel 5100 ²⁸	None	None	None		PC	XP Pro	Apr 09
< 7417-PCU	P8600	2.40	2GB	14.1" WXGA	LED		GMA 160G	7200	DVD±RW	Intel 5100	None	None	Fing		PC	XP Pro	Apr 09
< 7417-PDU	P8600	2.40	2GB	14.1" WXGA	LED		GMA 160G	7200	DVD±RW	Intel 5100	None	None	Fing		PC	Bus 32	Apr 09
< 7417-PEU	P8600	2.40	3GB	14.1" WXGA	LED	Cam	GMA 160G	7200	DVD±RW	Intel 5100	None	None	Fing	Blue	PC	XP Pro	Apr 09
< 7417-PFU	P8600	2.40	3GB	14.1" WXGA	LED	Cam	GMA 160G	5400	DVD±RW	WiMAX	None	None	Fing	Blue	PC	Bus 32	Apr 09
< 7417-PGU	T9400	2.53	3GB	14.1" WXGA	LED	Cam	GMA 160G	7200	DVD±RW	Intel 5100	None	None	Fing	Blue	PC	XP Pro	Apr 09
< 7417-PhU	T9400	2.53	3GB	14.1" WXGA	LED	Cam	GMA 128G	SSD	DVD±RW	Intel 5100	None	None	Fing	Blue	PC	XP Pro	Apr 09
< 7417-PJU	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA 80G	SSD	DVD±RW	Intel 5100	None	None	Fing	Blue	PC	XP Pro	Jun 09
< 7417-PKU	P8400	2.26	2GB	14.1" WXGA	LED		GMA 250G	5400	DVD±RW	Intel 5100	None	None	Fing		PC	XP Pro	Jul 09
< 7417-PLU	P8400	2.26	2GB	14.1" WXGA	LED	Cam	GMA 320G	5400	DVD±RW	Intel 5100	None	None	Fing	Blue	PC	XP Pro	Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8400, P8600, P8700 or T9400 with dual-core, 1066MHz system bus; P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2 cache										Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo						
Memory	1GB, 2GB, or 3GB 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 (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)						
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel Some: 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB (5400 or 7200 rpm), 250GB (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive										Supports ThinkVantage® technologies						
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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						
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus										ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968						
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536 @75Hz (VGA DB-15)										ThinkPlus 2-year LOR 9x5 NBD 45K5969						
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys										ThinkPlus 3-year LOR 9x5 NBD 45K5970						
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										ThinkPlus 4-year LOR 9x5 NBD 45K5973						
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label										ThinkPlus 5-year LOR 9x5 NBD 45K5975						
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										ThinkPlus 2-year P&L P/U Depot 45K5971						
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm										ThinkPlus 3-year P&L P/U Depot 45K5972						
Weight ²	6-cell: starting at 5.0 lb (2.3kg)										ThinkPlus 4-year P&L P/U Depot 45K5974						
Case color	Black										ThinkPlus 5-year P&L P/U Depot 45K5976						
Case material	Top: Super-Elastic Polycarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim																
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr																
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)																
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)																
PC Card	One slot (Type I, Type II), CardBus 32-bit																
Smart Card read	None																
Multicard reader	None																
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)																
Mini PCI Express	Three Mini PCI Express slots																
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)																
WWAN upg	None																
2G Turbo	None																
UWB	None																
Modem	56K V.92 ⁶ modem																
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator																
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																
Intel AMT	None																
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack																
Security	Power-on password, hard disk password, supervisor password, security keyhole																
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip																
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available																
1GB PC3-8500 DDR3 L-H SODIMM					55Y3706		T/R 14W Standard Battery 4-cell		41U3196								
2GB PC3-8500 DDR3 L-H SODIMM					55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198								
4GB PC3-8500 DDR3 L-H SODIMM					55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499								
ThinkPad Advanced Dock					250310U		Advanced Ultrabay Battery III		57Y4536								
Other accessories on O-T400 sheet							Other accessories at lenovo.com/accessories										

See footnotes for important warranty information

✧ Intel Centrino® 2 processor technology

US models announced April 21, June 2, or July 7, 2009

✧ US models withdrawn effective September or December 2009

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(ML3-13) July 2009

ThinkPad® T400 7417 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-Card tooth slot	Pre- load	Avail date
7417-21U	P8600	2.40	2GB	14.1" WXGA	LED		GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	PC	XP Pro	Oct 09
7417-23U	P8600	2.40	2GB	14.1" WXGA	LED	Cam	GMA	320G 5400	DVD±RW	Intel 5100	None	None	Fing	Blue PC	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache				Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32						
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB ⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™				Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)						
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15)				Supports ThinkVantage® technologies						
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg) Black <i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)				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						
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None None				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						
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack										
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹² 1-year - EasyServ™, ¹⁹ depot repair service / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706		T/R 14W Standard Battery 4-cell		41U3196					
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198					
4GB PC3-8500 DDR3 L-H SODIMM		55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499					
ThinkPad Advanced Dock		250310U		Advanced Ultrabay Battery III		57Y4536					
Other accessories on O-T400 sheet								Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced October 22, 2009

⚡ Intel Centrino® 2 processor technology

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(ML3-19) October 2009

ThinkPad® T400 7417 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-Card tooth slot	Pre- load	Avail date
7417-22U	P8600	2.40	2GB	14.1" WXGA	LED		GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	None	PC Pro 32	Oct 09
7417-31U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	250G 5400	DVD±RW	WiMAX	None	None	None	None	PC Pro 32	Nov 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8600 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache					Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 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• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)						
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus											
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					Supports ThinkVantage® technologies						
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15)											
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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						
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm											
Weight ²	6-cell: starting at 5.0 lb (2.3kg)											
Case color	Black					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						
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic											
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					ThinkPlus 5-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						
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)											
PC Card	One slot (Type I, Type II), CardBus 32-bit											
Smart Card read	None											
Multicard reader	None					ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											
Mini PCI Express	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)											
Intel 5100 ²⁸												
WiMAX						ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
WWAN upg	None											
2G Turbo	None											
UWB	None											
Modem	56K V.92 ⁶ modem					ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
Bluetooth™	None											
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											
Intel AMT	None											
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	22U model: Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		T/R 14W Standard Battery 4-cell		41U3196							
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198							
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499							
ThinkPad Advanced Dock	250310U		Advanced Ultrabay Battery III		57Y4536							
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories											

See footnotes for important warranty information

Intel Centrino® 2 processor technology

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US model announced November 3, 2009; previous model on October 22, 2009

(ML3-20) November 2009

ThinkPad® T400 2764 (Switchable) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Mem- ory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Whorse (W) Global (G) Avail date
2764-EAU T9400	2.53	3GB	14.1"	WXGA+Cam	GMA, HD 3470	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	9	Ult 32	Educ Mar09

- This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor T9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Ultimate 32 ↳ Vista Premium logo Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	3GB 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;			Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz</i>					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr			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		
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54					
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	None None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152)					
WWAN upg 2G Turbo UWB	None None None					
Modem	56K V.92 ⁶ modem					
Bluetooth™ Ethernet Intel AMT Audio support	Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	1-years - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499			
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US model announced March 17, 2009

⚡ US model withdrawn effective December 2009

⚡ Intel Centrino® 2 processor technology

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(ML3-12) March 2009

ThinkPad® T400 2765 (Switchable) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card Pre- slot load	Whorse (W) Global (G) Avail Educ date
✗ 2765-T1U	P8400	2.26	2GB	14.1" WXGA+			GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100 ²⁸	AT&T ²³	2G Turbo	PC B32	Aug 08
✗ 2765-T2U	T9400	2.53	2GB	14.1" WXGA+		Cam	GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100	AT&T	2G Turbo	PC XP	Aug 08
✗ 2765-T6U	P8400	2.26	2GB	14.1" WXGA+			GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100		2G Turbo	PC XP	Aug 08
✗ 2765-T7U	T9400	2.53	2GB	14.1" WXGA+		Cam	GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100		2G Turbo	PC B32	Aug 08
✗ 2765-P3U	T9400	2.53	2GB	14.1" WXGA+		Cam	GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100			PC XP	Sep 08
✗ 2765-33U	P8400	2.26	2GB	14.1" WXGA+	LED		GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100			PC XP	Oct 08
✗ 2765-PAU	P8600	2.40	3GB	14.1" WXGA+			GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100			PC XP	Mar 09
✗ 2765-PBU	P8600	2.40	3GB	14.1" WXGA+			GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100		2G Turbo	PC B32	Mar 09
✗ 2765-PCU	T9400	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	✗ Intel 5100			PC XP	Mar 09
✗ 2765-PDU	T9400	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	✗ Intel 5100		2G Turbo	PC B32	Mar 09
✗ 2765-PEU	T9400	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	✗ Intel 5100	AT&T		PC XP	Mar 09
✗ 2765-EAU	T9400	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	160G 7200	DVD±RW	✗ Intel 5100			7-in-1 U32 Edu	Mar 09
• These small and medium business (SMB) models are part of the US TopSeller™ Program														
Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Ultimate 32 ✧ Vista models: Vista Premium logo			
Memory	2GB or 3GB 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 (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (7200 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										Supports ThinkVantage® technologies			
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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			
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										ThinkPlus™, ²² 3-year LOR ²⁴ 9x5 NBD 45K6021			
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)										ThinkPlus 4-year LOR 9x5 NBD 45K6022			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										ThinkPlus 5-year LOR 9x5 NBD 45K6024			
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr										ThinkPlus 4-year P&L P/U Depot 45K6023			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit										ThinkPlus 5-year P&L P/U Depot 45K6025			
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	None <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T® Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator													
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		T/R 14W Standard Battery 4-cell		41U3196									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198									
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499									
ThinkPad Advanced Dock	250310U		Advanced Ultrabay Battery III		57Y4536									
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information ✗ Intel Centrino® 2 processor technology

US models announced Aug 5, Sep 2, or October 7, 2008 or March 24, 2009

✗ US models withdrawn effective September 2008, June 2009, or December 2009

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ThinkPad® T400 2765 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card slot	Pre- load	Avail date
2765-81U	P8700	2.53	3GB	14.1" WXGA+	LED	Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100 ²⁸		None	PC	XP Pro	Oct 09
2765-82U	P8700	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	AT&T ²³	None	PC	XP Pro	Oct 09
2765-83U	T9600	2.80	4GB	14.1" WXGA+	LED	Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100		None	PC	XP Pro	Oct 09
2765-94U	P8700	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	PC	XP Pro	Nov 09
2765-95U	T9600	2.80	4GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	PC	XP Pro	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8700:</i> 3MB L2 cache; <i>T9600:</i> 6MB L2 cache			Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	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					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)			Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®					
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		T/R 14W Standard Battery 4-cell	41U3196		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		T/R 14W Enhanced Battery 6-cell	41U3198		
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		T/R 14W High Capacity Battery 9-cell	43R2499		
ThinkPad Advanced Dock	250310U		Advanced Ultrabay Battery III	57Y4536		
Other accessories on O-T400 sheet			Other accessories at lenovo.com/accessories			

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

⚡ US models announced November 3, 2009; previous models on October 22, 2009

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(ML3-16) November 2009

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Inte- grated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/Car- d slot cells/Fing slot	Whorse (W) Pre- load	(G) Avail date
6474-11U	P8400	2.26	1GB	14.1"		WXGA	GMA 80G	5400 Combo	❖ Intel 5100 ²⁸	WWAN upg		6 Yes PC	B32	G Aug 08
6474-R1U	P8400	2.26	2GB	14.1"	Cam	WXGA	GMA 160G	5400 Combo	❖ Intel 5100	WWAN upg		6 Yes 7-in-1	B32 WG	Aug 08
6474-R2U	T9400	2.53	2GB	14.1"	Cam	WXGA	GMA 160G	7200 DVD±RW	❖ Intel 5100	WWAN upg	2G Turbo	9 Yes PC	B32 WG	Aug 08
6474-R3U	T9400	2.53	2GB	14.1"	Cam	WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	Verizon ¹⁶		6 Yes 7-in-1	B32 W	Aug 08
6474-P1U	T9400	2.53	2GB	14.1"		WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	WWAN upg		6 Yes PC	XP	G Sep 08
❖ 6474-P2U	P8400	2.26	1GB	14.1"		WXGA	GMA 80G	5400 Combo	❖ Intel 5100	WWAN upg		6 Yes PC	XP	G Sep 08
6474-T1U	P8600	2.40	1GB	14.1"		WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	WWAN upg		6 Smart	B32 TAA	Oct 08
6474-44U	P8400	2.26	3GB	14.1"	Cam	WXGA	GMA 160G	5400 Combo	❖ Intel 5100	WWAN upg		6 Yes 7-in-1	B32 WG	Nov 08
6474-45U	T9400	2.53	3GB	14.1"	Cam	WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	WWAN upg		6 Yes PC	B32 WG	Nov 08
6474-P8U	P8600	2.40	2GB	14.1"		WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	WWAN upg		6 Yes PC	B32 WG	Dec 08
6474-P9U	P8600	2.40	2GB	14.1"	LED	WXGA+	GMA 160G	7200 DVD±RW	❖ Intel 5100	WWAN upg		9 Yes PC	B32 WG	Dec 08
❖ 6474-R8U	P8600	2.40	3GB	14.1"	LED	WXGA	GMA 160G	7200 DVD±RW	❖ Intel 5100	WWAN upg		6 Yes PC	B32	Feb 09
6474-R9U	P8600	2.40	2GB	14.1"	LED	WXGA	GMA 160G	5400 DVD±RW	❖ Intel 5100	WWAN upg		6 Yes PC	B32	Feb 09
US Govt (TAA) ⁵ Processor	T1U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2												Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)	
Memory	1GB, 2GB, or 3GB 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 Combo SATA DVD±RW Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB ⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™													
Widescreen display	Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, high brightness 680 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio													
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus													
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536@75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit Some: Smart Card reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
ExpressCard/54 PC Card Smart Card read Multicard reader Ports														
Mini PCI Express Intel 5100 ²⁸ WWAN upg Verizon ¹⁶	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon													
2G Turbo UWB	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None													
Modem Bluetooth™	56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator													
Ethernet Intel AMT	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole													
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706 T/R 14W Standard Battery 4-cell 41U3196													
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707 T/R 14W Enhanced Battery 6-cell 41U3198													
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708 T/R 14W High Capacity Battery 9-cell 43R2499													
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information

✚ Intel Centrino® 2 with vPro™ technology

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✚ US models announced February 3, 2009; previous models on Aug 5, Sep 2, Oct 7, Nov 4, or Dec 2, 2008

(ML3-3) February 2009

✚ US model withdrawn effective August 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Inte- grated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/Cell	Card/ Fing	Pre- load	Whorse (W) Gbl (G) Avail date
6474-56U	P8700	2.53	3GB	14.1" WXGA	LED		GMA	80G SSD	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	6	Yes	PC B32	No Jun 09
6474-57U	P8700	2.53	2GB	14.1" WXGA	LED		GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Yes	PC B32	No Jun 09
6474-58U	P8400	2.26	2GB	14.1" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Yes	PC B32	No Jul 09
6474-59U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	11n ²⁸	WWAN upg	None	6	Yes	PC B32	No Jul 09

• These models have an EasyServ™,19 depot repair service 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8400 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✦ Vista Premium logo Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	2GB or 3GB 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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Camera						
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536@75Hz					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm					
Weight ²	6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg)					
Case color	Black					
Case material	Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card read	None					
Multicard reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			Supports ThinkVantage® technologies		
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)			65-watt (GMA graphics) AC adapter		
11n ²⁸	Some: 11b/g/n wireless, Mini-PCIe Adapter II			ThinkPad Roll Cage and Top Cover		
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some:Wire			Roll Cage (one-piece magnesium)		
2G Turbo	None			Climate Savers® certified		
UWB	None			EPEAT™ Gold rating		
Modem	56K V.92 ⁶ modem			ENERGY STAR® 5.0-compliant		
Bluetooth™	Bluetooth 2.1 wireless, LED indicator			RoHS-compliant		
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1			International Warranty Service ¹⁷		
Intel AMT	Intel Active Management Technology (iAMT)			24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack			ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021		
Security	Power-on password, hard disk password, supervisor password, security keyhole			ThinkPlus 4-year LOR 9x5 NBD 45K6022		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			ThinkPlus 5-year LOR 9x5 NBD 45K6024		
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			ThinkPlus 4-year P&L P/U Depot 45K6023		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available			ThinkPlus 5-year P&L P/U Depot 45K6025		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499			
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T400 sheet		Other accessories at lenovo.com/accessories				

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

Ⓢ US models announced July 7, 2009; previous models on June 2, 2009

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(ML3-14) July 2009

Type-model	Proc- essor	GHz	14.1" wide Mem- screen or Cam- display LED era	CCFL	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Card slot	Whorse (W) Gbl (G) Avail date
2767-11U	P8600	2.40	1GB	WXGA+		GMA, 3470 80G 5400	Combo	Intel 5100 ²⁸	WWAN upg		Yes 6 PC	B32	G Aug 08
2767-12U	T9400	2.53	2GB	WXGA+		GMA, 3470 160G 5400	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes 9 7-in-1	B32 W	G Aug 08
2767-13U	T9400	2.53	2GB	WXGA+		GMA, 3470 160G 7200	DVD±RW	Intel 5100	Verizon ¹⁶	2G Turbo	Yes 9 7-in-1	B32 W	Aug 08
2767-14U	T9600	2.80	2GB	WXGA+	Cam	GMA, 3470 160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes 9 7-in-1	B32 W	Aug 08
2767-R2U	T9600	2.80	2GB	WXGA+	Cam	GMA, 3470 160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes 9 7-in-1	B64	Aug 08
2767-R9U	T9600	2.80	2GB	WXGA+	LED Cam	GMA, 3470 160G 7200	DVD±RW	Intel 5100	Verizon	2G Turbo	Yes 9 7-in-1	B32 W	Aug 08
2767-2GU	P8600	2.40	1GB	WXGA		GMA, 3470 160G 7200	Combo	Intel 5100	WWAN upg		6 Smart	B32 TAA	Aug 08
2767-2HU	P8600	2.40	2GB	WXGA+		GMA, 3470 160G 7200	DVD±RW	Intel 5100	WWAN upg		6 Smart	B32 TAA	Aug 08
2767-2JU	T9400	2.53	2GB	WXGA	Cam	GMA, 3470 250G 5400	DVD±RW	Intel 5100	WWAN upg		Yes 9 7-in-1	B32 W	G Aug 08
2767-2NU	T9600	2.80	2GB	WXGA+	LED Cam	GMA, 3470 64G	SSD DVD±RW	Intel 5300 ²⁸	WWAN upg		Yes 9 PC	B32	Sep 08
2767-P1U	T9400	2.53	2GB	WXGA+		GMA, 3470 160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes 9 PC	XP	G Sep 08
2767-P6U	P8600	2.40	1GB	WXGA+		GMA, 3470 80G 5400	Combo	Intel 5100	WWAN upg		Yes 6 PC	XP	G Sep 08
2767-P7U	T9400	2.53	2GB	WXGA+		GMA, 3470 160G 5400	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes 9 7-in-1	XP	G Sep 08
US Govt (TAA) ⁵ Processor											Preloaded operating system ²⁰		
Intel® Core™ 2 Duo processor P8600, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600: 3MB L2 cache; T9400/T9600: 6MB L2 cache											- Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business		
Memory											- Some: Genuine Windows Vista Business 32		
1GB or 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in one socket; one socket available											- Some: Genuine Windows Vista Business 64		
SATA Combo											♦ Vista models: Vista Premium logo		
SATA DVD±RW											Preloaded applications ¹⁴ (all OSes; only some listed)		
Ultrabay Slim											• Rescue and Recovery™		
SATA disk											• Access Connections™		
Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213)											• Client Security Solution™		
Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214)											• ThinkVantage Productivity Center		
One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel											• ThinkVantage System Update		
Some: 64GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high;											• Fingerprint Software (fingerprint models)		
Some: 80GB ⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400 rpm) /											• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)		
SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™											• Lenovo System Toolbox		
All: removable, upgradable, supports 2nd disk, shock mounted storage											• ThinkPad Utilities (Power Manager and Presentation Director)		
Widescreen display											• Adobe® Reader®		
Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio											• Windows Live™ Toolbar		
Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio											• Microsoft® Office 2007 Trial (60-day)		
Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio											• Roxio® Creator® Business Edition (combo, DVD±RW)		
Camera											• Roxio MyDVD® (DVD±RW)		
Some: camera on top of screen, 1.3-megapixel, fixed focus											• Corel® WinDVD® (combo, DVD±RW)		
Switchable graphics											Supports ThinkVantage® technologies		
Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3470, PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536 @ 75Hz (VGA)											90-watt (ATI graphics) AC adapter		
Keyboard											ThinkPad Roll Cage and Top Cover		
TrackPoint®											Roll Cage (one-piece magnesium)		
Touch pad											Climate Savers® certified		
ThinkLight™											EPEAT™ Gold rating (LED model)		
Illuminates the keyboard to improve visibility in low-light conditions											EPEAT Silver rating (other models)		
Dimensions ³											ENERGY STAR® 5.0-compliant		
6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm											RoHS-compliant		
Weight ²											International Warranty Service ¹⁷		
6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg)											24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Case material											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021		
Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic											ThinkPlus 4-year LOR 9x5 NBD 45K6022		
Battery - type											ThinkPlus 5-year LOR 9x5 NBD 45K6024		
Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim											ThinkPlus 4-year P&L P/U Depot 45K6023		
Battery - life ¹⁰											ThinkPlus 5-year P&L P/U Depot 45K6025		
6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr											Post-warranty annual maintenance agreements at		
Chipset											lenovo.com/thinkplus/warranty		
Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)													
ExpressCard slot													
One ExpressCard/34 or ExpressCard/54													
PC Card Std slot													
Some: One Type I or Type II slot, CardBus 32-bit													
Smart Card Read													
Some: Smart Card Reader													
Multicard Reader													
Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)													
Ports													
Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express													
Three Mini PCI Express slots													
Intel 5100 ²⁸													
Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
Intel 5300 ²⁸													
Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)													
WWAN upg													
Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
Verizon ¹⁶													
Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon													
2G Turbo													
Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator													
UWB													
None													
Modem													
56K V.92 ⁶ modem													
Bluetooth™													
Some: Bluetooth 2.1 wireless, LED indicator													
Ethernet													
Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT													
Intel Active Management Technology (iAMT)													
Audio support													
High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack													
Security													
Power-on password, hard disk password, supervisor password, security keyhole													
Security chip													
Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader													
Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹² 3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													

See footnotes for important warranty information

♦ Intel Centrino® 2 with vPro™ technology

⚡ US models announced September 2, 2008; previous models on August 5, 2008

⚡ US model withdrawn effective August 2009

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(ML3-4) January 2009

ThinkPad® T400 2767 (Switchable) - October 2008

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Mem- GHz	14.1" wide screen or LED	Cam- era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Card slot	Whorse (G)	Avail date
2767-31U	P8600	2.40	2GB WXGA	Cam	GMA, 3470	160G 7200	DVD±RW	Intel 5300 ²⁸	WWAN upg		Yes 6	7-in-1	Bus32	WG Oct 08
2767-R1U	T9400	2.53	2GB WXGA	Cam	GMA, 3470	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	UWB Yes	9	7-in-1	Bus32	Oct 08
2767-R3U	T9400	2.53	2GB WXGA+	Cam	GMA, 3470	160G 7200	DVD±RW	Intel 5300	WWAN upg	UWB Yes	9	7-in-1	Bus32	W Oct 08
2767-T1U	P8600	2.40	1GB WXGA		GMA, 3470	160G 7200	Combo	Intel 5100	WWAN upg		6	Smart	Bus32	TAA Oct 08
2767-T2U	P8600	2.40	2GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		6	Smart	Bus32	TAA Oct 08
2767-4AU	T9400	2.53	3GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		Yes 6	PC	Bus32	WG Nov 08
2767-P8U	P8600	2.40	2GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		Yes 9	PC	Bus32	WG Dec 08
2767-P9U	P8600	2.40	2GB WXGA+ LED		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		Yes 9	PC	Bus32	WG Dec 08
2767-H7U	P8700	2.53	2GB WXGA LED		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		Yes 6	PC	Bus32	Jun 09
2767-H8U	P8700	2.53	3GB WXGA LED		GMA, 3470	80G SSD	DVD±RW	Intel 5100	WWAN upg		Yes 6	PC	Bus32	Jun 09
2767-H9U	P8700	2.53	3GB WXGA LED	Cam	GMA, 3470	128G SSD	DVD±RW	Intel 5100	WWAN upg		Yes 6	PC	Bus32	Jun 09
US Govt (TAA) ⁵ Processor											Preloaded operating system ²⁰ - Genuine Windows [®] Vista [®] Business 32 ◇ Vista Premium logo			
Memory											Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery [™] • Access Connections [™] • Client Security Solution [™] • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan [®] Plus with SiteAdvisor [™] (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe [®] Reader [®] • Windows Live [™] Toolbar • Microsoft [®] Office 2007 Trial (60-day) • Roxio [®] Creator [®] Business Edition (combo, DVD±RW) • Roxio MyDVD [®] (DVD±RW) • Corel [®] WinDVD [®] (combo, DVD±RW)			
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk														
Widescreen display														
Camera														
Switchable graphics														
Keyboard TrackPoint [®] Touch pad ThinkLight [™]														
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰														
Chipset											Supports ThinkVantage [®] technologies			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports											90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers [®] certified EPEAT [™] Gold rating (LED models) EPEAT Silver rating (other models) 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			
Mini PCI Express											ThinkPlus [™] , 22 3-year LOR ²⁴ 9x5 NBD 45K6021			
Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth [™] Ethernet Intel AMT Audio support											ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Security Security chip Fingerprint reader											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹² 3-years/1-yr battery - EasyServ [™] , ¹⁹ depot repair service / service upgrades ²² available														
Other accessories on O-T400 sheet						Other accessories at lenovo.com/accessories								

See footnotes for important warranty information

Intel Centrino® 2 with vPro™ technology

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US models announced June 2, 2009; previous models on October 7, November 4, or December 2, 2008

(ML3-10) June 2009

US models withdrawn effective August 2009

ThinkPad® T400 2767 (Switchable) - July 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or Cam- era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells slot	Pre- load	Avail date
2767-HAU	P8400	2.26	2GB	14.1"	WXGA LED Cam	GMA, 3470	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN	upg	None	Yes	6 PC Bus32 Jul 09
2767-HBU	P8700	2.53	2GB	14.1"	WXGA LED	GMA, 3470	160G 7200	DVD±RW	11n ²⁸	WWAN	upg	None	Yes	6 PC Bus32 Jul 09
2767-HCU	T9400	2.53	2GB	14.1"	WXGA LED Cam	GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN	upg	None	Yes	6 7-in-1 Bus32 Jul 09

Processor	Intel® Core™ 2 Duo processor P8400, P8700, or T9400 with dual-core. Intel HD Boost, 1066MHz system bus; <i>P8400/P8700</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2										Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ◇ Vista Premium logo Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All</i> : removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive													
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio													
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus													
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution</i> : 2048x1536 @ 75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell</i> : starting at 5.0 lb (2.3kg); <i>9-cell</i> : starting at 5.4 lb (2.4kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.5 hr; <i>6-cell plus Ultrabay battery</i> : up to 8.0 hr; <i>9-cell</i> : up to 9.8 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some</i> : One slot (Type I, Type II), CardBus 32-bit													
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None <i>Some</i> : 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some</i> : 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some</i> : 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		T/R 14W Standard Battery 4-cell		41U3196									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		T/R 14W Enhanced Battery 6-cell		41U3198									
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		T/R 14W High Capacity Battery 9-cell		43R2499									
ThinkPad Advanced Dock	250310U		Advanced Ultrabay Battery III		57Y4536									
Other accessories on O-T400 sheet										Other accessories at lenovo.com/accessories				

ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD	45K6021
ThinkPlus 4-year LOR 9x5 NBD	45K6022
ThinkPlus 5-year LOR 9x5 NBD	45K6024
ThinkPlus 4-year P&L P/U Depot	45K6023
ThinkPlus 5-year P&L P/U Depot	45K6025
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced July 7, 2009

◇ Intel Centrino® 2 with vPro™ technology

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(ML3-15) July 2009

ThinkPad® T400 6475 (GMA) - Onsite

Personal Systems Reference (PSREF)

Proc- Type-model	essor GHz	Memory	Wide- screen display	CCFL or Cam- LED era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Card slot	Whorse (W) Pre- Gbl (G) Avail load GMP (P) date
6475-11U	P8400	2.26	1GB	14.1" WXGA		GMA 80G	5400 Combo	Intel 5100 ²⁸	WWAN upg		6 Yes PC	B32 GP Aug08
6475-R1U	P8400	2.26	2GB	14.1" WXGA		Cam GMA 160G	5400 Combo	Intel 5100	WWAN upg		6 Yes 7-in-1	B32 WGP Aug08
6475-R2U	T9400	2.53	2GB	14.1" WXGA		Cam GMA 160G	7200 DVD±RW	Intel 5100	WWAN upg	2G Turbo	9 Yes PC	B32 WGP Aug08
6475-P1U	T9400	2.53	2GB	14.1" WXGA		GMA 160G	5400 DVD±RW	Intel 5100	WWAN upg		6 Yes PC	XP GP Sep08
6475-44U	P8400	2.26	3GB	14.1" WXGA		Cam GMA 160G	5400 Combo	Intel 5100	WWAN upg		6 Yes 7-in-1	B32 WGP Nov08
6475-45U	T9400	2.53	3GB	14.1" WXGA		Cam GMA 160G	5400 DVD±RW	Intel 5100	WWAN upg		6 Yes PC	B32 WGP Nov08
6475-P8U	P8600	2.40	2GB	14.1" WXGA		GMA 160G	5400 DVD±RW	Intel 5100	WWAN upg		6 Yes PC	B32 WGP Dec08
6475-P9U	P8600	2.40	2GB	14.1" WXGA+ LED		GMA 160G	7200 DVD±RW	Intel 5100	WWAN upg		9 Yes PC	B32 WGP Dec08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400 or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache				Preloaded operating system ²⁰ - <i>Some</i> : Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some</i> : Genuine Windows Vista Business 32 ♦ <i>Vista models</i> : Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (combo, DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (combo, DVD±RW)				
Memory	1GB, 2GB, or 3GB 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 Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB ⁸ (5400 rpm), 160GB (5400 rpm or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™								
Widescreen display	<i>Some</i> : 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio								
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus								
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock								
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions								
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH)</i> : 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell</i> : starting at 5.0 lb (2.3kg); <i>9-cell</i> : starting at 5.4 lb (2.4kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.5 hr; <i>6-cell plus Ultrabay battery</i> : up to 8.0 hr; <i>9-cell</i> : up to 9.8 hr								
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some</i> : One slot (Type I, Type II), CardBus 32-bit								
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None <i>Some</i> : 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)								
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some</i> : Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None								
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack								
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip								
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available								
1GB PC3-8500 DDR3 L-H SODIMM 55Y3706 T/R 14W Standard Battery 4-cell 41U3196									ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
2GB PC3-8500 DDR3 L-H SODIMM 55Y3707 T/R 14W Enhanced Battery 6-cell 41U3198									
4GB PC3-8500 DDR3 L-H SODIMM 55Y3708 T/R 14W High Capacity Battery 9-cell 43R2499									
ThinkPad Advanced Dock 250310U Advanced Ultrabay Battery III 57Y4536									
Other accessories on O-T400 sheet Other accessories at lenovo.com/accessories									

See footnotes for important warranty information

♦ Intel Centrino® 2 with vPro™ technology

⚡ US models announced December 2, 2008; previous models on Aug 5, Sep 2, or November 4, 2008

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ThinkPad® T400 2768 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Mem- ory	14.1" wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo	UWB cells	Card slot	Pre- load	Whorse (W) GMP (P) Avail Gbl (G) date
2768-11U	P8600	2.40	1GB	WXGA+		GMA, 3470	80G 5400	Combo	❖ Intel 5100 ²⁸	WWAN upg		6 PC	Bus32		G P Aug 08
2768-12U	T9400	2.53	2GB	WXGA+		GMA, 3470	160G 5400	DVD±RW	❖ Intel 5100	WWAN upg	Turbo	9 7-in-1	Bus32		WGP Aug 08
2768-2JU	T9400	2.53	2GB	WXGA	Cam	GMA, 3470	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg		9 7-in-1	Bus32		WGP Aug 08
2768-P1U	T9400	2.53	2GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	Turbo	9 PC	XP Pro		GP Aug 08
2768-31U	P8600	2.40	2GB	WXGA	Cam	GMA, 3470	160G 7200	DVD±RW	❖ Intel 5300 ²⁸	WWAN upg		6 7-in-1	Bus32		WGP Oct 08
2768-4AU	T9400	2.53	3GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		6 PC	Bus32		WGP Nov 08
2768-P8U	P8600	2.40	2GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		9 PC	Bus32		WGP Dec 08
2768-P9U	P8600	2.40	2GB	WXGA+ LED		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		9 PC	Bus32		WGP Dec 08
• These models are part of the Global Models Plus program with limited onsite service ²⁴ 3-year limited warranty															
Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8600 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8600: 3MB L2 cache; T9400: 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo			
Memory	1GB, 2GB, or 3GB 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 (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)			
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	Some: 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus														
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz (VGA)</i>														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr														
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit														
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator														
Modem Bluetooth™ Ethernet Intel AMT Audio support	None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack														
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available														
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Dock Other accessories on O-T400 sheet	55Y3706 55Y3707 55Y3708 250310U T/R 14W Standard Battery 4-cell T/R 14W Enhanced Battery 6-cell T/R 14W High Capacity Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories											ThinkPlus™. 22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

® US models announced December 2, 2008; previous models on Aug 5, Sep 2, Oct 7, or November 4, 2008

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(ML3-6) January 2009

ThinkPad® T400 2768 (Switchable) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Mem- ory	14.1" wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo	UWB cells	Card slot	Pre- load	Whorse (W) GMP (P) Gbl (G)	Avail date
2768-E7U	T9400	2.53	2GB	WXGA+	Cam	GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	6	7-in-1	Ult32	W	Feb 09
<ul style="list-style-type: none">• This model has a limited onsite service²⁴ 3-year limited warranty• Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.• Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.																
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Ultimate 32 ❖ Vista Premium logo					
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										Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio															
Camera	Camera on top of screen, 1.3-megapixel, fixed focus															
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)															
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm															
Weight ²	<i>6-cell:</i> starting at 5.0 lb (2.3kg); <i>9-cell:</i> starting at 5.4 lb (2.4kg)															
Case color	Black															
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic															
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim															
Battery - life ¹⁰	<i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
PC Card	None															
Smart Card read	None															
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
Intel 5300 ²⁸	None															
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)															
2G Turbo	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										Supports ThinkVantage® technologies					
											90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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					
1GB PC3-8500 DDR3 L-H SODIMM				55Y3706			T/R 14W Standard Battery 4-cell			41U3196			ThinkPlus™. ²² 4-year LOR 9x5 NBD			
2GB PC3-8500 DDR3 L-H SODIMM				55Y3707			T/R 14W Enhanced Battery 6-cell			41U3198			45K6038			
4GB PC3-8500 DDR3 L-H SODIMM				55Y3708			T/R 14W High Capacity Battery 9-cell			43R2499			Post-warranty annual maintenance agreements at			
ThinkPad Advanced Dock				250310U			Advanced Ultrabay Battery III			57Y4536			lenovo.com/thinkplus/warranty			
Other accessories on O-T400 sheet											Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
 US model announced February 17, 2009

❖ Intel Centrino® 2 with vPro™ technology

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 (ML3-11) February 2009

ThinkPad® T400 6474 (GMA) - Education

Personal Systems Reference (PSREF)

	Type-model	Proc- essor GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/ Fing cells	Card slot	Workhorse (W) Global (G) Avail date					
≈	6474-E1U	P8400	2.26	1GB	14.1"	WXGA	Cam	GMA	80G	5400	Combo	❖Intel 5100	WWAN upg	2G Turbo	6	Yes	PC Card	W	Aug 08
	6474-E2U	T9400	2.53	2GB	14.1"	WXGA	Cam	GMA	160G	7200	DVD±RW	❖Intel 5100	WWAN upg	2G Turbo	9	Yes	7-in-1	W	Aug 08
	6474-E3U	T9400	2.53	2GB	14.1"	WXGA	Cam	GMA	250G	5400	DVD±RW	❖Intel 5100	WWAN upg	2G Turbo	9	Yes	7-in-1	W	Aug 08
⌚	6474-E8U	P8700	2.53	2GB	14.1"	WXGA	Cam	GMA	250G	5400	DVD±RW	❖Intel 5100	WWAN upg		6	Yes	7-in-1		Mar 09
⌚	6474-E9U	T9600	2.80	3GB	14.1"	WXGA+	Cam	GMA	160G	7200	DVD±RW	❖Intel 5100	WWAN upg		9	Yes	7-in-1		Mar 09

• **These models have an EasyServ™¹⁹ depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8700, T9400, or T9600 with dual-core, 1066MHz system bus; P8400/P8700: 3MB L2 cache; T9400/T9600: 6MB L2 cache				Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ↳ Vista Premium logo Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (combo, DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (combo, DVD±RW)			
Memory	1GB, 2GB, or 3GB 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 Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™							
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio							
Camera	Camera on top of screen, 1.3-megapixel, fixed focus							
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536 @75Hz							
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions							
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg); <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr							
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54 <i>Some:</i> One Type I or Type II slot, CardBus 32-bit							
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)							
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack							
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip							
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available							
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	T/R 14W Standard Battery 4-cell	41U3196				
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198				
4GB PC3-8500 DDR3 L-H SODIMM		55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499				
ThinkPad Advanced Dock		250310U	Advanced Ultrabay Battery III	57Y4536				
Other accessories on O-T400 sheet		Other accessories at lenovo.com/accessories						

See footnotes for important warranty information

Intel Centrino® 2 with vPro™ technology

US models announced March 24, 2009; previous models on August 5, 2008

US model withdrawn effective August 2009

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(ML3-7) April 2009

ThinkPad® T400 2767 (Switchable) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Mem- ory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Card slot	Whorse (W) Global (G) Avail date
2767-E1U T9400	2.53	2.53	2GB	14.1"	WXGA+Cam	GMA, HD 3470	160G 5400 DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	2G Turbo	9	7-in-1	B32	W Aug 08
2767-E2U T9400	2.53	2.53	2GB	14.1"	WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	❖ Intel 5100	WWAN upg	2G Turbo	9	7-in-1	B32	W Aug 08
2767-E7U T9400	2.53	2.53	2GB	14.1"	WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	❖ Intel 5100	WWAN upg	2G Turbo	6	7-in-1	U32	W Feb 09
2767-E8U T9600	2.80	3GB	14.1"	WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	❖ Intel 5100	WWAN upg			9	7-in-1	B32	Mar 09

- **These models have an EasyServ™,19 depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, and 6MB L2 cache				Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✧ Vista Premium logo			
Memory	2GB or 3GB 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 (all OSES, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™							
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio							
Camera	Camera on top of screen, 1.3-megapixel, fixed focus							
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz</i>							
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys							
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass							
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label							
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions							
Dimensions ³	<i>6-cell 14.1W"</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm							
Weight ²	<i>9-cell:</i> starting at 5.4 lb (2.4kg)							
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic							
Battery - type	Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim							
Battery - life ¹⁰	<i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr							
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54							
ExpressCard slot	None				Supports ThinkVantage® technologies			
PC Card Std slot	None							
Smart Card Read	None							
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)				90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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			
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)							
Mini PCI Express	Three Mini PCI Express slots							
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)							
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)							
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator							
UWB	None							
Modem	56K V.92 ⁶ modem							
Bluetooth™	Bluetooth 2.1 wireless, LED indicator							
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1							
Intel AMT	Intel Active Management Technology (iAMT)							
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack				ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021			
Security	Power-on password, hard disk password, supervisor password, security keyhole				ThinkPlus 4-year LOR 9x5 NBD 45K6022			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant				ThinkPlus 5-year LOR 9x5 NBD 45K6024			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip				ThinkPlus 4-year P&L P/U Depot 45K6023			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades²² available				ThinkPlus 5-year P&L P/U Depot 45K6025			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R 14W Standard Battery 4-cell	41U3196					
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R 14W Enhanced Battery 6-cell	41U3198					
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	T/R 14W High Capacity Battery 9-cell	43R2499					
ThinkPad Advanced Dock	250310U	Advanced Ultrabay Battery III	57Y4536	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories							

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced March 24, 2009; previous models on August 5, 2008 or February 17, 2009

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(ML3-8) April 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann	03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s	43N3214	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay or (in the ThinkPad Advanced Dock 250310U with Serial Hard Drive Ultrabay Slim Adapter 40Y8725)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05
ThinkPad Advanced Dock	250310U	ann	09/20/05

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
T400/R400 Series 14W Privacy Filter	43R2472	ann	08/05/08
Note: T400/R400 Series 14W Privacy Filter (43R2472) is not supported on T400s.			
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

T/R 14W Standard Battery 4-cell	41U3196	ann	05/09/07
T/R 14W Enhanced Battery 6-cell	41U3198	ann	05/09/07
T/R 14W High Capacity Battery 9-cell	43R2499	ann	03/04/08
Advanced Ultrabay Battery III ⁴³	57Y4536	ann	08/25/09
⁴³ Used in Ultrabay Slim bay.			
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
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

• BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
• 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 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.			

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T400s



Lenovo ThinkPad T400s with
ThinkPad Mini Dock Series 3
433710U



ThinkPad Mini Dock Plus Series 3
433810U



T400s Series Li-Ion Battery 6-cell
51J0497



Lenovo ThinkPad T400s



Lenovo ThinkPad T400s

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Card slot	Preload	Avail date
2808-C4U	SP9400	2.40	2GB	14.1" WXGA+		GMA 120G	5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing		Express	XP Pro	Jun 09
2808-C5U	SP9600	2.53	2GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5100	AT&T ²³	None	Fing	Blue	Express	Bus 32	Jun 09
2808-CZU	SP9400	2.40	2GB	14.1" WXGA+	Cam	GMA 80G	SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express	XP Pro	Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9400 or SP9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)					
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch			Supports ThinkVantage® technologies		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 11 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) One slot (ExpressCard/34)					
ExpressCard/34 Smart Card Read Multicard Reader Ports	None None Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)			65-watt (GMA graphics) AC adapter Next Generation ThinkPad Roll Cage (in display cover) 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		
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T					
2G Turbo UWB Modem	None None None					
Bluetooth™ Ethernet Intel AMT	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack					
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole			ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			ThinkPlus 4-year LOR 9x5 NBD 45K6022		
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip			ThinkPlus 5-year LOR 9x5 NBD 45K6024		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available			ThinkPlus 4-year P&L P/U Depot 45K6023		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T400s Series Li-Ion Battery 6-cell	51J0497	ThinkPlus 5-year P&L P/U Depot 45K6025		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	Advanced Ultrabay Battery III	57Y4536	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad Mini Dock Plus Series 3	433810U			
Other accessories on O-T400-S sheet				Other accessories at lenovo.com/accessories		

See footnotes for important warranty information
US models announced June 23 or July 7, 2009
✕ US models withdrawn effective December 2009

✧ Intel Centrino® 2 with vPro™ technology

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(SN1-1) July 2009

Supports ThinkVantage® technologies

65-watt (GMA graphics) AC adapter
Next Generation ThinkPad Roll Cage (in display cover)
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

ThinkPlus™²² 3-year LOR²⁴ 9x5 NBD
45K6021
ThinkPlus 4-year LOR 9x5 NBD
45K6022
ThinkPlus 5-year LOR 9x5 NBD
45K6024
ThinkPlus 4-year P&L P/U Depot
45K6023
ThinkPlus 5-year P&L P/U Depot
45K6025
Post-warranty annual maintenance agreements at
lenovo.com/thinkplus/warranty

ThinkPad® T400s 2808 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print Blue- tooth	Card slot	Preload	Avail date
2808-DHUSP9400	2.40	2GB	14.1" WXGA+			GMA	120G 5400	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	Fing	Express	XPP	Oct 09
2808-DJU SP9400	2.40	2GB	14.1" WXGA+			GMA	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg	None	Fing	Express	XPP	Oct 09
2808-DKUSP9400	2.40	2GB	14.1" WXGA+		Cam	GMA	128G SSD	DVD±RW	❖ Intel 5100	WWAN upg	None	Fing	Express	XPP	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9400 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader™• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus					
Camera						
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm					
Weight ²	6-cell: starting at 3.9 lb (1.77kg)					
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 11 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
ExpressCard/34	One slot (ExpressCard/34)					
Smart Card Read	None					
Multicard Reader	None					
Ports	Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152)					
2G Turbo	None					
UWB	None					
Modem	None					
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack					
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T400s Series Li-Ion Battery 6-cell	51J0497			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	Advanced Ultrabay Battery III	57Y4536			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad Mini Dock Plus Series 3	433810U			
Other accessories on O-T400-S sheet	Other accessories at lenovo.com/accessories					

Supports ThinkVantage® technologies
65-watt (GMA graphics) AC adapter Next Generation ThinkPad Roll Cage (in display cover) 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 3-year LOR ²⁴ 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓢ US model announced November 3, 2009; previous models on October 22, 2009

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(SN1-5) November 2009

ThinkPad® T400s 2808 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date
2808-DLU SP9600	2.53	4GB	14.1"	WXGA+	Cam	GMA	128G SSD	DVD±RW	Intel 5100 ²⁸	AT&T ²³	None	Fing	Blue	Express	Pro 64	Nov 09

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 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 • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
Memory	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					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys			Supports ThinkVantage® technologies		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm					
Weight ²	6-cell: starting at 3.9 lb (1.77kg)					
Case material	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy					
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 11 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
ExpressCard/34	One slot (ExpressCard/34)					
Smart Card Read	None					
Multicard Reader	None					
Ports	Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
AT&T ²³	Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T					
2G Turbo	None					
UWB	None					
Modem	None					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack					
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T400s Series Li-Ion Battery 6-cell	51J0497			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	Advanced Ultrabay Battery III	57Y4536			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad Mini Dock Plus Series 3	433810U			
Other accessories on O-T400-S sheet		Other accessories at lenovo.com/accessories				

See footnotes for important warranty information
US model announced November 3, 2009

Intel Centrino® 2 with vPro™ technology

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(SN1-6) November 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Mini PCIe Finger print	Blue- tooth	Card slot	Whorse (W) Gbl (G) Avail date
2815-22U	SP9400	2.40	2GB	14.1" WXGA+		GMA 120G	5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing	Blue	Express XP	G Jun 09
2815-23U	SP9600	2.53	3GB	14.1" WXGA+	Cam	GMA 250G	5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express B32	G Jun 09
2815-24U	SP9600	2.53	4GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5300 ²⁸	WWAN upg	None	Fing	Blue	Express B32	G Jun 09
2815-25U	SP9600	2.53	2GB	14.1" WXGA+	Cam	GMA 80G	SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express B32	G Jul 09
2815-2YU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 120G	5400	DVD±RW	Intel 5100	Verizon ¹⁶	None	Fing	Blue	Express B32	Jun 09
2815-2ZU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5100	AT&T ²³	None	Fing	Blue	Express B32	Jun 09
2815-30U	SP9600	2.53	3GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5300	Verizon	None	Fing	Blue	Express B32	Jun 09
2815-3YU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 120G	5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express B32	Jun 09
2815-62U	SP9400	2.40	2GB	14.1" WXGA+		GMA 120G	5400	DVD±RW	Intel 5100	WWAN upg	None			Express B32 TAA	Jun 09
2815-63U	SP9400	2.40	3GB	14.1" WXGA+		GMA 128G	SSD	DVD±RW	Intel 5100	WWAN upg	None			Express B32 TAA	Jun 09
2815-64U	SP9600	2.53	3GB	14.1" WXGA+		GMA 128G	SSD	DVD±RW	Intel 5100	WWAN upg	None			Express B32 TAA	Jun 09
US Govt (TAA) ⁵ Processor	62U/63U/64U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor SP9400 or SP9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo			
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive											Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus														
Camera															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
ThinkLight™															
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 11 hr														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) One slot (ExpressCard/34)														
ExpressCard/34 Smart Card Read Multicard Reader Ports	None None Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)														
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T														
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack														
Security Security chip Fingerprint reader	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authen- tication, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available														
2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T400-S sheet	55Y3707 55Y3708 T400s Series Li-Ion Battery 6-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories											Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter Next Generation ThinkPad Roll Cage (in display cover) 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

ThinkPad® T400s 2815 (GMA) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Inte- grated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Card Fing slot	Preload	Avail date
2815-5XU	SP9400	2.40	2GB	14.1" WXGA+	MultiTouch	Cam	GMA 120G	5400 DVD±RW	❖Intel 5100 ²⁸	WWAN upg	No	Yes	Express Pro 32	Dec 09
2815-5YU	SP9400	2.40	4GB	14.1" WXGA+	MultiTouch	Cam	GMA 128G	SSD DVD±RW	❖Intel 5100	WWAN upg	No	Yes	Express Pro 64	Dec 09

Processor	Intel® Core™ 2 Duo processor SP9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 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 applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive													
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, MultiTouch (touchscreen support two-finger touch) Camera on top of screen, 2.0-megapixel, fixed focus													
Camera														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)													
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
ThinkLight™														
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy													
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 11 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
Mini PCI Express	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)None None None None Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack													
Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support														
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Security chip														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T400-S sheet	55Y3707 55Y3708		T400s Series Li-Ion Battery 6-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories							51J0497 57Y4536				
														Supports ThinkVantage® technologies
														65-watt (GMA graphics) AC adapter Next Generation ThinkPad Roll Cage (in display cover) 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 3-year LOR ²⁴ 9x5 NBD 45K6021
														ThinkPlus 4-year LOR 9x5 NBD 45K6022
														ThinkPlus 5-year LOR 9x5 NBD 45K6024
														ThinkPlus 4-year P&L P/U Depot 45K6023
														ThinkPlus 5-year P&L P/U Depot 45K6025
														Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced December 1, 2009

✦ Intel Centrino® 2 with vPro™ technology

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(SN1-7) December 2009

ThinkPad® T400s 2823 (GMA) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print Blue- tooth	Card slot	Whorse (W) GMP (P) Avail Preload Gbl (G) date
2823-22U SP9400	2.40	2GB	14.1" WXGA+			GMA	120G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing	Express	XP P Jun 09
2823-23U SP9600	2.53	3GB	14.1" WXGA+			Cam GMA	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Express	B32 P Jun 09
2823-24U SP9600	2.53	4GB	14.1" WXGA+			Cam GMA	128G SSD	DVD±RW	Intel 5300 ²⁸	WWAN upg	None	Fing	Express	B32 P Jun 09
2823-25U SP9600	2.53	2GB	14.1" WXGA+			Cam GMA	80G SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Express	B32 P Jul 09

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9400 or SP9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive			
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus			
Camera				
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)			
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions			
ThinkLight™				
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy			
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 11 hr			
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC) One slot (ExpressCard/34)			
ExpressCard/34 Smart Card Read Multicard Reader Ports	None None Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)			
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None None			
Bluetooth™ Ethernet Intel AMT Audio support	Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack			
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip			
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T400-S sheet	55Y3706 55Y3707 55Y3708	T400s Series Li-Ion Battery 6-cell Advanced Ultrabay Battery III ThinkPad Mini Dock Plus Series 3 Other accessories at lenovo.com/accessories	51J0497 57Y4536 433810U	
ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US models announced June 23, 2009

♦ Intel Centrino® 2 with vPro™ technology

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(SN1-2) June 2009

ThinkPad® T400s 2815 (GMA) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date
2815-52U	SP9400	2.40	2GB	14.1" WXGA+	Cam	GMA	120G 5400	DVD±RW	❖Intel 5100 ²⁸	WWAN	upg	None	Fing	Blue	Express	Bus 32 Jun 09
2815-53U	SP9400	2.40	2GB	14.1" WXGA+	Cam	GMA	128G SSD	DVD±RW	❖Intel 5100	WWAN	upg	None	Fing	Blue	Express	Bus 32 Jun 09

• **These models have an EasyServ™¹⁹ depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Premiere performance and ultraportability; two spindles Intel® Core™ 2 Duo processor SP9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✦ Vista Premium logo Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio					
Camera	Camera on top of screen, 2.0-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm					
Weight ²	6-cell: starting at 3.9 lb (1.77kg)					
Case material	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy					
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 11 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
ExpressCard/34	One slot (ExpressCard/34)					
Smart Card Read	None					
Multicard Reader	None					
Ports	Two USB 2.0 and one eSATA/USB combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)					
2G Turbo	None					
UWB	None					
Modem	None					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack					
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T400s Series Li-Ion Battery 6-cell	51J0497			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	Advanced Ultrabay Battery III	57Y4536			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad Mini Dock Plus Series 3	433810U			
Other accessories on O-T400-S sheet	Other accessories at lenovo.com/accessories					

ThinkPlus™ ²² 3-year LOR ²⁴ 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced June 23, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(SN1-3) June 2009

Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann 06/23/09
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s	43N3229	ann 06/23/09

Storage and removable storage

1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	ann 06/23/09
500GB Disk SATA 3.0Gb/s (5400 rpm) ⁵¹	43N3420	ann 06/23/09

⁵¹ Can be used with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8"(2.5" cover) ⁴⁹	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ⁴⁹	43N3417	ann 06/23/09

⁴⁹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in Ultrabay via the removable adaptive cover provided with the drive

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB Portable Diskette Drive	05K9276	ann 06/05/00
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 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Communication

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann 08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann 08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad Port Replicator Series 3	433610W	ann 06/23/09
ThinkPad Mini Dock Series 3	433710U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3	433810U	ann 06/23/09

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

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

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Batteries

T400s Series Li-Ion Battery 6-cell	51J0497	ann 06/23/09
Advanced Ultrabay Battery III ⁴³	57Y4536	ann 08/25/09
⁴³ Used in Ultrabay Slim bay.		
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter 40Y7659</i> 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
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

• BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
• 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 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L174 17" Monitor	9227AE1	ann 04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann 09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann 09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann 09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann 09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann 08/05/08
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 Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T500



ThinkPad Business Topload Case
43R2476



Lenovo ThinkPad T500 with
T500/R500/W500 Series 15W Privacy Filter
43R2474



Lenovo ThinkPad T500



Lenovo ThinkPad T500



Advanced Ultrabay Battery III
57Y4536

ThinkPad® T500 2242 (GMA) - TopSeller

Personal Systems Reference (PSREF)

	Type-model	Proc-essor	GHz	Memory	Wide-screen display	CCFL or Cam-LED era	Integrated graphics	Disk SATA GB* rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
⌘	2242-22U	P8400	2.26	2GB	15.4" WXGA		GMA 160G	5400	DVD±RW	⇄ Intel 5100 ²⁸	AT&T ²³		Fing		Bus 32	Aug 08
⌘	2242-23U	T9400	2.53	2GB	15.4" WXGA	Cam	GMA 160G	7200	DVD±RW	⇄ Intel 5100	AT&T		Fing	Blue	XP Pro	Aug 08
⌘	2242-32U	P8400	2.26	2GB	15.4" WXGA		GMA 160G	7200	DVD±RW	⇄ Intel 5100	AT&T		Fing	Blue	Bus 32	Aug 08
⌘	2242-33U	P8400	2.26	2GB	15.4" WXGA		GMA 160G	5400	DVD±RW	⇄ Intel 5100			Fing		XP Pro	Aug 08
⌘	2242-34U	T9400	2.53	2GB	15.4" WXGA	Cam	GMA 160G	7200	DVD±RW	⇄ Intel 5100		2G Turbo	Fing	Blue	Bus 32	Aug 08
⌘	2242-35U	P8400	2.26	2GB	15.4" WXGA		GMA 160G	7200	DVD±RW	⇄ Intel 5100			Fing	Blue	XP Pro	Aug 08
⌘	2242-4EU	P8400	2.26	1GB	15.4" WXGA		GMA 160G	5400	Combo	⇄ Intel 5100	AT&T				Bus 32	Aug 08
⌘	2242-4FU	P8400	2.26	1GB	15.4" WXGA		GMA 160G	5400	Combo	⇄ Intel 5100					XP Pro	Aug 08
⌘	2242-55U	T9400	2.53	2GB	15.4" WXGA	Cam	GMA 160G	7200	DVD±RW	⇄ Intel 5100			Fing	Blue	XP Pro	Sep 08
⌘	2242-5FU	P8400	2.26	1GB	15.4" WXGA		GMA 160G	5400	DVD±RW	⇄ Intel 5100					XP Pro	Sep 08
⌘	2242-5GU	P8400	2.26	2GB	15.4" WXGA LED		GMA 160G	5400	DVD±RW	⇄ Intel 5100			Fing		XP Pro	Sep 08
⌘	2242-5HU	P8400	2.26	2GB	15.4" WXGA LED		GMA 160G	7200	DVD±RW	⇄ Intel 5100			Fing	Blue	XP Pro	Sep 08
⌘	2242-6BU	P8600	2.40	2GB	15.4" WXGA LED		GMA 160G	5400	DVD±RW	⇄ WiMAX			Fing		Bus 32	Jan 09
⌘	2242-6CU	P8600	2.40	2GB	15.4" WXGA LED	Cam	GMA 128G SSD	DVD±RW	⇄ Intel 5100				Fing	Blue	XP Pro	Jan 09

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Processor	Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache		Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 32 ✧ Vista models: Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)
Memory	1GB or 2GB 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 Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some</i> : 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some</i> : 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All</i> : removable, upgradable, supports second disk, Shock Mounted Hard Drive		
Widescreen display	<i>Some</i> : 15.4" (391mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio		
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus		
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution</i> : 2048x1536 @ 75Hz		
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 6-cell: starting at 5.9 lb (2.7kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr		
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)		
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)		
Mini PCI Express Intel 5100 ²⁸ WiMAX	Three Mini PCI Express slots <i>Some</i> : 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some</i> : 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)		
WWAN upg AT&T ²³	None <i>Some</i> : Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T		
2G Turbo UWB	<i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None		
Modem Bluetooth™ Ethernet Intel AMT	56K V.92 ⁶ modem <i>Some</i> : Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1		
Audio support	None		
Security Security chip Fingerprint reader	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some</i> : Fingerprint reader on palm rest, swipe sensor, supports the security chip		
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available		
Other accessories on O-T500 sheet		Other accessories at lenovo.com/accessories	

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

See footnotes for important warranty information

US models announced August 5, 2008, September 23, 2008, or January 6, 2009

^a X US models withdrawn effective September 2008 or June, August, or December 2009

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ThinkPad® T500 2242 (GMA) - TopSeller (March 2009)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
2242-6YU	P8600	2.40	1GB	15.4" WXGA LED			GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	None			XP Pro	Mar 09
2242-6ZU	P8600	2.40	2GB	15.4" WXGA LED			GMA	160G 7200	DVD±RW	Intel 5100	None	None	Fing		XP Pro	Mar 09
2242-72U	P8600	2.40	2GB	15.4" WXGA LED			GMA	160G 7200	DVD±RW	WiMAX	None	None	Fing		Bus 32	Mar 09
2242-73U	P8600	2.40	3GB	15.4" WXGA LED		Cam	GMA	160G 7200	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Mar 09
2242-74U	T9400	2.53	3GB	15.4" WXGA LED		Cam	GMA	160G 7200	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Mar 09
2242-75U	T9400	2.53	3GB	15.4" WXGA LED		Cam	GMA	128G SSD	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Mar 09
2242-7LU	P8700	2.53	2GB	15.4" WXGA LED		Cam	GMA	80G SSD	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Jun 09
2242-7UU	P8400	2.26	2GB	15.4" WXGA LED			GMA	250G 5400	DVD±RW	Intel 5100	None	None	Fing		XP Pro	Jul 09
2242-7VU	P8400	2.26	2GB	15.4" WXGA LED		Cam	GMA	320G 5400	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Jul 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™¹⁹ depot repair service 1-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8400, P8600, P8700 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2										Preloaded operating system ²⁰					
Memory	1GB, 2GB, or 3GB 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										- Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 or 7200 rpm), 250GB (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports second disk, Shock Mounted Hard Drive										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)					
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										Supports ThinkVantage® technologies					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536@75Hz										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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 ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										ThinkPlus™. 22 1-year LOR ²⁴ 9x5 NBD 45K5968					
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 6-cell: starting at 5.9 lb (2.7kg) Black Top: Super-Elastic Polycarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr										ThinkPlus 2-year LOR 9x5 NBD 45K5969					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)										ThinkPlus 3-year LOR 9x5 NBD 45K5970					
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										ThinkPlus 4-year LOR 9x5 NBD 45K5973					
Mini PCI Express Intel 5100 ²⁸ WiMAX	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)										ThinkPlus 5-year LOR 9x5 NBD 45K5975					
WWAN upg 2G Turbo UWB	None None None										ThinkPlus 2-year P&L P/U Depot 45K5971					
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus 3-year P&L P/U Depot 45K5972					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip										ThinkPlus 4-year P&L P/U Depot 45K5974					
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available										ThinkPlus 5-year P&L P/U Depot 45K5976					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708 T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797 Advanced Ultrabay Battery III 57Y4536 Other accessories at lenovo.com/accessories										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					

See footnotes for important warranty information

US models announced March 24, June 2, or July 7, 2009

⚡ US models withdrawn effective August or December 2009

⚡ Intel Centrino® 2 processor technology

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(CR5-12) July 2009

ThinkPad® T500 2242 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
2242-8QU	P8600	2.40	2GB	15.4" WXGA	LED		GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing		XP Pro	Oct 09
2242-8RU	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	320G 5400	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™¹⁹ depot repair service 1-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32	
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB ⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™				
Widescreen display	15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)	
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus				
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz				
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass				
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions				
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm				
Weight ²	6-cell: starting at 5.9 lb (2.7kg)				
Case color	Black				
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic				
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim				
Battery - life ¹⁰	6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr				
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)				
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)				
PC Card	One slot (Type I, Type II), CardBus 32-bit				
Smart Card read	None				
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)				
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)				
Mini PCI Express	Three Mini PCI Express slots				
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)				
WWAN upg	None				
2G Turbo	None				
UWB	None				
Modem	56K V.92 ⁶ modem				
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator				
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1				
Intel AMT	None				
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack				
Security	Power-on password, hard disk password, supervisor password, security keyhole				
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant				
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip				
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available				
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799		Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797		
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536		
Other accessories on O-T500 sheet		Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced October 22, 2009

✚ Intel Centrino® 2 processor technology

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(CR5-15) October 2009

ThinkPad® T500 2242 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
2242-8SU	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	320G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	Blue	Pro 32	Oct 09

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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 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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio			
Camera	Camera on top of screen, 1.3-megapixel, fixed focus			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 6-cell: starting at 5.9 lb (2.7kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	1-year - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708	T/R/W/SL Series Li-Ion Battery 6-cell T/R/W/SL Series Li-Ion Battery 9-cell Advanced Ultrabay Battery III	40Y6799 40Y6797 57Y4536	

See footnotes for important warranty information
US model announced October 22, 2009

Intel Centrino® 2 processor technology

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(CR5-16) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Preload	Avail date
2243-56U	P8400	2.26	2GB	15.4" WXGA			GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Finger		XP Pro	Sep 08
2243-7WU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100	None	None	Finger	Blue	XP Pro	Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8400 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache				Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business ◇ Vista logo: None Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™							
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio							
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus							
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz							
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions							
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 6-cell: starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr							
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit				Supports ThinkVantage® technologies			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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			
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack				ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available							
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708	T/R/W/SL Series Li-Ion Battery 6-cell T/R/W/SL Series Li-Ion Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories	40Y6799 40Y6797 57Y4536					

See footnotes for important warranty information

• Intel Centrino® 2 processor technology

US models announced September 23, 2008 or July 7, 2009

✗ US models withdrawn effective June or December 2009

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(CR5-11) July 2009

ThinkPad® T500 2243 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Preload	Avail date
2243-93U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	XP Pro	Oct 09
2243-95U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	80G SSD	DVD±RW	Intel 5100	None	None	Finger	Blue	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive,			
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 6-cell: starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708	T/R/W/SL Series Li-Ion Battery 6-cell T/R/W/SL Series Li-Ion Battery 9-cell Advanced Ultrabay Battery III Other accessories at lenovo.com/accessories	40Y6799 40Y6797 57Y4536	

Supports ThinkVantage® technologies			
65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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			
ThinkPlus™.22 3-year LOR²⁴ 9x5 NBD 45K6021			
ThinkPlus 4-year LOR 9x5 NBD 45K6022			
ThinkPlus 5-year LOR 9x5 NBD 45K6024			
ThinkPlus 4-year P&L P/U Depot 45K6023			
ThinkPlus 5-year P&L P/U Depot 45K6025			
Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty**			

See footnotes for important warranty information
US models announced October 22, 2009

✧ Intel Centrino® 2 processor technology

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(CR5-17) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Preload	Avail date
2243-94U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100 ²⁸		None	Finger	Blue	Pro 32	Oct 09
2243-9MU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100	Verizon ¹⁶	None	Finger	Blue	Pro 32	Nov 09
2243-9PU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	128G SSD	DVD±RW	Intel 5100		None	Finger	Blue	Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 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• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive					
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @75Hz					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm					
Weight ²	6-cell: starting at 5.9 lb (2.7kg)					
Case color	Black					
Case material	Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card read	None					
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
Verizon ¹⁶	Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					
				Supports ThinkVantage® technologies		
				65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified 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 3-year LOR ²⁴ 9x5 NBD 45K6021		
				ThinkPlus 4-year LOR 9x5 NBD 45K6022		
				ThinkPlus 5-year LOR 9x5 NBD 45K6024		
				ThinkPlus 4-year P&L P/U Depot 45K6023		
				ThinkPlus 5-year P&L P/U Depot 45K6025		
				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

Intel Centrino® 2 processor technology

US models announced November 3, 2009; previous model on October 22, 2009

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ThinkPad® T500 2082 (Switchable) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
✕ 2082-26U	P8400	2.26	2GB	15.4" WSXGA+		GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100 ²⁸	AT&T ²³		9	Bus 32	Aug 08
✕ 2082-27U	T9400	2.53	2GB	15.4" WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100	AT&T		9	XP Pro	Aug 08
✕ 2082-3GU	T9400	2.53	2GB	15.4" WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100		2G Turbo	9	Bus 32	Aug 08
✕ 2082-3HU	P8400	2.26	2GB	15.4" WSXGA+		GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100			9	XP Pro	Aug 08
✕ 2082-5XU	T9400	2.53	2GB	15.4" WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100			9	XP Pro	Sep 08
✕ 2082-7YU	P8600	2.40	2GB	15.4" WSXGA+		GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100		2G Turbo	9	Bus 32	Jan 09
✕ 2082-8ZU	P8600	2.40	3GB	15.4" WSXGA+		GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100			9	XP Pro	Mar 09
✕ 2082-92U	P8600	2.40	3GB	15.4" WSXGA+		GMA, HD 3650	160G 7200	DVD±RW	✕ Intel 5100		2G Turbo	9	Bus 32	Mar 09
✕ 2082-93U	T9400	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	✕ Intel 5100			9	XP Pro	Mar 09
✕ 2082-94U	T9400	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	✕ Intel 5100		2G Turbo	9	Bus 32	Mar 09
✕ 2082-95U	T9400	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	✕ Intel 5100	AT&T		9	XP Pro	Mar 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™, 19 depot repair service 3-year limited warranty

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400/P8600</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache				Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
Memory	2GB or 3GB 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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™							
Widescreen display Camera	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus							
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz							
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions							
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) Black <i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr							
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)							
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34 or ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)							
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack							
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip							
Limited warranty ¹² 3-years/1-yr battery - EasyServ™, 19 depot repair service / service upgrades ²² available								
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799				
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797				
4GB PC3-8500 DDR3 L-H SODIMM		55Y3708	Advanced Ultrabay Battery III	57Y4536				
Other accessories on O-T500 sheet Other accessories at lenovo.com/accessories								

See footnotes for important warranty information
 US models announced August 5, September 23, 2008, January 6, 2009 or March 24, 2009
 ✕ US models withdrawn effective September 2008, June 2009, or December 2009

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ThinkPad® T500 2082 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
2082-BKU P8700	P8700	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	±Intel 5100 ²⁸			9	XP Pro	Oct 09
2082-BMU P8700	P8700	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	±Intel 5100	AT&T ²³		9	XP Pro	Oct 09
2082-BNU T9600	T9600	2.80	4GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	±Intel 5100			9	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™,19 depot repair service 3-year limited warranty

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8700</i> : 3MB L2 cache; <i>T9600</i> : 6MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
Memory	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;					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm					
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)					
Case color	Black					
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	9-cell: up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard/54	One slot (ExpressCard/34 or ExpressCard/54)					
PC Card	One slot (Type I, Type II), CardBus 32-bit					
Smart Card read	None					
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	None					
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	None					
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					

Supports ThinkVantage® technologies
90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 45K6021
ThinkPlus 4-year LOR 9x5 NBD 45K6022
ThinkPlus 5-year LOR 9x5 NBD 45K6024
ThinkPlus 4-year P&L P/U Depot 45K6023
ThinkPlus 5-year P&L P/U Depot 45K6025
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced October 22, 2009

± Intel Centrino® 2 processor technology

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Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery Blue/Card or Turbo cells	Fing slot	Preload	Whorse (W) Gbl (G) Avail date
2089-2JU	P8400	2.26	1GB	15.4"	WXGA		GMA 80G	5400 Combo	✦ Intel 5100 ²⁸	WWAN upg			6	Yes	PC B32 G Aug 08
2089-2KU	T9400	2.53	2GB	15.4"	WXGA		Cam GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg	2G Turbo	6	Yes	PC B32 WG Aug 08	
2089-2LU	T9400	2.53	2GB	15.4"	WXGA		GMA 160G	5400 DVD±RW	✦ Intel 5100	Verizon ¹⁶	2G Turbo	9	Yes	PC B32 W Aug 08	
2089-2MU	T9400	2.53	2GB	15.4"	WXGA		Cam GMA 160G	7200 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 W Aug 08	
2089-3HU	T9400	2.53	2GB	15.4"	WXGA		Cam GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 G Aug 08	
2089-3JU	T9400	2.53	2GB	15.4"	WXGA		GMA 160G	5400 DVD±RW	✦ Intel 5100	AT&T ²³	2G Turbo	9	Yes	PC B32 W Aug 08	
2089-4XU	T9400	2.53	2GB	15.4"	WXGA	LED	Cam GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 WG Sep 08	
2089-58U	T9400	2.53	2GB	15.4"	WXGA		GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC XP G Sep 08	
✗ 2089-59U	P8400	2.26	1GB	15.4"	WXGA		GMA 80G	5400 Combo	✦ Intel 5100	WWAN upg		6	Yes	PC XP Sep 08	
✗ 2089-5WU	P8600	2.40	2GB	15.4"	WSXGA+		GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Smart	B32 TAA Oct 08	
2089-5ZU	P8600	2.40	2GB	15.4"	WXGA	LED	GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 WG Dec 08	
2089-7QU	P8700	2.53	2GB	15.4"	WXGA	LED	GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 Jun 09	
2089-82U	P8400	2.26	2GB	15.4"	WXGA	LED	GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Yes	PC B32 Jul 09	
2089-83U	P8700	2.53	3GB	15.4"	WXGA	LED	Cam GMA 250G	5400 DVD±RW	11n ²⁸	WWAN upg		6	Yes	PC B32 Jul 09	
US Govt (TAA) ⁵ Processor	5WU: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8400, P8600, P8700 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2												Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✦ <i>Vista models:</i> Vista Premium logo		
Memory	1GB, 2GB or 3GB 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 (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)		
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio														
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz (VGA, DisplayPort)														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr														
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)														
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit <i>Some:</i> Smart Card reader 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												Supports ThinkVantage® technologies		
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip												ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories														

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

✦ US models announced July 7, 2009; previous models on Aug 5, Sep 23, October 7, December 2, 2008 or June 2, 2009

✗ US models withdrawn effective August 2009

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(CR5-3) July 2009

ThinkPad® T500 2055 (Switchable)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Mem- ory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo slot	Bat- tery cells	Blue/ Fin	Global (G) Preload	Workhorse (W) Global (G) Availability	
✖ 2055-2BU	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 80G	5400	Combo	✧ Intel 5100 ²⁸	WWAN upg	PC	6	Yes	B32	G Aug 08	
2055-2CU	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 160G	5400	DVD±RW	✧ Intel 5100	WWAN upg	PC	6	Yes	B32 W	G Aug 08	
2055-2EU	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	Verizon ¹⁶	2G	PC	9	Yes	B32 W	Aug 08
2055-3AU	T9600	2.80	4GB	15.4" WSXGA+		Cam	GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	2G	PC	9	Yes	B32 W	G Aug 08
2055-45U	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	PC	9	Yes	B32	G Aug 08	
✖ 2055-2DU	T9400	2.53	2GB	15.4" WSXGA+		Cam	GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	UWB	PC	6	Yes	B32 W	Sep 08
✖ 2055-2VU	T9400	2.53	2GB	15.4" WSXGA+		Cam	GMA, 3650 160G	7200	DVD±RW	✧ Intel 5300 ²⁸	WWAN upg	UWB	Smart 9	B32	Sep 08		
2055-5TU	T9400	2.53	2GB	15.4" WXGA		LED Cam	GMA, 3650 160G	7200	DVD±RW	✧ Intel 5300	WWAN upg	PC	9	Yes	B32 W	G Sep 08	
2055-5UU	T9400	2.53	2GB	15.4" WXGA		LED Cam	GMA, 3650 64G	SSD	DVD±RW	✧ Intel 5300	WWAN upg	PC	9	Yes	B32	Sep 08	
2055-63U	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	PC	9	Yes	XP	G Sep 08	
✖ 2055-7GU	T9400	2.53	2GB	15.4" WSXGA+			GMA, 3650 160G	7200	DVD±RW	✧ Intel 5300	WWAN upg	Smart 9	B32	TAA	Oct 08		
2055-7LU	P8600	2.40	2GB	15.4" WSXGA+			GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	PC	9	Yes	B32 W	G Dec 08	
✖ 2055-9KU	P8700	2.53	3GB	15.4" WXGA		LED Cam	GMA, 3650 80G	SSD	DVD±RW	✧ Intel 5100	WWAN upg	PC	6	Yes	B32	Jun 09	
✖ 2055-9LU	P8700	2.53	3GB	15.4" WXGA		LED	GMA, 3650 160G	7200	DVD±RW	✧ Intel 5100	WWAN upg	PC	6	Yes	B32	Jun 09	
US Govt (TAA) ⁵ Processor	7GU: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600, P8700, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600/P8700: 3MB L2 cache; T9400/T9600: 6MB L2											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ✧ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)					
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 Combo	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213)																
SATA DVD±RW	Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214)																
Ultrabay Slim	One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel																
SATA disk	Some: 64GB ⁸ or 80GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 80GB (5400 rpm), 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, shock mounted storage																
Widescreen display	Some: 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Some: 15.4" (391mm) WSXGA+ (1680x1050) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio																
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus																
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3650, PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536@75Hz (VGA, DisplayPort)																
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys																
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label																
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm																
Weight ²	6-cell: starting at 5.9 lb (2.7kg); 9-cell: starting at 6.2 lbs (2.8kg)																
Case color	Black																
Case material	Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic																
Battery - type	Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim																
Battery - life ¹⁰	6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr																
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)																
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)																
PC Card	Some: One slot (Type I, Type II), CardBus 32-bit																
Smart Card read	Some: Smart Card reader																
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H)																
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)																
Mini PCI Express	Three Mini PCI Express slots																
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																
Intel 5300 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)																
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)																
Verizon ¹⁶	Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon																
2G Turbo	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator																
UWB	Some: Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter																
Modem	56K V.92 ⁶ modem																
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator																
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																
Intel AMT	Intel Active Management Technology (iAMT)																
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack																
Security	Power-on password, hard disk password, supervisor password, security keyhole																
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor, supports security chip																
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available																
Other accessories on O-T500 sheet							Other accessories at lenovo.com/accessories										
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty																	

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

US models announced June 2, 2009; previous models on Aug 5, Sep 23, October 7, or December 2, 2008

✂ US models withdrawn effective August 2009

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ThinkPad® T500 2055 (Switchable) - July 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo slot	Bat- tery Blue/ Finger	Avail Preload date
2055-9RU	P8400	2.26	2GB	15.4" WXGA	LED	Cam	GMA, 3650	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	PC 6	Yes B32 Jul 09
2055-9SU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA, 3650	250G FDE	DVD±RW	11n ²⁸	WWAN upg	None	PC 6	Yes B32 Jul 09
2055-9TU	T9400	2.53	2GB	15.4" WSXGA+		Cam	GMA, 3650	250G FDE	DVD±RW	Intel 5100	WWAN upg	None	PC 6	Yes B32 Jul 09

Processor	Intel® Core™ 2 Duo processor P8400, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8700: 3MB L2 cache; T9400: 6MB L2										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ◆ Vista Premium logo Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™													
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio													
Camera	Camera on top of screen, 1.3-megapixel, fixed focus													
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3650, PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm										Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Weight ²	6-cell: starting at 5.9 lb (2.7kg); 9-cell: starting at 6.2 lbs (2.8kg)													
Case color	Black													
Case material	Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic													
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)													
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)													
PC Card	One slot (Type I, Type II), CardBus 32-bit													
Smart Card read	None													
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H)													
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express	Three Mini PCI Express slots													
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
11n ²⁸	<i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II													
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo	None													
UWB	None													
Modem	56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM					55Y3706		T/R/W/SL Series Li-Ion Battery 6-cell		40Y6799					
2GB PC3-8500 DDR3 L-H SODIMM					55Y3707		T/R/W/SL Series Li-Ion Battery 9-cell		40Y6797					
4GB PC3-8500 DDR3 L-H SODIMM					55Y3708		Advanced Ultrabay Battery III		57Y4536					
Other accessories on O-T500 sheet											Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced July 7, 2009

◇ Intel Centrino® 2 with vPro™ technology

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(CR5-13) July 2009

ThinkPad® T500 2241 (GMA) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸	rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo	Blue- tooth	Preload	Whorse (W) GMP (P) Avail Gbl (G) date
2241-3WUP	P8400	2.26	1GB	15.4"	WXGA		GMA 80G	5400	Combo	↕ Intel 5100 ²⁸	WWAN upg			6	Blue Bus 32	GP Aug08
2241-3XU	T9400	2.53	2GB	15.4"	WXGA	Cam	GMA 160G	5400	DVD±RW	↕ Intel 5100	WWAN upg	2G Turbo	6	Blue Bus 32	WG P Aug08	
2241-3YU	T9400	2.53	2GB	15.4"	WXGA	Cam	GMA 160G	5400	DVD±RW	↕ Intel 5100	WWAN upg		6	Blue Bus 32	GP Aug08	
2241-4XU	T9400	2.53	2GB	15.4"	WXGA	LED Cam	GMA 160G	5400	DVD±RW	↕ Intel 5100	WWAN upg		6	Blue Bus 32	WG P Sep08	
2241-58U	T9400	2.53	2GB	15.4"	WXGA		GMA 160G	5400	DVD±RW	↕ Intel 5100	WWAN upg		6	Blue XP Pro	GP Sep08	
2241-5ZU	P8600	2.40	2GB	15.4"	WXGA	LED	GMA 160G	5400	DVD±RW	↕ Intel 5100	WWAN upg		6	Blue Bus 32	WG P Dec08	

• *These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty*

Positioning Processor	Premiere performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache		Preloaded operating system ²⁰ - <i>Some</i> : Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some</i> : Genuine Windows Vista Business 32 ✧ <i>Vista models</i> : Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (combo, DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (combo, DVD±RW)
Memory	1GB or 2GB 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 Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB ⁸ (5400 rpm), 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™		
Widescreen display	<i>Some</i> : 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio		
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus		
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution</i> : 2048x1536 @75Hz		
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH)</i> : 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell</i> : starting at 5.9 lb (2.7kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.3 hr; <i>6-cell plus Ultrabay battery</i> : up to 7.8 hr; <i>9-cell</i> : up to 9.4 hr		
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit		
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)		
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip		
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available		
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708	T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797 Advanced Ultrabay Battery III 57Y4536 Other accessories at lenovo.com/accessories	

Supports ThinkVantage® technologies	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver 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 4-year LOR 9x5 NBD 45K6038	
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

 US model announced December 2, 2008; previous models on August 5 or September 23, 2008

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(CR5-5) December 2008

ThinkPad® T500 2056 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Mem- ory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Whorse (W) GMP (P) Avail date
2056-4PU	T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	80G 5400	Combo	Intel 5100 ²⁸	WWAN upg	6	B32 GP Aug 08
2056-4QU	T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 5400	DVD±RW	Intel 5100	WWAN upg	6	B32 WGP Aug 08
2056-4RU	T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	Intel 5100	WWAN upg	9	B32 GP Aug 08
2056-4SU	T9600	2.80	4GB	15.4"	WSXGA+	Cam	GMA, 3650	160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	9 B32 WGP Aug 08
2056-5TU	T9400	2.53	2GB	15.4"	WXGA	LED Cam	GMA, 3650	160G 7200	DVD±RW	Intel 5300 ²⁸	WWAN upg	9	B32 WGP Sep 08
2056-63U	T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	Intel 5100	WWAN upg	9	XP GP Sep 08
2056-7LU	P8600	2.40	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	Intel 5100	WWAN upg	9	B32 WGP Dec 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8600, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600: 3MB L2 cache; T9400/T9600: 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
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			
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB ⁸ (5400 rpm), 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus			
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus			
Switchable graphics	Dynamic switching between discrete and integrated graphics (user selectable), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None			
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 55Y3706 T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799				
2GB PC3-8500 DDR3 L-H SODIMM 55Y3707 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797				
4GB PC3-8500 DDR3 L-H SODIMM 55Y3708 Advanced Ultrabay Battery III 57Y4536				
Other accessories on O-T500 sheet Other accessories at lenovo.com/accessories				
Supports ThinkVantage® technologies				
90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver 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 4-year LOR 9x5 NBD 45K6038				
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information

♦ Intel Centrino® 2 with vPro™ technology

US model announced December 2, 2008; previous models on August 5 or September 23, 2008

US model withdrawn effective August 2009

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(CR5-6) December 2008

ThinkPlus™. 22 4-year LOR 9x5 NBD
45K6038
Post-warranty annual maintenance
agreements at
lenovo.com/thinkplus/warranty

Supports ThinkVantage® technologies
90-watt (ATI graphics) AC adapter
ThinkPad Roll Cage and Top Cover
Roll Cage (one-piece magnesium)
Climate Savers® certified
EPEAT™ Gold rating (LED models)
EPEAT Silver 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

ThinkPad® T500 2089 (GMA) - Education (EasyServ)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue- tooth	Workhorse (W) Global (G) Avail date
2089-E1U	P8400	2.26	2GB	15.4" WXGA		Cam	GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	6 Blue	Bus 32 No Aug 08
2089-E2U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Aug 08
2089-E3U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	9 Blue	Bus 32 No Aug 08
2089-E4U	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Dec 08
2089-E5U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Mar 09

• **These models have an EasyServ™¹⁹ depot repair service 3-year limited warranty**

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/8700: 3MB L2 cache; T9400: 6MB L2 cache</i>				Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ✦ Vista Premium logo						
Memory	2GB 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™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)						
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™				Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio										
Camera	Camera on top of screen, 1.3-megapixel, fixed focus										
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr										
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit										
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available										
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799								
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797								
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536								
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories										

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

⚡ US model announced March 24, 2009; previous models on August 5 or December 2, 2008

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(CR5-7) April 2009

ThinkPad® T500 2055 (Switchable) - Education (EasyServ)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Switchable graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Battery	Workhorse (W) Global (G) Avail date
2055-E1U T9400	2.53	2GB	15.4"	WSXGA+	Cam GMA, HD 3650	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	9	Bus32	No Aug 08
2055-E2U T9400	2.53	2GB	15.4"	WSXGA+	Cam GMA, HD 3650	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	9	Bus32	No Aug 08
2055-E3U T9600	2.80	3GB	15.4"	WSXGA+	Cam GMA, HD 3650	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	9	Bus32	No Mar 09

• **These models have an EasyServ™¹⁹ depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo		
Memory	2GB or 3GB 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) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm					
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)					
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	<i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard slot	One ExpressCard/34 or ExpressCard/54					
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information

◇ Intel Centrino® 2 with vPro™ technology

Ⓢ US model announced March 24, 2009; previous models on August 5, 2008

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(CR5-8) April 2009

ThinkPad® T500 2241 (GMA) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue- tooth	Workhorse (W) Global (G) Avail date
2241-E1U	P8400	2.26	2GB	15.4" WXGA		Cam	GMA	160G 5400	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	6 Blue Bus 32	No Aug 08
2241-E2U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg	None	6 Blue Bus 32	No Aug 08
2241-E3U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	None	9 Blue Bus 32	No Aug 08
2241-E4U	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	None	6 Blue Bus 32	No Dec 08
2241-E5U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	❖ Intel 5100	WWAN upg	None	6 Blue Bus 32	No Mar 09

• These models have a limited onsite service²⁴ 3-year limited warranty

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/P8700</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache			Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo		
Memory	2GB 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™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) ExpressCard/54 PC Card One slot (ExpressCard/34, ExpressCard/54) Smart Card read One slot (Type I, Type II), CardBus 32-bit Multicard reader 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Ports Three USB 2.0, external monitor ¹¹ (VGA DB-15, Displayport), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole			Supports ThinkVantage® technologies		
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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		
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available			ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

US Model announced March 24, 2009; previous models on August 5 or December 2, 2008

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ThinkPad® T500 2056 (Switchable) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Mem- ory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo cells	Bat- tery	Workhorse (W) Global (G) Avail date
2056-E1U T9400	2.53	2GB	15.4"	WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	9	No Aug 08
2056-E2U T9400	2.53	2GB	15.4"	WSXGA+	Cam	GMA, HD 3650	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg	None	9	No Aug 08
2056-E3U T9600	2.80	3GB	15.4"	WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	None	9	No Mar 09

• **These models have a limited onsite service²⁴ 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo		
Memory	2GB or 3GB 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) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Camera	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536 @75Hz</i>					
Switchable graphics	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
TrackPoint®	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 9-cell: starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Weight ²	6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr					
Case material	6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr					
Battery - type	6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr					
Battery - life ¹⁰	6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)					
ExpressCard slot	One ExpressCard/34 or ExpressCard/54					
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Intel 5100 ²⁸	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
WWAN upg	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
2G Turbo	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
UWB	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Modem	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Bluetooth™	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Ethernet	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Intel AMT	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Security	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Security chip	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Fingerprint reader	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) WWAN upg Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) 2G Turbo None UWB None Modem 56K V.92 ⁶ modem Bluetooth™ Bluetooth 2.1 wireless, LED indicator Ethernet Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel AMT Intel Active Management Technology (iAMT) Audio support High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					
				Supports ThinkVantage® technologies		
				90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced March 24, 2009; previous models on August 5, 2008

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(CR5-10) April 2009



Lenovo® ThinkPad W500



ThinkPad Advanced Mini Dock
250410U



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500

ThinkPad® W500 4062 (Switchable) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Preload	Avail date
4062-24U	T9600	2.80	2GB	15.4" WUXGA	GMA, V5700	160G 7200	DVD±RW	Intel 5100 ²⁸	AT&T ²³	2G Turbo	9 Bus 32	Aug 08
4062-25U	T9600	2.80	4GB	15.4" WUXGA	GMA, V5700	200G 7200 FDE	DVD±RW	Intel 5100	AT&T		9 Bus 64	Aug 08
4062-26U	T9600	2.80	4GB	15.4" WUXGA	GMA, V5700	200G 7200 FDE	DVD±RW	Intel 5100	WWAN upg		9 Bus 32	Aug 08
4062-27U	T9600	2.80	2GB	15.4" WUXGA	GMA, V5700	160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	9 XP Pro	Aug 08
4062-35U	T9600	2.80	2GB	15.4" WUXGA	GMA, V5700	160G 7200	DVD±RW	Intel 5100	WWAN upg		9 XP Pro	Sep 08
4062-36U	T9400	2.53	2GB	15.4" WSXGA+	GMA, V5700	160G 7200	DVD±RW	Intel 5100	WWAN upg		9 XP Pro	Sep 08
4062-4FU	T9400	2.53	3GB	15.4" WSXGA+	GMA, V5700	320G 7200	DVD±RW	Intel 5100	WWAN upg		9 XP Pro	Mar 09
4062-4GU	T9600	2.80	3GB	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100	WWAN upg		9 XP Pro	Mar 09
4062-4HU	T9600	2.80	4GB	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100	AT&T	2G Turbo	9 Bus 64	Mar 09
4062-4JU	T9600	2.80	4GB	15.4" WUXGA	GMA, V5700	250G 7200 FDE	DVD±RW	Intel 5100	WWAN upg		9 Bus 32	Mar 09
4062-4LU	T9600	2.80	3GB	15.4" WUXGA	GMA, V5700	80G SSD	DVD±RW	Intel 5100	WWAN upg		9 XP Pro	Jun 09
<ul style="list-style-type: none">• These small and medium business (SMB) models are part of the US TopSeller™ Program• Power-packed engineering with Open GL graphics and ISV certifications												
Positioning Processor	Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache									Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 64 ♦ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (7200 rpm), 200GB (7200 rpm) Full Disk Encryption [FDE] , 250GB (7200 rpm) Full Disk Encryption [FDE] , or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports second disk, Shock Mounted Hard Drive											
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio											
Camera	Camera on top of screen, 1.3-megapixel, fixed focus											
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>											
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit											
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator											
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole											
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708 T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797 Advanced Ultrabay Battery III 57Y4536 Other accessories at lenovo.com/accessories											
										Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

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US models announced August 5 or September 23, 2008, March 24, 2009, or June 2, 2009

(CR5W-1) June 2009

✦ US models withdrawn effective September 2008, June 2009 or December 2009

ThinkPad® W500 4062 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery cells	Preload	Avail date	
4062-5DU	T9600	2.80	<i>3GB</i>	15.4" WSXGA+	GMA, V5700	320G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	9	XP Pro	Oct 09
4062-5EU	T9900	3.06	<i>3GB</i>	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	9	XP Pro	Oct 09
<ul style="list-style-type: none">• <i>These small and medium business (SMB) models are part of the US TopSeller™ Program</i>• <i>Power-packed engineering with Open GL graphics and ISV certifications</i>													
Positioning Processor	Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9600 or T9900 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache								Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	3GB 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;								Preloaded applications¹⁴ (only some listed)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™								<ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)				
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio												
Camera	Camera on top of screen, 1.3-megapixel, fixed focus												
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)								Supports ThinkVantage® technologies				
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip								90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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				
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available								ThinkPlus™, ²² 3-year LOR ²⁴ 9x5 NBD 41C9176				
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell		40Y6799	41C9177						
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell		40Y6797	41C9178						
4GB PC3-8500 DDR3 L-H SODIMM			55Y3708	Advanced Ultrabay Battery III		57Y4536	41C9179						
Other accessories on O-T500 sheet				Other accessories at lenovo.com/accessories			41C9180						
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty													

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5W-4) October 2009

ThinkPad® W500 4062 (Switchable) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Preload	Avail date
4062-5FU	T9900	3.06	4GB	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100 ²⁸	AT&T ²³	None	9	Oct 09
4062-5GU	T9900	3.06	4GB	15.4" WUXGA	GMA, V5700	250G FDE	DVD±RW	Intel 5100	WWAN upg	None	9	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9900 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64		
Memory	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;			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• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB ⁸ (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™					
Widescreen display Camera	15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 9-cell: starting at 6.2 lb (2.8kg) Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell, supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit					
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			Supports ThinkVantage® technologies		
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T			90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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		
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole			ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180		
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-T500 sheet	55Y3706 55Y3707 55Y3708	T/R/W/SL Series Li-Ion Battery 6-cell 40Y6799 T/R/W/SL Series Li-Ion Battery 9-cell 40Y6797 Advanced Ultrabay Battery III 57Y4536		Other accessories at lenovo.com/accessories		

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology

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Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Whorse (W) Gbl (G)	Avail date
4061-2HU T9400	2.53	4GB	15.4"	WSXGA+		GMA, V5700	160G 7200	DVD±RW	Intel 5300 ²⁸	WWAN upg		9	Bus 32	Aug 08
4061-2KU T9600	2.80	4GB	15.4"	WUXGA	Cam	GMA, V5700	200G FDE	DVD±RW	Intel 5300	WWAN upg		9	Bus 32	Aug 08
4061-2ZU T9400	2.53	4GB	15.4"	WSXGA+		GMA, V5700	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg		9	Bus 32 W G	Sep 08
4061-32U T9600	2.80	4GB	15.4"	WUXGA	Cam	GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg	2GB Turbo	9	Bus 64 W	Sep 08
4061-38U T9600	2.80	4GB	15.4"	WUXGA	Cam	GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg		9	XP Pro	Sep 08
4061-3FU T9400	2.53	2GB	15.4"	WUXGA		GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg	2GB Turbo	6	Bus 32 G	Sep 08
4061-4PU T9600	2.80	3GB	15.4"	WUXGA	Cam	GMA, V5700	80G SSD	DVD±RW	Intel 5100	WWAN upg		9	Bus 32	Jun 09

• **Power-packed engineering with Open GL graphics and ISV certifications**

Positioning Processor	Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 - <i>Some:</i> Genuine Windows Vista Business 64 ♦ <i>Vista models:</i> Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)					
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 Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (7200 rpm) or 200GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports second disk, Shock Mounted Hard Drive								
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio; <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio								
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus			Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz								
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions								
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr								
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)								
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None								
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip								
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available								
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799				ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797						
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536						
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories								

See footnotes for important warranty information

♦ Intel Centrino® 2 with vPro™ technology

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⚡ US model announced June 2, 2009; previous models on August 5 or September 23, 2008

(CR5W-2) June 2009

⚡ US model withdrawn effective August 2009

Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty**

ThinkPad® W500 4063 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ^a rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Whorse (W) GMP(P) Avail	date
4063-33U	T9400	2.53	4GB	15.4" WSXGA+		GMA, V5700	160G 7200 DVD±RW	❖ Intel 5100 ²⁸	WWAN upg			9	Bus 32 WGP	Sep 08
4063-34U	T9600	2.80	4GB	15.4" WUXGA	Cam	GMA, V5700	160G 7200 DVD±RW	❖ Intel 5300 ²⁸	WWAN upg	2GB Turbo		9	Bus 64 W	Sep 08
4063-3FU	T9400	2.53	2GB	15.4" WUXGA		GMA, V5700	160G 7200 DVD±RW	❖ Intel 5300	WWAN upg	2GB Turbo	6	Bus 32	GP	Sep 08

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	Mobile workstation; two spindles Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Business 64 ✧ Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
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					
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio; <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio					
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz			Supports ThinkVantage® technologies 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver 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 4-year LOR 9x5 NBD 12X5630 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm					
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)					
Case material	<i>Top:</i> Super-Elastic Polycarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic					
Battery - type	Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim					
Battery - life ¹⁰	<i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)			ThinkPlus™. ²² 4-year LOR 9x5 NBD 12X5630 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54					
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit					
Smart Card Read	None					
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)					
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years /1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	Advanced Ultrabay Battery III	57Y4536			
Other accessories on O-T500 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US models announced September 23, 2008

❖ Intel Centrino® 2 with vPro™ technology

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(CR5W-3) November 2008

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann	03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s	43N3214	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay or (in the ThinkPad Advanced Dock 250310U with Serial Hard Drive Ultrabay Slim Adapter 40Y8725)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann	06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05
ThinkPad Advanced Dock	250310U	ann	09/20/05

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
T500/R500/W500 Series 15W Privacy Filter	43R2474	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

T/R/W/SL Series Li-Ion Battery 6-cell	40Y6799	ann	01/05/06
T/R/W/SL Series Li-Ion Battery 9-cell	40Y6797	ann	09/20/05
Advanced Ultrabay Battery III ⁴³	57Y4536	ann	08/25/09

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
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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
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⁴⁵ Only compatible with the integrated graphics models.

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

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•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 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L174 17" Monitor	9227AE1	ann	04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann	09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann	09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08
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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad W700



Lenovo ThinkPad W700 with
ThinkPad W700 Mini Dock 2.0
57Y4345



ThinkPad 170W AC Adapter
41R4421



W700 Series Li-Ion Battery 9-cell
45J7914



Lenovo ThinkPad W700



Lenovo ThinkPad W700

ThinkPad® W700 2758 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Cam-era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card slot	Color calib	Digitizer	Preload	Avail date
2758-28U	T9400	2.53	1GB	17" WXGA+	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300 ²⁸		Smart	X-Rite	Wacom	Bus64	Sep08
2758-4SU	T9600	2.80	4GB	17" WUXGA	Cam	512MB	2x160G 7200		DVD±RW	Intel 5300	2G Turbo	Smart	X-Rite	Wacom	Bus64	Sep08
2758-29U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x250G 5400	1	DVD±RW	Intel 5300		Smart	X-Rite	Wacom	Bus64	Sep08
2758-MPU	Q9000	2.00	4GB	17" WUXGA	Cam	512MB	1x80G SSD		DVD±RW	Intel 5300		/54			Bus64	Jun 09
2758-MWU	P8700	2.53	3GB	17" WXGA+	Cam	512MB	1x320G 7200		DVD±RW	Intel 5300		/54			XP Pro	Oct 09
2758-MXU	T9900	3.06	4GB	17" WUXGA	Cam	512MB	2x320G 7200		DVD±RW	Intel 5300		/54			Bus64	Oct 09
• These small and medium business (SMB) models are part of the US TopSeller™ Program																
Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Duo processor P8700 with dual-core , Intel HD Boost, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Duo processor T9400, T9600 or T9900 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Quad processor Q9000 with quad-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Extreme processor X9100 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 64 ◇ Vista models: Vista Premium logo				
Memory	1GB, 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 applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™ PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models)				
SATA DVD±RW Ultrabay Enhanced SATA disks	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> One disk, 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>Some:</i> Two disks, 160GB (7200 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive											ISV software certifications Supports ThinkVantage® technologies				
Widescreen display	<i>Some:</i> 17.0" (431.8mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut <i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus											ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter				
Discrete graphics	<i>Some:</i> NVIDIA® Quadro® FX2700M , PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M , PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)											170-watt AC adapter 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 Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180				
Dimensions ³ Weight ² Case material	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm <i>9-cell:</i> starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell <i>9-cell:</i> up to 2.3 hr											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Battery - type Battery - life ¹⁰	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus One ExpressCard/34 <i>Some:</i> [54] One ExpressCard/34 or ExpressCard/54 None <i>Some:</i> Smart Card Reader 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											Other accessories at lenovo.com/accessories				
Chipset	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Other accessories on O-W700 sheet				
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Other accessories on O-W700 sheet				
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Other accessories on O-W700 sheet				
Security Security chip Fingerprint reader	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Other accessories on O-W700 sheet				
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available											Other accessories on O-W700 sheet				
Other accessories on O-W700 sheet	Other accessories at lenovo.com/accessories											Other accessories on O-W700 sheet				

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

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US models announced October 22, 2009; previous models on August 12, 2008 or June 2, 2009

(NIC1-1) November 2009

US models withdrawn effective September 2008 or December 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Discrete Cam- graphics era memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ Color	Color Fing calib	Digit- izer	Workhorse (W) Global (G) Avail Preload date
2752-36U	T9600	2.80	4GB	17" WUXGA	Cam 1GB	2x250G 5400	1	DVD±RW	Intel 5300 ²⁸	None	/54	Yes	X-Rite	Bus64 W Sep 08
2752-37U	T9600	2.80	4GB	17" WUXGA	Cam 1GB	2x250G 5400	1	DVD±RW	Intel 5300	None	/54	Yes	X-Rite	Bus64 W Sep 08
2752-38U	T9600	2.80	4GB	17" WUXGA	Cam 1GB	2x320G 5400	0	DVD±RW	Intel 5300	None	CF	Yes	X-Rite	Wacom Bus64 Sep 08
2752-3NU	T9600	2.80	4GB	17" WUXGA	Cam 1GB	2x320G 5400	0	DVD±RW	Intel 5300	None	CF	Yes	X-Rite	Wacom Bus64 Sep 08
2752-3YU	T9600	2.80	2GB	17" WXGA+	Cam 1GB	2x200G FDE	0	DVD±RW	Intel 5300	None	/54	Yes	X-Rite	Wacom Bus32 W Sep 08
2752-MSU	Q9000	2.00	3GB	17" WUXGA	Cam 512MB	1x160G 7200		DVD±RW	Intel 5300	None	/54	Yes		Bus32 Jun 09
2752-MTU	Q9000	2.00	4GB	17" WUXGA	Cam 512MB	1x80G SSD		DVD±RW	Intel 5300	None	/54	Yes		Bus64 Jun 09
<ul style="list-style-type: none"> • First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks • Select models include digitizer on palm rest and dual-link DVI-D and DisplayPort ports 														
Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Duo processor T9600 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Quad processor Q9000 with quad-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache												Preloaded operating system ²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Business 64 ◇ Vista Premium logo	
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 (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)	
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 80GB® Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> One disk, 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>Some:</i> Two disks, 250GB (5400 rpm), 320GB (5400 rpm), or 200GB Full Disk Encryption [FDE] (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive													
Widescreen display	<i>Some:</i> 17.0" (431.8mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (431.8mm) WUXGA (1920x1200) color, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut													
Color calibration Camera	<i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus													
Discrete graphics	<i>Some:</i> NVIDIA® Quadro® FX2700M, PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M, PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)													
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions												ISV software certifications Supports ThinkVantage® technologies	
Dimensions ³ Weight ² Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic												ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter	
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr													
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus													
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	One ExpressCard/34 <i>Some:</i> [54] One ExpressCard/34 or ExpressCard/54 <i>Some:</i> [CF] One Type I slot 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												170-watt AC adapter 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	
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180	
Security Security chip Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Limited warranty ¹²	3-year - EasyServ™, 19 depot repair service / service upgrades ²² available													
2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3707 55Y3708 W700 Series Li-Ion Battery 9-cell 45J7914 ThinkPad W700 Mini Dock 2.0 57Y4345 Other accessories at lenovo.com/accessories													

See footnotes for important warranty information

◇ Intel Centrino 2 with vPro™ technology

Ⓜ US models announced June 2, 2009; previous models on August 12, 2008

Ⓢ US model withdrawn effective August 2009

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(NIC1-2) June 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ slot	Fing	Digit- izer	Workhorse (W) Global (G) Avail date
2752-6SU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300 ²⁸		/54	Yes		Bus64 W G Sep 08
2752-6TU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	1	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 W G Sep 08
2752-3AU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		/54	Yes	Wacom	Ult64 Sep 08
2752-6UU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 W G Sep 08
2752-3DU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		CF	Yes	Wacom	Bus64 Sep 08
2752-5ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 Sep 08
2752-62U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200		DVD±RW	Intel 5300	2G Turbo	/54	Yes	Wacom	Bus64 W Sep 08
2752-43U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		/54	Yes	Wacom	Ult64 W Sep 08
2752-6ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200		DVD±RW	Intel 5300		CF	Yes		XP Pro G Sep 08
2752-72U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300		CF	Yes	Wacom	XP Pro G Sep 08

- First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks
- Select models include digitizer on palm rest and dual-link DVI-D and DisplayPort ports

Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Extreme processor X9100 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 64 - Some: Genuine Windows Vista Ultimate 64 ✧ Vista models: Vista Premium logo Preloaded applications ¹⁴ (all OSes, only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software• ThinkPad Utilities (Power Manager and Presentation Director)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)• huey™PRO Monitor Color Correction by Pantone®/X-Rite® ISV software certifications Supports ThinkVantage® technologies ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: <ul style="list-style-type: none">• Security key lock• Security cable lock slot• External monitor ports<ul style="list-style-type: none">– Analog VGA DB-15– Dual-link DVI-D– DisplayPort• Four USB 2.0 ports• eSATA port• Gigabit ethernet port• Microphone in and headphone out• S/PDIF (RCA coaxial digital out)• Requires 170 watt AC adapter 170-watt AC adapter 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 ThinkPlus™.22 3-year LOR 24 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Memory	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			
SATA DVD±RW SATA BD burner Ultrabay Enhanced SATA disk	Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) Some: Blu-ray™ burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9150) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB ⁸ (7200 rpm) or 200GB Full Disk Encryption [FDE] (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display Color calibration Camera	17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus			
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express x16, 1GB memory Max external resolution: 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)			
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr			
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus One ExpressCard/34 Some: [54] One ExpressCard/34 or ExpressCard/54 Some: [CF] One Type I slot			
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot)			
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3706 55Y3707 55Y3708	W700 Series Li-Ion Battery 9-cell ThinkPad 170W AC Adapter ThinkPad W700 Mini Dock 2.0 Other accessories at lenovo.com/accessories	45J7914 41R4421 57Y4345	

See footnotes for important warranty information
US models announced August 12, 2008
⚡ US models withdrawn effective August 2009

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ThinkPad® W700 2752 (Quad-Core Extreme)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	SATA RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ Fing	Digit- izer	Workhorse (W) Global (G) Avail date
2752-3KU QX9300		2.53	4GB	17" WUXGA	Cam	1GB	2x320G 5400	0	BD burner	Intel 5300 ²⁸	None	/54	Yes	Wacom Bus64 No Sep 08

- **First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks**
- **Select models include digitizer on palm rest and dual-link DVI-D and DisplayPort ports**

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ 2 Extreme processor QX9300 with quad-core , Intel HD boost, 1066MHz system bus, and 12MB L2 cache			Preloaded operating system²⁰ - Genuine Windows® Vista® Business 64 ✧ Vista Premium logo Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)• huey™PRO Monitor Color Correction by Pantone®/X-Rite®		
Memory	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			ISV software certifications Supports ThinkVantage® technologies		
SATA BD burner	Blu-ray™ burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9150)			ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: <ul style="list-style-type: none">• Security key lock• Security cable lock slot• External monitor ports<ul style="list-style-type: none">– Analog VGA DB-15– Dual-link DVI-D– DisplayPort• Four USB 2.0 ports• eSATA port• Gigabit ethernet port• Microphone in and headphone out• S/PDIF (RCA coaxial digital out)• Requires 170 watt AC adapter		
Ultrabay Enhanced SATA disk	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 320GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Widescreen display	17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut			170-watt AC adapter 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		
Color calibration	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus			ThinkPlus™, 22 3-year LOR 24 9x5 NBD 41C9176		
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)			ThinkPlus 4-year LOR 9x5 NBD 41C9177		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys			ThinkPlus 5-year LOR 9x5 NBD 41C9179		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			ThinkPlus 4-year P&L P/U Depot 41C9178		
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label			ThinkPlus 5-year P&L P/U Depot 41C9180		
Numeric keypad	10-key numeric keypad on right side of keyboard			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Digitizer	Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side					
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm					
Weight ²	<i>9-cell:</i> starting at 8.4 lb (3.8kg)					
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic					
Battery - type	Lithium Ion 9-cell					
Battery - life ¹⁰	<i>9-cell:</i> up to 2.3 hr					
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus					
ExpressCard/34	One ExpressCard/34					
ExpressCard/54	[54] One ExpressCard/34 or ExpressCard/54					
Compact Flash	None					
Smart Card Read	None					
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)					
Ports	Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)					
2G Turbo	<i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator					
UWB	None (uses Half-Mini PCIe slot)					
Modem	56K V.92 ⁶ modem in Communications Daughter Card socket					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-year - EasyServ™, 19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	W700 Series Li-Ion Battery 9-cell	45J7914			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad 170W AC Adapter	41R4421			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad W700 Mini Dock 2.0	57Y4345			
Other accessories on O-W700 sheet		Other accessories at lenovo.com/accessories				

See footnotes for important warranty information
US models announced August 12, 2008

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Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ³ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card slot	Blue/ Fing	Digit- izer	Workhorse (W) Global (G), Ed Avail
2753-48U	T9400	2.53	1GB	17" WUXGA		512MB	2x160G 7200	0	Combo	Intel 5300 ²⁸	None	/54	Yes	Bus32	Sep 08
2753-6SU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	/54	Yes	Bus64	W G P Sep 08
2753-6TU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	1	DVD±RW	Intel 5300	None	CF	Yes	Wacom	Bus64 W G P Sep 08
2753-6UU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	Wacom	Bus64 W G P Sep 08
2753-6ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	XP Pro	G P Sep 08
2753-72U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	Wacom	XP Pro G P Sep 08
2753-MNUT9600	T9600	2.80	4GB	17" WUXGA	Cam	512MB	2x160G 7200		DVD±RW	Intel 5300	None	/54	Yes	Bus32	W Ed Mar 09

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
- First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks

Processor	Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Extreme processor X9100 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ <ul style="list-style-type: none">- <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business- <i>Some:</i> Genuine Windows Vista Business 32- <i>Some:</i> Genuine Windows Vista Business 64 ♦ <i>Vista models:</i> Vista Premium logo
Memory	1GB 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 Combo	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148)			
SATA DVD±RW	<i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149)			
Ultrabay Enhanced	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high			
SATA disk	Two disks, 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			
Widescreen display	17.0" (431.8mm) WUXGA (1920x1200) color, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut			
Color calibration	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest			
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus			
Discrete graphics	<i>Some:</i> NVIDIA® Quadro® FX2700M, PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M, PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536 @85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)			
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys			Preloaded applications ¹⁴ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)• huey™PRO Monitor Color Correction by Pantone®/X-Rite®
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label			
Numeric keypad	10-key numeric keypad on right side of keyboard			
Digitizer	<i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side			
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions			
Dimensions ³	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm			
Weight ²	9-cell: starting at 8.4 lb (3.8kg)			
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			
Battery - type	Lithium Ion 9-cell			
Battery - life ¹⁰	9-cell: up to 2.3 hr			
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus			ISV software certifications Supports ThinkVantage® technologies ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: <ul style="list-style-type: none">• Security key lock• Security cable lock slot• External monitor ports<ul style="list-style-type: none">– Analog VGA DB-15– Dual-link DVI-D– DisplayPort• Four USB 2.0 ports• eSATA port• Gigabit ethernet port• Microphone in and headphone out• S/PDIF (RCA coaxial digital out)• Requires 170 watt AC adapter
ExpressCard/34	One ExpressCard/34			
ExpressCard/54	<i>Some:</i> [/54] One ExpressCard/34 or ExpressCard/54			
Compact Flash	<i>Some:</i> [CF] One Type I slot			
Smart Card Read	None			
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)			
Ports	Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
Mini PCI Express	Three Mini PCI Express slots			
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)			
2G Turbo	None			
UWB	None (uses Half-Mini PCIe slot)			
Modem	56K V.92 ⁶ modem in Communications Daughter Card socket			
Bluetooth™	Bluetooth 2.1 wireless, LED indicator			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1			
Intel AMT	Intel Active Management Technology (iAMT)			
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available			170-watt AC adapter 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 4-year LOR ²⁴ 9x5 NBD 12X5630 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	W700 Series Li-Ion Battery 9-cell	45J7914	
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad 170W AC Adapter	41R4421	
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad W700 Mini Dock 2.0	57Y4345	
Other accessories on O-W700 sheet		Other accessories at lenovo.com/accessories		

See footnotes for important warranty information

♦ Intel Centrino® 2 with vPro™ technology

US model announced March 24, 2009; previous models on August 12, 2008

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(NIC1-5) November 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card slot	Blue/ Fing	Digit- izer	Workhorse (W) Global (G) Avail date
2752-MNUT9600		2.80	4GB	17" WUXGA	Cam	512MB	2x160G 7200	None	DVD±RW	❖Intel 5300 ²⁸	None	/54	Yes	None	Bus32 W Mar 09
<ul style="list-style-type: none">• First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks• This model has an EasyServ™, 19 depot repair service 3-year limited warranty• Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.• Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.															
Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Duo processor T9600 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo			
Memory	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;											Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Enhanced disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											<ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software• ThinkPad Utilities (Power Manager and Presentation Director)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)• huey™PRO Monitor Color Correction by Pantone®/X-Rite®			
Widescreen display	17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut											ISV software certifications Supports ThinkVantage® technologies ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: <ul style="list-style-type: none">• Security key lock• Security cable lock slot• External monitor ports<ul style="list-style-type: none">– Analog VGA DB-15– Dual-link DVI-D– DisplayPort• Four USB 2.0 ports• eSATA port• Gigabit ethernet port• Microphone in and headphone out• S/PDIF (RCA coaxial digital out)• Requires 170 watt AC adapter			
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus														
Discrete graphics	NVIDIA® Quadro® FX2700M , PCI Express® x16, 512MB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)														
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard None Two LEDs illuminate the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											170-watt AC adapter 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			
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr														
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus One ExpressCard/34														
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	[54] One ExpressCard/34 or ExpressCard/54 None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-year - EasyServ™, 19 depot repair service / service upgrades ²² available														
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3706 55Y3707 55Y3708		W700 Series Li-Ion Battery 9-cell ThinkPad 170W AC Adapter ThinkPad W700 Mini Dock 2.0 Other accessories at lenovo.com/accessories		45J7914 41R4421 57Y4345										

See footnotes for important warranty information
 US model announced March 24, 2009

❖ Intel Centrino 2 with vPro™ technology

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 (NIC1-6) May 2009

ThinkPad®



Lenovo® ThinkPad W700ds



Lenovo ThinkPad W700ds



Lenovo ThinkPad W700ds



ThinkPad 17W Business Topload Case
43R9117



Lenovo ThinkPad W700ds

ThinkPad® W700ds 2758 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Primary display	Secondary display	Camera	Disk(s) SATA GB ^a	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ slot	Digit- izer	Workhorse (W) Global (G) Avail Preload date
2758-MMU Q9000	2.00	4GB	17" WUXGA	10.6" WXGA	Cam	2x320GB	1	DVD±RW	Intel 5300 ²⁸	None	/54	Yes	Wacom	Bus64 No Mar 09
2758-MYU Q9000	2.00	4GB	17" WUXGA	10.6" WXGA	Cam	2x320GB	1	DVD±RW	Intel 5300	None	/54	Yes	Wacom	Bus64 No Oct 09

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks**
- **Select models include digitizer on palm rest**

Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Quad processor Q9000 with quad-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 64 ♦ Vista Premium logo Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®		
Memory	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;					
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™					
Displays	Primary: 17.0" (431.8mm) WUXGA (1920x1200) color, widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; Secondary: 10.6" (269.2mm) WXGA (768x1280) color, portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size					
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus					
Discrete graphics	NVIDIA® Quadro® FX3700M, PCI Express® x16, 1GB memory; Max external resolution: 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)					
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions			ISV software certifications Supports ThinkVantage® technologies		
Dimensions ³ Weight ² Case color Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm 9-cell: starting at 10.9 lb (4.96kg) Black Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter		
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.1 hr					
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus					
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	One slot (ExpressCard/34) One slot (ExpressCard/34, ExpressCard/54) None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)					
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			170-watt AC adapter 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		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			ThinkPlus™.22 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180		
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	W700 Series Li-Ion Battery 9-cell	45J7914			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad 170W AC Adapter	41R4421			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708	ThinkPad W700 Mini Dock 2.0	57Y4345			
Other accessories on O-W700 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information

Intel Centrino® 2 with vPro™ technology

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US model announced October 22, 2009; previous models on March 24, 2009

(NIC15-3) October 2009

US model withdrawn effective December 2009

Type-model	Proc- essor	Mem- ory	Primary display	Secondary display	Camera	Disk(s) SATA GB ^a	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	CardBlue/ slot	Digit- izer	Workhorse (W) Global (G) Avail Preload date
2752-EPU Q9100	2.26	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300 ²⁸	None	/54	Yes	Bus64 Jan 09
2752-E7U QX9300	2.53	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300	None	/54	Yes	Wacom Bus64 WG Jan 09

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks**
- **Select models include digitizer on palm rest**

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ 2 Quad processor Q9100 with quad-core , Intel HD boost, 1066MHz system bus, and 12MB L2 cache or Intel Core 2 Extreme processor QX9300 with quad-core , Intel HD boost, 1066MHz system bus, and 12MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 64 ✧ Vista Premium logo
Memory	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™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™			ISV software certifications Supports ThinkVantage® technologies ThinkPad W700 Mini Dock Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter 170-watt AC adapter 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 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Displays	<i>Primary:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; <i>Secondary:</i> 10.6" (269.2mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size			
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus			
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express® x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)			
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions			
Dimensions ³ Weight ² Case color Case material	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm <i>9-cell:</i> starting at 10.9 lb (4.96kg) Black <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic			
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell:</i> up to 2.1 hr			
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus			
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	One slot (ExpressCard/34) <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54) None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)			
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3706 55Y3707 55Y3708	W700 Series Li-Ion Battery 9-cell ThinkPad 170W AC Adapter ThinkPad W700 Mini Dock 2.0 Other accessories at lenovo.com/accessories	45J7914 41R4421 57Y4345	

Type-model	Proc- essor	Mem- ory	Primary display	Secondary display	Camera	Disk(s) SATA GB ^a	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	CardBlue/ Digit- izer	Workhorse (W) Global (G) Avail Preload GMP (P) date
2753-E7U QX9300	2.53	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300 ²⁸	None	/54 Yes Wacom	Bus64 WGP Jan 09
<ul style="list-style-type: none">• ds = dual screen• 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks• Select models include digitizer on palm rest• This model is part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty												
Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Extreme processor QX9300 with quad-core , Intel HD boost, 1066MHz system bus, and 12MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 64 ♦ Vista Premium logo Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)• huey™PRO Monitor Color Correction by Pantone®/X-Rite®
Memory	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 Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											
Displays	<i>Primary:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; <i>Secondary:</i> 10.6" (269.2mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size											
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus											
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express® x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)											
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label											
Numeric keypad	10-key numeric keypad on right side of keyboard											
Digitizer	Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side											
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm											
Weight ²	<i>9-cell:</i> starting at 10.9 lb (4.96kg)											
Case color	Black											
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											
Battery - type	Lithium Ion 9-cell											
Battery - life ¹⁰	<i>9-cell:</i> up to 2.1 hr											
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus											
ExpressCard/34	One slot (ExpressCard/34)											
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)											
Compact Flash	None											
Smart Card read	None											
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)											
Ports	Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)											
Mini PCI Express	Three Mini PCI Express slots											
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)											
2G Turbo	None											
UWB	None (uses Half-Mini PCIe slot)											
Modem	56K V.92 ⁶ modem in Communications Daughter Card socket											
Bluetooth™	Bluetooth 2.1 wireless, LED indicator											
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706					W700 Series Li-Ion Battery 9-cell			45J7914			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707					ThinkPad 170W AC Adapter			41R4421			
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708					ThinkPad W700 Mini Dock 2.0			57Y4345			
Other accessories on O-W700 sheet						Other accessories at lenovo.com/accessories						
ThinkPlus™. ²² 4-year LOR 9x5 NBD 12X5630												
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty												

See footnotes for important warranty information
 US model announced January 6, 2009

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 (NIC15-2) January 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann 08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann 03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann 08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann 03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann 03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann 06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann 08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann 08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann 08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann 08/05/08
CD-RW/DVD-ROM Ultrabay Enh SATA	43R9148	ann 08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann 08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann 08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB Portable Diskette Drive	05K9276	ann 06/05/00
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 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad W700 Mini Dock 2.0	57Y4345	ann 09/29/09

More information at www.lenovo.com/support/W700minidock

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Batteries

W700 Series Li-Ion Battery 9-cell	45J7914	ann 08/12/08
ThinkPad 170W AC Adapter	41R4421	ann 08/12/08

More information at www.lenovo.com/alldaycomputing

Carrying Cases

Up to 17.0" widescreen models:		
ThinkPad 17W Business Topload Case	43R9117	ann 08/12/08

Monitors

ThinkVision® L174 17" Monitor	9227AE1	ann 04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann 09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann 09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann 09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann 09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	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 Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200



Lenovo ThinkPad X200 with
X200/X200s (WXGA) 12W Privacy Filter
55Y9264



Lenovo ThinkPad X200



Lenovo ThinkPad X200 with
ThinkPad X200 UltraBase
43R8781



Lenovo ThinkPad X200



ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X200 (7454) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Pre- load	Whorse (W) Gbl (G) Educ	Avail date
✖ 7454-2GU	P8600	2.40	2GB	12.1" WXGA		160GB 5400			✚ Intel 5100 ²⁸		4	XP Pro		Aug 08
✖ 7454-2HU	P8600	2.40	2GB	12.1" WXGA		160GB 5400 DVD±RW		UltraBase	✚ Intel 5100		6	XP Pro		Aug 08
✖ 7454-2JU	P8600	2.40	2GB	12.1" WXGA	Cam	160GB 7200 DVD±RW		UltraBase	✚ Intel 5300 ²⁸	WWAN upg	2G Turbo	6	Bus 32	Aug 08
✖ 7454-2NU	P8400	2.26	2GB	12.1" WXGA		160GB 5400			✚ Intel 5100	AT&T ²³		4	Bus 32	Aug 08
✖ 7454-2PU	P8400	2.26	2GB	12.1" WXGA		160GB 7200 DVD±RW		UltraBase	✚ Intel 5100	AT&T		6	Bus 32	Aug 08
✖ 7454-2QU	P8600	2.40	2GB	12.1" WXGA	Cam	160GB 7200 DVD±RW		UltraBase	✚ Intel 5100	AT&T	2G Turbo	6	Bus 32	Aug 08
✖ 7454-2ZU	P8600	2.40	2GB	12.1" WXGA	Cam	160GB 7200 DVD±RW		UltraBase	✚ Intel 5100	AT&T		6	XP Pro	Sep 08
✖ 7454-95U	P8600	2.40	2GB	12.1" WXGA		160GB 5400			✚ Intel 5100			4	XP Pro	Sep 08
✖ 7454-96U	P8600	2.40	2GB	12.1" WXGA	Cam	160GB 7200 DVD±RW		UltraBase	✚ Intel 5300	WWAN upg		6	XP Pro	Sep 08
✖ 7454-9FU	P8600	2.40	2GB	12.1" WXGA		160GB 5400			✚ WiMAX	WWAN upg		4	Bus 32	Jan 09
✖ 7454-9GU	P8600	2.40	3GB	12.1" WXGA	Cam	128GB SSD DVD±RW		UltraBase	✚ Intel 5100	WWAN upg		6	XP Pro	Jan 09
✖ 7454-9HU	P8600	2.40	2GB	12.1" WXGA	Cam	160GB 5400			✚ Intel 5100	WWAN upg		6	Ult 32 Edu	Mar 09
✖ 7454-9JU	P8700	2.53	2GB	12.1" WXGA	Cam	80GB SSD DVD±RW		UltraBase	✚ Intel 5100	WWAN upg		6	XP Pro	Jun 09
✖ 7454-36U	P8700	2.53	4GB	12.1" WXGA LED	Cam	160GB 7200 DVD±RW		UltraBase	✚ Intel 5100	AT&T		6	XP Pro	Oct 09
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8400, P8600 or P8700 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system ²⁰			
Memory	2GB, 3GB or 4GB std / 4GB 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 1 socket; 1 socket available										- Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Ultimate 32 ✦ Vista models: Vista Premium logo			
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) <i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox			
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio										Supports ThinkVantage® technologies			
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										ThinkPad X200 UltraBase™			
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45										• Provides desktop expansion and cable management for X200 Series			
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz										• Easily connects to the bottom of the X200 Series for traveling			
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										- CD-RW/DVD-ROM Ultrabay Slim			
Touch pad	None										SATA 1.5Gb/s 43N3213			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										- DVD Burner Ultrabay Slim			
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg)										SATA 1.5Gb/s 43N3214			
Weight ²	<i>Color:</i> black; <i>Material:</i> magnesium alloy										- Serial ATA Hard Drive			
Case	Lithium Ion 4-cell or 6-cell										Bay Adapter III 43N3412			
Battery - type	4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr										Disks supported (some):			
Battery - life ¹⁰											• 250GB FDE 7200 rpm 43N3410			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										• 320GB Disk 7200 rpm 43N3411			
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)										Other features:			
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)										• Power button (front)			
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)										• Stereo speakers (2 watt)			
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										• Security key lock, security keyhole, and optional security screw			
Mini PCI Express	Three Mini PCI Express slots										• Analog DB-15 monitor port			
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)										• DisplayPort (supports single-link DVI-D via cable 45J7915)			
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)										• Four USB 2.0 ports			
WiMAX	<i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)										• Gigabit ethernet port			
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)										• Microphone in and headphone out			
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T										• Second battery charger			
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator										• Requires 65 or 90 watt AC adapter			
UWB	None										• 1.6 lb; 730g			
Modem	56K V.92 ⁶ modem										65-watt (GMA graphics) AC Adapter			
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										Climate Savers® certified			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										EPEAT™ Gold rating (LED models)			
Intel AMT	None										EPEAT Silver rating (other models)			
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ENERGY STAR® 5.0-compliant			
Security	Power-on password, hard disk password, supervisor password, security keyhole										ROHS-compliant			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										International Warranty Service ¹⁷			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available										via 800-426-7378			
Other accessories on O-X200 sheet						Other accessories at lenovo.com/accessories								

See footnotes for important warranty information

✚ Intel Centrino® 2 processor technology

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US models announced August 5 or September 2, 2008 or January 6, March 17, June 2, or October 22, 2009

(MOC1-1) October 2009

✖ US models withdrawn effective September 2008 or June, October, or December 2009

ThinkPad® X200 (7454) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Pre- load	Whorse (W) Gbl (G) Educ	Avail date
7454-32U	P8700	2.53	2GB	12.1" WXGA	LED		160GB 5400			❖ Intel 5100 ²⁸	WWAN upg	None	6	XP Pro	No	Oct 09
7454-34U	P8700	2.53	2GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	❖ Intel 5100	WWAN upg	None	6	XP Pro	No	Oct 09
7454-3SU	P8800	2.66	4GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	❖ Intel 5100	WWAN upg	None	6	XP Pro	No	Oct 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8700 or P8800 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32		
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director)		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase					
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz			Supports ThinkVantage® technologies		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions			ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg)					
Weight ² Case color Case material Battery - type Battery - life ¹⁰	Black Magnesium alloy Lithium Ion 6-cell 4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)			Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 3SU model: Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant		
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available			International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Series Li-Ion Battery 4-cell	43R9253			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Series Li-Ion Battery 6-cell	43R9254			
ThinkPad X200 UltraBase	43R8781	X200 Series Li-Ion Battery 9-cell	43R9255			
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology
Intel Centrino 2 with vPro™ technology

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(MOC2-1) October 2009

ThinkPad® X200 (7454) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo	Whorse (W) Pre- Gbl (G) Educ	Avail date
7454-33U	P8700	2.53	2GB	12.1" WXGA	LED		160GB 5400			Intel 5100 ²⁸	WWAN upg	None	6 Pro 32 No	Oct 09
7454-3VU	P8700	2.53	2GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	Intel 5100	Verizon ¹⁶	None	6 Pro 32 No	Nov 09
7454-3WU	P8700	2.53	2GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	WiMAX	WWAN upg	None	6 Pro 32 No	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch			
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁹ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase													
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Some: camera on top of screen, 1.3-megapixel, fixed focus													
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg) Color: black; Material: magnesium alloy													
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell 4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
Media slice Multicard reader ExpressCard/54 Ports	Some: X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Mini PCI Express Intel 5100 ²⁸ WiMAX	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)													
WWAN upg Verizon ¹⁶	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon													
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781 X200 Series Li-Ion Battery 4-cell 43R9253 X200 Series Li-Ion Battery 6-cell 43R9254 X200 Series Li-Ion Battery 9-cell 43R9255 Other accessories at lenovo.com/accessories													

See footnotes for important warranty information

Intel Centrino® 2 processor technology

US models announced November 3, 2009; previous model on October 22, 2009

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(MOC2-2) November 2009

ThinkPad® X200 (7455) - TopSeller

Personal Systems Reference (PSREF)

Proc- Type-model	essor GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Pre- load	Whorse (W) Gbl (G) Educ	Avail date
7455-D9U	P8600	2.40	2GB	12.1" WXGA	Cam	160GB	5400	Optional	Optional	Intel 5100 ²⁸ WWAN upg	None	6 Ult 32 Educ	Mar09

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an EasyServ™¹⁹ depot repair service 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core , Intel HD boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Ultimate 32 ↳ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • Adobe® Reader®		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std <i>X200 UltraBase</i>					
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536 @ 75Hz</i>			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions			Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg)					
Weight ² Case color Case material Battery - type Battery - life ¹⁰	Black Magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip			65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver 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		
Limited warranty ¹²	3-years /1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Series Li-Ion Battery 4-cell	43R9253			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Series Li-Ion Battery 6-cell	43R9254			
ThinkPad X200 UltraBase	43R8781	X200 Series Li-Ion Battery 9-cell	43R9255			
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US model announced March 24, 2009

Intel Centrino® 2 processor technology

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(MOC1-7) April 2009

US model withdrawn effective December 2009

	Proc- Type-model	essor GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue- tooth	Finger Bat- print erty reader cells	Pre- load	Whorse (W) Gbl (G) TAA	Avail date	
	7458-5EU	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸			Blue	Finger	6	B32 W G	Aug 08	
	7458-5FU	P8600	2.40	2GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5100			Blue	Finger	6	B32 W G	Aug 08	
	7458-69U	P8600	2.40	2GB	12.1" WXGA Cam	160GB 5400	Optional	Optional	Intel 5300 ²⁸	WWAN upg	2G Turbo	Blue	Finger	6	B32 W G	Aug 08	
	7458-M2U	P8600	2.40	1GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100			Blue	Finger	4	B32 W G	Aug 08	
	7458-M3U	P8600	2.40	1GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100			Blue	Finger	6	B32 W G	Aug 08	
	7458-7DU	P8600	2.40	2GB	12.1" WXGA Cam	160GB 7200	Optional	Optional	Intel 5300	WWAN upg	2G Turbo	Blue	Finger	6	B32	Aug 08	
	7458-X4U	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100	WWAN upg			Finger	6	B32 TAA	Aug 08	
	7458-5HU	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	Verizon ¹⁶		Blue	Finger	9	B32 W	Sep 08	
	7458-7CU	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	AT&T ²³		Blue	Finger	9	B32 W	Sep 08	
	7458-87U	P8600	2.40	2GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5100			Blue	Finger	6	XP G	Sep 08	
	7458-88U	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	AT&T		Blue	Finger	9	XP W	Sep 08	
	7458-89U	P8600	2.40	2GB	12.1" WXGA Cam	160GB 5400	Optional	Optional	Intel 5300	Verizon		Blue	Finger	9	XP W	Sep 08	
	Positioning US Govt (TAA) ⁵ Processor	An ultraportable for the executive on the move; one spindle X4U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo					
	Memory	1GB, 2GB, or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®					
	Diskette drive SATA Combo Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for ThinkPad X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411					
	Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Some: camera on top of screen, 1.3-megapixel, fixed focus										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g					
	Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz (VGA)										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver 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 ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions															
	Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg)															
	Weight ² Case color Case material Battery - type Battery - life ¹⁰	Black Magnesium alloy Lithium Ion 4-cell, 6-cell, or 9-cell 4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr															
	Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
	Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
	Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack															
	Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip															
	Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available															
	1GB PC3-8500 DDR3 L-H SODIMM					55Y3706									43R9253		
	2GB PC3-8500 DDR3 L-H SODIMM					55Y3707									43R9254		
	ThinkPad X200 UltraBase					43R8781									43R9255		
	Other accessories on O-X200 sheet											Other accessories at lenovo.com/accessories					

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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US model announced September 2, 2008; previous models on August 5, 2008

(MOC1-2) January 2009

US model withdrawn effective August 2008

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue- tooth	Finger print reader	Bat- tery cells	Pre- load	Whorse (W) Gbl (G)	Avail date								
7458-8SU	P8600	2.40	2GB	12.1"	WXGA Cam	128GB SSD			✦Intel 5100 ²⁸	WWAN upg					6	XP	Dec08								
7458-8RU	P8600	2.40	2GB	12.1"	WXGA	128GB SSD			✦Intel 5300 ²⁸	WWAN upg		Blue	Finger		6	B32	Dec08								
7458-8QU	P8600	2.40	2GB	12.1"	WXGA Cam	128GB SSD			✦WiMAX	WWAN upg		Blue	Finger		6	B32	Dec08								
7458-8PU	P8600	2.40	2GB	12.1"	WXGA	128GB SSD			✦WiMAX	WWAN upg		Blue	Finger		6	B32	Dec08								
7458-7BU	P8600	2.40	2GB	12.1"	WXGA Cam	160GB 7200	Combo	UltraBase	✦WiMAX	WWAN upg	2G Turbo	Blue	Finger		9	U32 W	Dec08								
Positioning Processor												An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache						Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Ultimate 32 ✦ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver 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							
Memory												2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available													
Diskette drive SATA Combo Ultrabay Slim SATA disk												None (use optional USB-based diskette drive) <i>Some:</i> CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard X200 UltraBase													
Widescreen display Camera												12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus													
Graphics controller												Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45						Security chip Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip							
Graphics - external												External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)													
Keyboard												Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys													
TrackPoint®												TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad												None													
ThinkLight™												Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³												<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg)													
Weight ²																									
Case color												Black													
Case material												Magnesium alloy													
Battery - type												Lithium Ion 6-cell or 9-cell													
Battery - life ¹⁰												<i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr													
Chipset												Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
Media slice												<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side)													
Multicard reader												5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)													
ExpressCard/54												One slot (ExpressCard/34, ExpressCard/54)													
Ports												Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Mini PCI Express												Three Mini PCI Express slots													
Intel 5100 ²⁸												<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
Intel 5300 ²⁸												<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)													
WiMAX												<i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)													
WWAN upg												<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo												<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator													
UWB												None													
Modem												56K V.92 ⁶ modem													
Bluetooth™												<i>Some:</i> Bluetooth 2.1 wireless, LED indicator													
Ethernet												Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT												Intel Active Management Technology (iAMT)													
Audio support												High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security												Power-on password, hard disk password, supervisor password, security keyhole													
Security chip												Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader												<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²												3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM																55Y3706		X200 Series Li-Ion Battery 4-cell		43R9253					
2GB PC3-8500 DDR3 L-H SODIMM																55Y3707		X200 Series Li-Ion Battery 6-cell		43R9254					
ThinkPad X200 UltraBase																43R8781		X200 Series Li-Ion Battery 9-cell		43R9255					
Other accessories on O-X200 sheet												Other accessories at lenovo.com/accessories													

See footnotes for important warranty information
US models announced December 2 or December 9, 2008

✦ Intel Centrino® 2 with vPro™ technology

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(MOC1-6) December 2008

ThinkPad® X200 (7459) - Onsite

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Battery cells	Whorse (W) Gbl (G) Avail Preload GMP (P) date
7459-M2U	P8600	2.40	1GB	12.1" WXGA	160GB 5400			❖ Intel 5100 ²⁸				4	Bus32 WGP Aug 08
7459-M3U	P8600	2.40	1GB	12.1" WXGA	160GB 5400			❖ Intel 5100			Finger	6	Bus32 WGP Aug 08
7459-5EU	P8600	2.40	2GB	12.1" WXGA	160GB 5400			❖ Intel 5100				6	Bus32 WGP Aug 08
7459-5FU	P8600	2.40	2GB	12.1" WXGA	160GB 7200			❖ Intel 5100			Finger	6	Bus32 WGP Aug 08
7459-69U	P8600	2.40	2GB	12.1" WXGA Cam	160GB 5400			❖ Intel 5300 ²⁸	WWAN upg	2G Turbo	Finger	6	Bus32 WGP Aug 08
7459-M4U	P8600	2.40	2GB	12.1" WXGA Cam	160GB 7200	Combo	UltraBase	❖ WiMAX	WWAN upg		Finger	9	Ult 32 W Oct 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Ultimate 32 ✧ Vista Premium logo		
Memory	1GB or 2GB std / 4GB 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 1 socket; 1 socket available			Preloaded applications ¹⁴ (all OSES; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®		
Diskette drive	None (use optional USB-based diskette drive)			Supports ThinkVantage® technologies		
SATA Combo Ultrabay Slim SATA disk	None (CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional ThinkPad X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase					
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio			ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45			Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz (VGA)					
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys			65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver 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		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	None			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Weight ²	4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg)					
Case	Color: black; Material: magnesium alloy			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Battery - type	Lithium Ion 4-cell, 6-cell, or 9-cell					
Battery - life ¹⁰	4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice	Some: ThinkPad X200 UltraBase media slice (see right side)			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)					
ExpressCard slot	One ExpressCard/34 or ExpressCard/54			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
Intel 5300 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)					
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
2G Turbo	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator					
UWB	None			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip			• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Series Li-Ion Battery 4-cell	43R9253	Other accessories at lenovo.com/accessories		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Series Li-Ion Battery 6-cell	43R9254			
ThinkPad X200 UltraBase	43R8781	X200 Series Li-Ion Battery 9-cell	43R9255			
Other accessories on O-X200 sheet						

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

⚡ US model announced October 14, 2008; previous models on August 5, 2008

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ThinkPad® X200 (7458) - Education (EasyServ)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Bat- tery cells	Whorse (W) Gbl (G)	Avail date	
7458-E2U	P8600	2.40	2GB	12.1"	WXGA	Cam	160GB	5400	Optional	Optional	❖Intel 5100 ²⁸	WWAN upg	None	Finger	6	Bus32 W	Aug 08
7458-FQU	P8600	2.40	2GB	12.1"	WXGA	Cam	160GB	5400	Optional	Optional	❖Intel 5100	WWAN upg	None	Finger	6	Bus32 W	Mar 09

• **This model has an EasyServ™,19 depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core , Intel HD boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics</i> : standard memory in 1 socket; 1 socket available			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day)		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional <i>ThinkPad X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>			Supports ThinkVantage® technologies		
Widescreen display display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus			ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 320GB Disk 7200 rpm 43N3411		
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase <i>Maximum external resolution: 2048x1536@75Hz</i>			Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions			65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver 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		
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy					
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard Reader ExpressCard slot Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	X200 Series Li-Ion Battery 4-cell	43R9253		
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	X200 Series Li-Ion Battery 6-cell	43R9254		
ThinkPad X200 UltraBase		43R8781	X200 Series Li-Ion Battery 9-cell	43R9255		
Other accessories on O-X200 sheet			Other accessories at lenovo.com/accessories			

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

US model announced March 24, 2009; previous model on August 5, 2008

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(MOC1-4) April 2009

ThinkPad® X200 (7459) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁵	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Battery cells	Whorse (W) Gbl (G)	Avail date
7459-E3U	P8600	2.40	2GB	12.1" WXGA	Cam	160GB	5400	Optional	Optional	❖Intel 5100 ²⁸	WWAN upg	None	None	6	Bus32 W	Aug 08

• **This model has a limited onsite service²⁴ 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel Core 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • Adobe® Reader®		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available					
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional <i>ThinkPad X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>					
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase <i>Maximum external resolution:</i> 2048x1536@75Hz			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter 1.6 lb; 730g		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy					
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr					
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard Reader ExpressCard slot Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant None					
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	X200 Series Li-Ion Battery 4-cell	43R9253		
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	X200 Series Li-Ion Battery 6-cell	43R9254		
ThinkPad X200 UltraBase		43R8781	X200 Series Li-Ion Battery 9-cell	43R9255		
Other accessories on O-X200 sheet			Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced August 5, 2008

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ThinkPad®



Lenovo® ThinkPad X200s



Lenovo ThinkPad X200s



Lenovo ThinkPad X200s



ThinkPad 12W Case Sleeve
51J0476



Lenovo ThinkPad X200s



X200 Series Li-Ion Battery 9-cell
43R9255

ThinkPad® X200s (7466) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁶ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Workhorse (W) Pre-Global (G) Avail date
7466-43U	SL9600	2.13	2GB	12.1" WXGA	160GB 7200	DVD±RW	UltraBase	❖ Intel 5100 ²⁸	WWAN upg	None	Yes 6	XP Pro No Oct 09
<ul style="list-style-type: none">• Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover• This small and medium business (SMB) model is part of the US TopSeller™ Program• This model has a 3-years limited warranty												
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32	
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox	
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										Supports ThinkVantage® technologies	
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411	
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified 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	
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)											
Weight ² Case color Case material	black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy											
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice Multicard Reader ExpressCard/54 Ports	X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781		X200 Series Li-Ion Battery 4-cell X200 Series Li-Ion Battery 6-cell X200 Series Li-Ion Battery 9-cell Other accessories at lenovo.com/accessories		43R9253 43R9254 43R9255							

See footnotes for important warranty information
US model announced October 22, 2009

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(PEC2-1) October 2009

ThinkPad® X200s (7466) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Workhorse (W) Pre-Global (G) Avail date
7466-44U	SL9600	2.13	4GB	12.1" WXGA+	320GB 7200	DVD±RW	UltraBase	❖ Intel 5100 ²⁸	None	None	Yes	9 Pro 64 No Oct 09

- Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover
- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has a 3-years limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64		
Memory	4GB std / 4GB 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			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase					
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536 @ 75Hz</i>			Supports ThinkVantage® technologies		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions			ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)					
Weight ² Case color Case material	black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy Lithium Ion 9-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr					
Battery - type Battery - life ¹⁰				Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)			65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified 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		
Media slice Multicard Reader ExpressCard/54 Ports	X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781	X200 Series Li-Ion Battery 4-cell X200 Series Li-Ion Battery 6-cell X200 Series Li-Ion Battery 9-cell Other accessories at lenovo.com/accessories	43R9253 43R9254 43R9255			

See footnotes for important warranty information
US model announced October 22, 2009

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(PEC2-2) October 2009

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Workhorse (W) Global (G)	Avail date			
7469-5GU	SL9400	1.86	2GB	12.1" WXGA+	160GB 5400			❖ Intel 5100 ²⁸	None	None	Yes	6	Sep 08			
7469-5HU	SL9400	1.86	2GB	12.1" WXGA+	160GB 7200			❖ Intel 5300 ²⁸	None	None	Yes	4	Sep 08			
7469-5JU	SL9400	1.86	2GB	12.1" WXGA+	80GB SSD	Combo	UltraBase	❖ Intel 5100	None	None	Yes	6	Dec 08			
7469-74U	SL9400	1.86	2GB	12.1" WXGA+	80GB SSD			❖ Intel 5300	None	None	Yes	4	Dec 08			
7469-7YU	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ WiMAX	None	None	Yes	6	Dec 08			
7469-7ZU	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ Intel 5100	None	None	4	Bus 32	Dec 08			
7469-82U	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ Intel 5300	None	None	Yes	6	Dec 08			
7469-8TU	SL9400	1.86	3GB	12.1" WXGA+	160GB 5400			❖ Intel 5100	None	None	Yes	6	Mar 09			
• Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover																
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9300 or SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • Adobe® Reader® Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified 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					
Memory	2GB or 3GB std / 4GB 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 1 socket; 1 socket available															
Diskette drive	None (use optional USB-based diskette drive)															
SATA Combo	Some: CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase															
Ultrabay Slim	Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781)															
SATA disk	Some: 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard X200 UltraBase															
Widescreen display	12.1" (308mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio															
Camera	None															
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45															
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz															
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	None															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)															
Weight ²	Black															
Case color	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy															
Case material	Lithium Ion 4-cell or 6-cell															
Battery - type	4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr															
Battery - life ¹⁰																
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice	Some: ThinkPad X200 UltraBase media slice (see right side)															
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
Intel 5300 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)															
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)															
WWAN upg	None															
2G Turbo	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		X200 Series Li-Ion Battery 4-cell		43R9253											
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		X200 Series Li-Ion Battery 6-cell		43R9254											
ThinkPad X200 UltraBase	43R8781		X200 Series Li-Ion Battery 9-cell		43R9255											
Other accessories on O-X200 sheet			Other accessories at lenovo.com/accessories													

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

US model announced March 10, 2009; previous models on September 23 or December 9, 2008

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(PEC1-2) March 2009

ThinkPad® X200s (7469) - April 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery cells	Preload	Workhorse (W) Global (G) Avail date
7469-8UU	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	Blue	6	Bus 32	G W Apr 09
7469-8ZU	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	11n ²⁸	WWAN upg	None	Yes	6	Bus 32	G W May 09

• These models have an EasyServ™,19 depot repair service 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ✧ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics</i> : standard memory in 1 socket; 1 socket available			Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day)		
Diskette drive SATA Combo Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁹ (5400) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution</i> : 2048x1536@75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.43 lb (1.1kg); <i>6-cell:</i> from 2.71 lb (1.23kg); <i>9-cell:</i> from 3.05 lb (1.38kg)					
Weight ² Case color Case material	Black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>4-cell:</i> up to 4.4 hr; <i>6-cell:</i> up to 8.8 hr; <i>9-cell:</i> up to 13.2 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard reader ExpressCard/54 Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781	X200 Series Li-Ion Battery 4-cell X200 Series Li-Ion Battery 6-cell X200 Series Li-Ion Battery 9-cell Other accessories at lenovo.com/accessories	43R9253 43R9254 43R9255			

See footnotes for important warranty information

US model announced May 12, 2009; previous model on April 14, 2009

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(PEC1-4) May 2009

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam- era	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Mini PCIe Blue/tery Fing cells	Bat- tery Preload	Workhorse (W) Global (G) Avail date
7470-5GU	SL9400	1.86	2GB	12.1" WXGA+		160GB 5400	Optional	Optional	❖ Intel 5100 ²⁸			None Yes 6	Bus 32 W G P	Sep 08
7470-5HU	SL9400	1.86	2GB	12.1" WXGA+		160GB 7200	Optional	Optional	❖ Intel 5300 ²⁸			None Yes 4	Bus 32 W G P	Sep 08
7470-6FU	SL9400	1.86	2GB	12.1" WXGA+		160GB 5400	Optional	Optional	❖ Intel 5100			None Yes 6	Bus 32 W	Sep 08
7470-6GU	SL9400	1.86	2GB	12.1" WXGA+		80GB 5400	Optional	Optional	❖ Intel 5300			None Yes 4	Bus 32 W	Sep 08
7470-6HU	SL9400	1.86	2GB	12.1" WXGA+		80GB SSD	Optional	Optional	❖ Intel 5300			None Yes 4	XP Pro W	Dec 08
7470-8TU	SL9400	1.86	3GB	12.1" WXGA+		160GB 5400	Optional	Optional	❖ Intel 5100			None Yes 6	Bus 32 W G P	Mar 09
7470-8UU	Cel 723	1.20	2GB	12.1" WXGA	Cam	160GB 5400	Optional	Optional	Intel 5100	WWAN upg	None Blue 6	Bus 32 W	P	Apr 09
7470-8ZU	Cel 723	1.20	2GB	12.1" WXGA	Cam	160GB 5400	Optional	Optional	11n ²⁸	WWAN upg	None Blue 6	Bus 32 W	P	May 09
• Some models are part of the Global Models Plus program with limited onsite service ²⁴ 3-year limited warranty														
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache or Intel Core™ 2 Duo processor SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo			
Memory	2GB or 3GB std / 4GB 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 1 socket; 1 socket available										Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®			
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) <i>Some:</i> 80GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 80GB (5400) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard <i>X200 UltraBase</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> 12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> Camera on top of screen, 1.3-megapixel, fixed focus										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
Camera	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified (except Celeron models) EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant (except Celeron models) ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.43 lb (1.1kg); <i>6-cell:</i> from 2.71 lb (1.23kg); <i>9-cell:</i> from 3.05 lb (1.38kg)													
Weight ² Case color Case material	Black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy													
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell or 6-cell <i>4-cell:</i> up to 4.4 hr; <i>6-cell:</i> up to 8.8 hr; <i>9-cell:</i> up to 13.2 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
Media slice Multicard reader ExpressCard/54 Ports	<i>Option:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Mini PCI Express	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
Intel 5100 ²⁸ Intel 5300 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB	None None None													
Modem	56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706			X200 Series Li-Ion Battery 4-cell			43R9253					
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707			X200 Series Li-Ion Battery 6-cell			43R9254					
ThinkPad X200 UltraBase			43R8781			X200 Series Li-Ion Battery 9-cell			43R9255					
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced May 12, 2009; previous models on September 23 or December 9, 2008, or March 10 or April 14, 2009

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ThinkPad® X200s (7469) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Workhorse (W) Global (G) Avail date	
7469-E2U	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	None	6 Bus 32 W Apr 09	
• This model has an EasyServ™,19 depot repair service 3-year limited warranty													
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ◆ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)		
Diskette drive SATA Combo Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) Option for ThinkPad X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										• Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®		
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus										Supports ThinkVantage® technologies		
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter 1.6 lb; 730g		
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) ROHS-compliant		
Weight ² Case color Case material	Black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy										International Warranty Service ¹⁷		
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem None Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant None												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM					55Y3706	X200 Series Li-Ion Battery 4-cell				43R9253			
2GB PC3-8500 DDR3 L-H SODIMM					55Y3707	X200 Series Li-Ion Battery 6-cell				43R9254			
ThinkPad X200 UltraBase					43R8781	X200 Series Li-Ion Battery 9-cell				43R9255			
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US model announced April 14, 2009

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Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad X200 UltraBase	43R8781	ann	08/05/08

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
X200s (WXGA+) 12W Privacy Filter	43R2470	ann	08/05/08
X200/X200s (WXGA) 12W Privacy Filter	55Y9264	ann	04/07/09
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Batteries

X200 Series Li-Ion Battery 4-cell	43R9253	ann	08/05/08
X200 Series Li-Ion Battery 6-cell	43R9254	ann	08/05/08
X200 Series Li-Ion Battery 9-cell	43R9255	ann	08/05/08
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	40Y7696	ann	01/05/06
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

Up to 12" widescreen models:

ThinkPad 12W Case Sleeve	51J0476	ann	08/18/09
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Up to 13.3" widescreen models:

ThinkPad Ultraportable Case	41U5062	ann	05/13/08
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Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L174 17" Monitor	9227AE1	ann	04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann	09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann	09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann	08/05/08

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 with
ThinkPad X200 Tablet Sleeve
43R9115



Lenovo ThinkPad X200 with
ThinkPad X200 Tablet Sleeve
43R9115

ThinkPad® X200 Tablet (7448) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ^a rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Bat- tery cells	Preload	Workhorse (W) Global (G) Avail Educ date
✖ 7448-2QU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 5400	Optional	Optional	✦ Intel 5100 ²⁸	WWAN upg	8	Ultimate 32	Educ Mar 09

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an EasyServ™¹⁹ depot repair service 1-year limited warranty

Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® Vista® Ultimate 32 ✧ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available			Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Microsoft® Office 2007 Trial (60-day)		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ <ul style="list-style-type: none">• Provides desktop expansion and cable management for X200 Series• Easily connects to the bottom of the X200 Series for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:<ul style="list-style-type: none">– CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213– DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214– Serial ATA Hard Drive Bay Adapter III 43N3412Disks supported (some):<ul style="list-style-type: none">• 250GB FDE 7200 rpm 43N3410• 320GB Disk 7200 rpm 43N3411		
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen, WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, fixed focus					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus			Other features: <ul style="list-style-type: none">• Power button (front)• Stereo speakers (2 watt)• Security key lock, security keyhole, and optional security screw• Analog DB-15 monitor port• DisplayPort (supports single-link DVI-D via cable 45J7915)• Four USB 2.0 ports• Gigabit ethernet port• Microphone in and headphone out• Second battery charger• Requires 65 or 90 watt AC adapter• 1.6 lb; 730g		
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45					
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536 @ 75Hz (VGA)</i>			65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver 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	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	None					
ThinkLight™	None					
Dimensions ³	<i>without X200 UltraBase</i> ; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase</i> ; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm 4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg) Color: black; Material: magnesium alloy					
Weight ²	4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg)					
Case	Color: black; Material: magnesium alloy					
Battery - type	Lithium Ion 8-cell					
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice	Optional: X200 UltraBase media slice (see right side)					
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257			
Other accessories on O-X200-T sheet		Other accessories at lenovo.com/accessories				

See footnotes for important warranty information
US model announced March 17, 2009

✦ Intel Centrino® 2 with vPro™ technology

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(CML1-7) March 2009

✖ US model withdrawn effective December 2009

ThinkPad® X200 Tablet (7449) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED Cam	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Avail date
7449-EKU	SL9400	1.86	4GB	12.1" WXGA	Touch LED Cam	160G 7200	DVD±RW	UltraBase	Intel 5100 ²⁸	AT&T ²³	2G Turbo 8	Bus 64 Oct 08
7449-88U	SL9400	1.86	2GB	12.1" WXGA	LED Cam	160G 7200	DVD±RW	UltraBase	Intel 5100	WWAN upg	2G Turbo 8	Bus 32 Oct 08
7449-9FU	SL9400	1.86	2GB	12.1" WXGA		160G 5400	DVD±RW	UltraBase	Intel 5100	WWAN upg	4 XP Tab	Oct 08
7449-8JU	SL9400	1.86	2GB	12.1" WXGA	LED Cam	160G 7200	DVD±RW	UltraBase	Intel 5100	WWAN upg	8 XP Tab	Oct 08
7449-9EU	SL9400	1.86	2GB	12.1" WXGA		160G 5400		UltraBase	Intel 5100	WWAN upg	4 XP Tab	Oct 08
7449-F9U	SL9400	1.86	2GB	12.1" WXGA	Touch LED	160G 5400		UltraBase	Intel 5100	WWAN upg	8 XP Tab	Oct 08
7449-84U	SL9400	1.86	4GB	12.1" WXGA	LED Cam	128G SSD	DVD±RW	UltraBase	Intel 5100	AT&T	8 XP Tab	Oct 08
7449-2QU	SL9400	1.86	2GB	12.1" WXGA		Cam 160G 5400		UltraBase	Intel 5100	WWAN upg	8 Ult 32	Mar 09
• These small and medium business (SMB) models are part of the US TopSeller™ Program												
Processor	Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available											
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high; <i>Some:</i> 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard X200 UltraBase											
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>Touch:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)											
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus											
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45											
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz (VGA)											
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	None											
ThinkLight™	None											
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm											
Weight ²	4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg)											
Case	Color: black; Material: magnesium alloy											
Battery - type	Lithium Ion 4-cell or 8-cell											
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)											
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)											
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)											
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express	Three Mini PCI Express slots											
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)											
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)											
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®											
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator											
UWB	None											
Modem	56K V.92 ⁹ modem											
Bluetooth™	Bluetooth 2.1 wireless, LED indicator											
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available											
Other accessories on O-X200-T sheet						Other accessories at lenovo.com/accessories						
										Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 - <i>Some:</i> Genuine Windows Vista Business 64 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ◇ Vista models: Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB SFD 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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		

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

US models announced September 23, 2008, October 14, 2008, or March 24, 2009

✗ US models withdrawn effective December 2009

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(CML1-1) April 2009

ThinkPad® X200 Tablet (7449) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
7449-43U	SL9600	2.13	2GB	12.1" WXGA	Entry	160G 5400			❖ Intel 5100 ²⁸	WWAN upg	None	4	XP Tab	Oct 09
7449-45U	SL9600	2.13	2GB	12.1" WXGA	Entry	160G 7200	DVD±RW	UltraBase	❖ Intel 5100	WWAN upg	None	8	XP Tab	Oct 09
7449-47U	SL9600	2.13	4GB	12.1" WXGA	Entry	160G 7200	DVD±RW	UltraBase	❖ Intel 5100	AT&T ²³	None	8	XP Tab	Oct 09
7449-49U	SL9600	2.13	2GB	12.1" WXGA	MultiTouch	160G 7200			❖ Intel 5100	WWAN upg	None	8	XP Tab	Oct 09
7449-4AU	SL9600	2.13	4GB	12.1" WXGA	MultiTouch	160G 7200	DVD±RW	UltraBase	❖ Intel 5100	WWAN upg	None	8	XP Tab	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available					
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>					
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)					
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)					
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ <ul style="list-style-type: none">• Provides desktop expansion and cable management for X200 Series• Easily connects to the bottom of the X200 Series for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:<ul style="list-style-type: none">– CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213– DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214– Serial ATA Hard Drive Bay Adapter III 43N3412Disks supported (some):<ul style="list-style-type: none">• 250GB FDE 7200 rpm 43N3410• 320GB Disk 7200 rpm 43N3411		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @75Hz (VGA)					
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None					
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy					
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 4-cell or 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard Reader ExpressCard/54 Ports	<i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®					
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Security Security chip Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257			
Other accessories on O-X200-T sheet				Other accessories at lenovo.com/accessories		

See footnotes for important warranty information
US models announced October 22, 2009

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ThinkPad® X200 Tablet (7449) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
7449-44U	SL9600	2.13	2GB	12.1" WXGA Entry		160G 5400	Optional	Optional	❖ Intel 5100 ²⁸	WWAN upg	None	4	Pro 32	Oct 09
7449-4KU	SL9600	2.13	2GB	12.1" WXGA MultiTouch	Cam	160G 7200	Optional	Optional	❖ Intel 5100	WWAN upg	None	8	Pro 32	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32 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• Fingerprint Software• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available					
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ <ul style="list-style-type: none">• Provides desktop expansion and cable management for X200 Series• Easily connects to the bottom of the X200 Series for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:<ul style="list-style-type: none">– CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213– DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214– Serial ATA Hard Drive Bay Adapter III 43N3412Disks supported (some):<ul style="list-style-type: none">• 250GB FDE 7200 rpm 43N3410• 320GB Disk 7200 rpm 43N3411		
Widescreen display	Entry: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen MultiTouch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)					
Camera	Some: camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)			Other features: <ul style="list-style-type: none">• Power button (front)• Stereo speakers (2 watt)• Security key lock, security keyhole, and optional security screw• Analog DB-15 monitor port• DisplayPort (supports single-link DVI-D via cable 45J7915)• Four USB 2.0 ports• Gigabit ethernet port• Microphone in and headphone out• Second battery charger• Requires 65 or 90 watt AC adapter• 1.6 lb; 730g		
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45					
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @75Hz (VGA)			65-watt (GMA graphics) AC Adapter Climate Savers® certified 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	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	None					
ThinkLight™	None					
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm					
Weight ²	4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg)					
Case	Color: black; Material: magnesium alloy					
Battery - type	Lithium Ion 4-cell or 8-cell					
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice	Optional: X200 UltraBase media slice (see right side)					
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)					
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)					
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express	Three Mini PCI Express slots					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some:					
2G Turbo	None					
UWB	None					
Modem	56K V.92 ⁶ modem					
Bluetooth™	Bluetooth 2.1 wireless, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257			
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US models announced October 22, 2009

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Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ⁹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Workhorse (W) Global (G) Avail date
7450-2CU	SL9400	1.86	2GB	12.1" WXGA			160G	5400	Optional	Opt	❖ Intel 5100 ²⁸	WWAN upg			Bus 32 W G Oct 08
7450-28U	SL9300	1.60	2GB	12.1" WXGA		Cam	250G	5400	Optional	Opt	❖ Intel 5300 ²⁸	WWAN upg	2G Turbo	Yes	Bus 32 W G Oct 08
7450-EDU	SL9400	1.86	2GB	12.1" WXGA	LED		160G	7200	Optional	Opt	❖ Intel 5100	WWAN upg		Yes	Bus 32 W G Oct 08
7450-8HU	SL9400	1.86	2GB	12.1" WXGA		LED Cam	160G	7200	Optional	Opt	❖ Intel 5100	WWAN upg		Yes	Bus 32 W G Oct 08
7450-9GU	SL9400	1.86	2GB	12.1" WXGA		Cam	160G	7200	Optional	Opt	❖ Intel 5300	WWAN upg		Yes	XP Tab W G Oct 08
7450-EYU	SL9300	1.60	2GB	12.1" WXGA	LED	Cam	160G	5400	Optional	Opt	❖ Intel 5300	WWAN upg		Yes	XP Tab Oct 08
7450-FDU	SL9400	1.86	2GB	12.1" WXGA	LED		160G	7200	Optional	Opt	❖ Intel 5100	WWAN upg		Yes	XP Tab W G Oct 08
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9300 or SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache												Preloaded operating system²⁰ - Some: Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available														
Diskette drive	None (use optional USB-based diskette drive)												Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day)		
SATA DVD±RW	None														
Ultrabay Slim	Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781)												Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
SATA disk	160GB⁸ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>														
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>Touch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)														
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus														
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45												Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @75Hz														
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys												65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	None														
ThinkLight™	None														
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)														
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)														
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy														
Battery - type	Lithium Ion 8-cell														
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)														
Media slice	<i>Optional: X200 UltraBase media slice</i> (see right side)														
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)														
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)														
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)														
Mini PCI Express	Three Mini PCI Express slots														
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)														
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)														
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)														
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator														
UWB	None														
Modem	56K V.92 ⁶ modem														
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator														
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1														
Intel AMT	Intel Active Management Technology (iAMT)														
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant														
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available														
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706	X200 Tablet Li-Ion Battery 4-cell				43R9256							
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707	X200 Tablet Li-Ion Battery 8-cell				43R9257							
Other accessories on O-X200-T sheet				Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced September 23, 2008

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Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ⁹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery Cells	Pre- load	Avail date				
7450-8UU	SL94001	1.86	2GB	12.1" WXGA		LED Cam	80GBSSD		DVD±RW	UltraBase	❖ Intel 5300 ²⁸	AT&T ²³	None	Yes	8	Bus 32	Dec 08				
7450-G9U	SL93001	1.60	2GB	12.1" WXGA			128G SSD				❖ Intel 5100 ²⁸	WWAN upg	None		4	Bus 32	Dec 08				
7450-GDU	SL94001	1.86	2GB	12.1" WXGA		LED Cam	128G SSD				❖ Intel 5300	WWAN upg	None	Yes	8	Bus 32	Dec 08				
7450-GEU	SL94001	1.86	2GB	12.1" WXGA	Touch	LED Cam	128G SSD				❖ Intel 5300	WWAN upg	None	Yes	8	Bus 32	Dec 08				
7450-GAU	SL94001	1.86	2GB	12.1" WXGA		Cam	128G SSD				❖ WiMAX	WWAN upg	None	Yes	8	Bus 32	Jan 09				
7450-GBU	SL94001	1.86	2GB	12.1" WXGA		LED Cam	128G SSD				❖ WiMAX	WWAN upg	None	Yes	8	Bus 32	Jan 09				
7450-GCU	SL94001	1.86	2GB	12.1" WXGA	Touch	LED Cam	128G SSD				❖ WiMAX	WWAN upg	None	Yes	8	Bus 32	Jan 09				
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9300 or SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache												Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo								
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available												Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)								
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high removable, upgradable, shock mounted storage, supports second disk in optional or standard <i>X200 UltraBase</i>												Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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								
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>Touch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus																				
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus																				
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45																				
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz																				
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None																				
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)																				
Weight ²	Black																				
Case color	Magnesium alloy																				
Case material	Lithium Ion 4-cell or 8-cell																				
Battery - type	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr																				
Battery - life ¹⁰																					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)																				
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)																				
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)																				
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)																				
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)																				
Mini PCI Express	Three Mini PCI Express slots																				
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																				
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)																				
WiMAX	<i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)																				
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)																				
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T																				
2G Turbo	None																				
UWB	None																				
Modem	56K V.92 ⁶ modem																				
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator																				
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																				
Intel AMT	Intel Active Management Technology (iAMT)																				
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack																				
Security	Power-on password, hard disk password, supervisor password, security keyhole																				
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																				
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip																				
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available																				
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706	X200 Tablet Li-Ion Battery 4-cell				43R9256													
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707	X200 Tablet Li-Ion Battery 8-cell				43R9257													
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories																				

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

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US models announced January 6, 2009; previous models December 9, 2008

(CML1-6) January 2009

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ¹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Pre- load	Avail date
7450-9RU	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160GB	7200	DVD±RW	Ultrabase	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	8	Bus 32 May 09
7450-9SU	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	128G	SSD			❖ Intel 5100	AT&T ²³	None	Yes	8	Bus 32 May 09
7450-2NU	SL9600	2.13	2GB	12.1" WXGA			160GB	5400			❖ Intel 5100	WWAN upg	None	Yes	8	Bus 32 May 09
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo				
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std <i>X200 UltraBase</i>															
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)															
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus															
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45															
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz															
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	None															
ThinkLight™	None															
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)															
Weight ²	Black															
Case color	Magnesium alloy															
Case material	Lithium Ion 8-cell															
Battery - type	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr															
Battery - life ¹⁰																
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)															
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)															
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T															
2G Turbo	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706															
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707															
Other accessories on O-X200-T sheet	X200 Tablet Li-Ion Battery 4-cell 43R9256 X200 Tablet Li-Ion Battery 8-cell 43R9257 Other accessories at lenovo.com/accessories															

See footnotes for important warranty information
US models announced April 28, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML1-8) May 2009

ThinkPad® X200 Tablet (7450) - September 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Bat- tery Blue/ Fing	Pre- load	Avail date				
7450-66U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED	Cam	160GB 5400			❖ Intel 5100 ²⁸	WWAN upg	8	Bus 32	Sep 09				
7450-67U	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED		250GB 5400	DVD±RW	Ultrabase	❖ Intel 5100	AT&T ²³	Yes 8	XP Tab	Sep 09				
7450-68U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED	Cam	160GB 7200			❖ Intel 5100	WWAN upg	Yes 8	Bus 32	Sep 09				
7450-69U	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	Cam	160GB 7200			❖ Intel 5100	WWAN upg	Yes 8	Bus 32	Sep 09				
7450-6AU	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED	Cam	160GB 7200			❖ Intel 5300 ²⁸	WWAN upg	Yes 8	XP Tab	Sep 09				
7450-6BU	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	Cam	160GB 7200			11n ²⁸	WWAN upg	Yes 8	Bus 32	Sep 09				
7450-6CU	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED		320GB 7200			❖ Intel 5100	Verizon ¹⁶	Yes 8	Bus 32	Sep 09				
Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ❖ <i>Vista models:</i> Vista Premium logo							
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)							
Diskette drive	None (use optional USB-based diskette drive)										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified 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 Ultrabay Slim	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781)																	
SATA disk	160GB⁸ (5400 or 7200 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>																	
Widescreen display	<i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)																	
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)																	
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified 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							
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz																	
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys																	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																	
Touch pad	None																	
ThinkLight™	None																	
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm																	
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)																	
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy																	
Battery - type	Lithium Ion 8-cell																	
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr																	
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)																	
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)																	
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)																	
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)																	
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)																	
Mini PCI Express	Three Mini PCI Express slots																	
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																	
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)																	
11n ²⁸	<i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II																	
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)																	
Verizon ¹⁶	<i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon																	
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T																	
2G Turbo	None																	
UWB	None																	
Modem	56K V.92 ⁶ modem																	
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator																	
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																	
Intel AMT	Intel Active Management Technology (iAMT)																	
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack																	
Security	Power-on password, hard disk password, supervisor password, security keyhole																	
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip																	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available																	
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706			X200 Tablet Li-Ion Battery 4-cell		43R9256										
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707			X200 Tablet Li-Ion Battery 8-cell		43R9257										
Other accessories on O-X200-T sheet						Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US models announced September 15, 2009

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(CML2-1) October 2009

ThinkPad® X200 Tablet (7450) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Workhorse (W) Global (G) Avail date
7450-DDU	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	160G 7200	Optional	Optional	❖ Intel 5300 ²⁸	WWAN upg	None	8 Pro 64 G Oct 09
Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed)
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch), WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										Supports ThinkVantage® technologies
Camera	Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)										ThinkPad X200 UltraBase™
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45										<ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536 @ 75Hz (VGA)</i>										Other features:
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None										<ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy										65-watt (GMA graphics) AC Adapter Climate Savers® certified 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
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr										
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										
Media slice Multicard Reader ExpressCard/54 Ports	<i>Optional: X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
Mini PCI Express Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152) <i>Some:</i> None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole										
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available										
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-X200-T sheet	55Y3706 55Y3707	X200 Tablet Li-Ion Battery 4-cell X200 Tablet Li-Ion Battery 8-cell Other accessories at lenovo.com/accessories				43R9256 43R9257					

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-5) October 2009

ThinkPad® X200 Tablet (7453) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ⁶	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB Blue/ or TurboFing	Mini PCleMini PCle Preload GMP (P)	Workhorse (W) Global (G) Avail Preload (P)	date
7453-2CU	SL9400	1.86	2GB	12.1" WXGA			160G	5400			❖ Intel 5100 ²⁸	WWAN upg	No	Bus 32 W G P	Oct 08	
7453-EDU	SL9400	1.86	2GB	12.1" WXGA	TouchLED		160G	7200			❖ Intel 5100	WWAN upg	No	Yes Bus 32 W	Oct 08	
7453-9GU	SL9400	1.86	2GB	12.1" WXGA		Cam	160G	7200			❖ Intel 5300 ²⁸	WWAN upg	No	Yes XP Tab W G P	Oct 08	
7453-FDU	SL9400	1.86	2GB	12.1" WXGA	TouchLED		160G	7200			❖ Intel 5100	WWAN upg	No	Yes XP Tab W G P	Oct 08	
7453-8HU	SL9400	1.86	2GB	12.1" WXGA		LED Cam	160G	7200			❖ Intel 5100	WWAN upg	No	Yes Bus 32 W	Oct 08	
7453-9RU	SL9600	2.13	2GB	12.1" WXGA		LED Cam	160G	7200	DVD±RW	UltraBase	❖ Intel 5100	WWAN upg	No	Yes Bus 32	P Apr 09	

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9400 or SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ❖ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) 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					
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available															
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) <i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>															
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>Touch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)															
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus															
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45															
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz															
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	None															
ThinkLight™	None															
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy															
Weight ²	Lithium Ion 8-cell															
Case	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr															
Battery - type																
Battery - life ¹⁰																
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice	<i>Some:</i> X200 UltraBase media slice (see right side)															
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCle adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCle adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)															
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)															
2G Turbo	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256													
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257													
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories															

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓢ US model announced April 28, 2009; previous models on September 23, 2008

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(CML1-3) May 2009

ThinkPad® X200 Tablet (7453) - Onsite (September 2009)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ⁹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue/ Fing	Preload	Workhorse (W) Global (G) Avail Preload GMP (P)	date
7453-68U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED	Cam	160G	7200	Optional	Optional	Intel 5100 ²⁸	WWAN upg	Yes	Bus 32	P	Sep09
7453-69U	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	Cam	160G	7200	Optional	Optional	Intel 5100	WWAN upg	Yes	Bus 32	P	Sep09
7453-6AU	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED	Cam	160G	7200	Optional	Optional	Intel 5300 ²⁸	WWAN upg	Yes	XP Tab	P	Sep09
7453-6BU	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	Cam	160G	7200	Optional	Optional	11n ²⁸	WWAN upg	Yes	Bus 32	P	Sep09
• These models are part of the Global Models Plus program with limited onsite service ²⁴ 3-year limited warranty																
Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo				
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available											Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day)				
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>											Supports ThinkVantage® technologies				
Widescreen display	<i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)															
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)															
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45															
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @75Hz															
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None															
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm															
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.8 lb (1.76kg)															
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy															
Battery - type	Lithium Ion 8-cell															
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr															
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice	<i>Optional: X200 UltraBase media slice</i> (see right side)															
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)															
11n ²⁸	<i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II															
WWAN upg	Wireless WAN upgradable, requires <i>Verizon®</i> (43R9151) or <i>AT&T®</i> (43R9152)															
2G Turbo	None															
UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip															
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706			X200 Tablet Li-Ion Battery 4-cell				43R9256				24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707			X200 Tablet Li-Ion Battery 8-cell				43R9257								
Other accessories on O-X200-T sheet								Other accessories at lenovo.com/accessories								

See footnotes for important warranty information
US models announced September 15, 2009

◇ Intel Centrino® 2 with vPro™ technology

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(CML2-2) October 2009

ThinkPad® X200 Tablet (7453) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Workhorse (W) Global (G) Avail Preload GMP(P) date
7453-DDU	SL9600	2.13	2GB	12.1" WXGA MultiTouch	160G 7200	Optional	Optional	❖ Intel 5300 ²⁸	WWAN upg	None	8 Pro 64 P Oct 09

• This model is part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB 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• Fingerprint Software• ThinkVantage Toolbox• Lenovo Online Data Backup• Adobe Flash® Player• Skype™ for Windows• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available					
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>					
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch), WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)					
Camera						
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ <ul style="list-style-type: none">• Provides desktop expansion and cable management for X200 Series• Easily connects to the bottom of the X200 Series for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:<ul style="list-style-type: none">– CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213– DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214– Serial ATA Hard Drive Bay Adapter III 43N3412Disks supported (some):<ul style="list-style-type: none">• 250GB FDE 7200 rpm 43N3410• 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none">• Power button (front)• Stereo speakers (2 watt)• Security key lock, security keyhole, and optional security screw• Analog DB-15 monitor port• DisplayPort (supports single-link DVI-D via cable 45J7915)• Four USB 2.0 ports• Gigabit ethernet port• Microphone in and headphone out• Second battery charger• Requires 65 or 90 watt AC adapter• 1.6 lb; 730g		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536@75Hz (VGA)</i>					
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None					
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy					
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard Reader ExpressCard/54 Ports	Optional: X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole					
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM		55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256		
2GB PC3-8500 DDR3 L-H SODIMM		55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257		
Other accessories on O-X200-T sheet Other accessories at lenovo.com/accessories						

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-6) October 2009

ThinkPad® X200 Tablet (7450) - Education (EasyServ)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁶	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery cells	Workhorse (W) Global (G) Avail date
7450-2DU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G	5400	Optional	Optional	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	8	Bus 32 W Oct 08
7450-2KU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G	7200	Optional	Optional	❖ Intel 5100	WWAN upg	None	Yes	8	Ult 32 W Feb 09
7450-2PU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G	5400	Optional	Optional	❖ Intel 5100	WWAN upg	None	Yes	8	Bus 32 W Mar 09

• **These models have an EasyServ™,19 depot repair service 3-year limited warranty**
 • Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
 • Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Ultimate 32 ❖ Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day)
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	
Diskette drive	None (use optional USB-based diskette drive)	
SATA DVD±RW	None	
Ultrabay Slim	Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781)	
SATA disk	160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>	
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen, WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45	
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536 @ 75Hz</i>	
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys	Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver 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
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	None	
ThinkLight™	None	
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm	
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)	
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy	
Battery - type	Lithium Ion 8-cell	
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr	
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice	<i>Optional: X200 UltraBase media slice</i> (see right side)	• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver 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
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54	
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express	Three Mini PCI Express slots	
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)	
WWAN upg	Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152)	
2G Turbo	None	
UWB	None	
Modem	56K V.92 ⁶ modem	
Bluetooth™	Bluetooth 2.1 wireless, LED indicator	65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver 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
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1	
Intel AMT	Intel Active Management Technology (iAMT)	
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades²² available	
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	
Other accessories on O-X200-T sheet		

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓢ US model announced March 24, 2009; previous models on September 23, 2008 or February 17, 2009

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(CML1-4) April 2009

ThinkPad® X200 Tablet (7453) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁶	Optical in rpm	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing	Workhorse (W) Global (G) Avail date
7453-2DU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 5400	Optional	Optional	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	8 Bus 32 W Oct 08
7453-2KU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 7200	Optional	Optional	❖ Intel 5100	WWAN upg	None	Yes	8 Ult 32 W Feb 09

- **These models have a limited onsite service²⁴ 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache			Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✧ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available			Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day)		
Diskette drive SATA DVD±RW Ultrabay Slim SATA disk	None (use optional USB-based diskette drive) None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>			Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver 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		
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen, WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, fixed focus					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus					
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz					
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None					
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy					
Weight ² Case Battery - type Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)					
Media slice Multicard Reader ExpressCard slot Ports	<i>Optional: X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X200 Tablet Li-Ion Battery 4-cell	43R9256			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X200 Tablet Li-Ion Battery 8-cell	43R9257			
Other accessories on O-X200-T sheet		Other accessories at lenovo.com/accessories				

See footnotes for important warranty information ❖ Intel Centrino® 2 with vPro™ technology

US model announced February 17, 2009; previous model on September 23, 2008

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(CML1-5) February 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

Wireless WAN (Mini PCI Express)

Verizon WWAN UNDP Broadband Mini PCle	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCle	43R9152	ann	08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05
ThinkPad X200 UltraBase	43R8781	ann	08/05/08

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
Ultralim 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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Tablet

ThinkPad Digitizer Pen	41U3143	ann	11/14/06
ThinkPad Tablet Tether (3-pack)	41U4820	ann	11/14/06

Batteries

X200 Tablet Li-Ion Battery 4-cell	43R9256	ann	09/23/08
X200 Tablet Li-Ion Battery 8-cell	43R9257	ann	09/23/08
ThinkPad External Battery Charger ⁴⁷	40Y7625	ann	09/20/05
⁴⁷ Only supports <i>X200 Tablet Li-Ion Battery 4-cell 43R9256</i> (requires the <i>ThinkPad 90W AC Adapter 40Y7659</i> or the adapter provided with the system)			

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann	01/05/06
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

• BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
• 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**X200 Tablet:**

ThinkPad X200 Tablet Sleeve	43R9115	ann	09/23/08
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Up to 13.3" widescreen models:

ThinkPad Ultraportable Case	41U5062	ann	05/13/08
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Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L174 17" Monitor	9227AE1	ann	04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann	09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann	09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann	08/05/08

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X301



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Lenovo ThinkPad X301



USB Port Replicator with Digital Video
45K1610

ThinkPad® X301 (2776) - TopSeller

Personal Systems Reference (PSREF)

	Low Voltage proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ^a	SSD/RPM	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Preload	Avail- date
X 2776-TMU	SU9400	1.40	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100 ²⁸	AT&T ²³		Yes	6	Bus 32 Aug 08
X 2776-L9U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	3	Bus 32 Aug 08
X 2776-LAU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	AT&T		Yes	6	Bus 32 Aug 08
X 2776-P4U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	3	XP Pro Sep 08
X 2776-P5U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	AT&T		Yes	6	XP Pro Sep 08
X 2776-P6U	SU9400	1.40	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100	AT&T		Yes	6	XP Pro Sep 08
X 2776-V1U	SU9400	1.40	2GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5300 ²⁸	WWAN upg		Yes	6	Bus 32 Oct 08
X 2776-V2U	SU9400	1.40	2GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5300	WWAN upg		Yes	6	Bus 64 Nov 08
X 2776-TKU	SU9400	1.40	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	3	Bus 32 Nov 08
X 2776-TLU	SU9400	1.40	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	❖ Intel 5100	AT&T		Yes	6	Bus 32 Nov 08
X 2776-H1U	SU9400	1.40	2GB	13.3" WXGA+	Cam	120GB	5400	DVD±RW	❖ Intel 5100	WWAN upg	2G Turbo	Yes	6	Bus 32 Dec 08
X 2776-27U	SU9600	1.60	2GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	6	XP Pro Apr 09
• These small and medium business (SMB) models are part of the US TopSeller™ Program														
Positioning Processor	Thin and light; two spindles Intel® Core™ 2 Duo processor SU9400 or SU9600 with ultra low voltage, dual-core, Intel HD Boost, 800MHz system bus, and 3MB L2 cache											Preloaded operating system ²⁰		
Memory	2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Italics: standard memory in both sockets; no sockets available; Non-italics: standard memory in 1 socket; 1 socket available											- Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 64 ❖ Vista models: Vista Premium logo		
Diskette drive	None (use optional USB-based diskette drive)											Preloaded applications ¹⁴ (all OSes; only some listed)		
EIDE DVD±RW	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in											• Rescue and Recovery™		
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high											• Access Connections™		
Serial ATA disk	Some: 64GB ⁸ , 80GB, or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s Some: 120GB ⁸ (5400 rpm) / SATA 1.5Gb/s, Active Protection System™ All: 1.8" wide, 8mm high, removable, upgradeable, shock mounted storage											• Client Security Solution™		
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 250:1 contrast ratio											• ThinkVantage Productivity Center		
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0											• ThinkVantage System Update		
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536@75Hz (VGA, DisplayPort)											• Fingerprint Software (fingerprint models)		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)											• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											• Lenovo System Toolbox		
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label											• ThinkPad Utilities (Power Manager and Presentation Director)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• Adobe® Reader®		
Dimensions ³	3-cell: (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm 6-cell: (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm 3-cell: from 3.16 lb (1.43kg); 6-cell: from 3.35 (1.52kg)											• Windows Live™ Toolbar		
Weight ²	Black											• Microsoft® Office 2007 Trial (60-day)		
Case color	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy											• Roxio® Creator® Business Edition (DVD±RW)		
Case material	Lithium Polymer 3-cell or Lithium Ion 6-cell, supports optional Option Bay 3-cell battery (for two batteries)											• Roxio MyDVD® (DVD±RW)		
Battery - type	3-cell: up to 3.4 hr; 6-cell: up to 5.5 hr; 6-cell and Option Bay battery: up to 9.5 hr											• Corel® WinDVD® (DVD±RW)		
Battery - life ¹⁰														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)													
ExpressCard	None											Supports ThinkVantage® technologies		
Multicard reader	None													
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios											65-watt (GMA graphics) AC Adapter		
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradeable											Next Generation ThinkPad Roll Cage (in display cover)		
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)											EPEAT™ Gold rating		
Intel 5300 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)											ENERGY STAR® 5.0-compliant		
WWAN upg	Some: Wireless WAN upgradeable, requires Verizon® (43R9151) or AT&T® (43R9152)											RoHS-compliant		
AT&T ²³	Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T											International Warranty Service ¹⁷		
Turbo Memory	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator											24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
UWB	None													
Modem	None (use optional USB-based modem)											ThinkPlus 3-year LOR 9x5 NBD		
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator											41C9176		
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											ThinkPlus 4-year LOR 9x5 NBD		
Intel AMT	Intel Active Management Technology (iAMT)											41C9177		
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack											ThinkPlus 5-year LOR 9x5 NBD		
Security	Power-on password, hard disk password, supervisor password, security keyhole											41C9179		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											ThinkPlus 4-year P&L P/U Depot		
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip											41C9178		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available											ThinkPlus 5-year P&L P/U Depot		
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706											41C9180		
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707											Post-warranty annual maintenance agreements at		
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories											lenovo.com/thinkplus/warranty		

See footnotes for important warranty information ❖ Intel Centrino® 2 with vPro™ technology
US models announced Aug 26, Sep 2, Oct 14, Nov 18, Nov 25, or December 2, 2008 or April 21, 2009
✖ US models withdrawn effective July, September, or December 2009

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ThinkPad® X301 (2776) - TopSeller (July 2009)

Personal Systems Reference (PSREF)

	Low Voltage				Wide- screen display	Cam- era	Disk		EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery cells	Preload	Avail date
	Type-model	proc- essor	GHz	Memory			GB ⁸	SSD/RPM								
⌵	2776-32U	SU9600	1.60	2GB	13.3" WXGA+	Cam	250GB	5400	DVD±RW	⌵ Intel 5100 ²⁸	WWAN upg	None	Yes	6	XP Pro	Jul 09
⌵	2776-33U	SU9600	1.60	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	⌵ Intel 5100	WWAN upg	None	Yes	6	XP Pro	Jul 09
⌵	2776-34U	SU9600	1.60	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	⌵ Intel 5100	WWAN upg	None	Yes	6	Bus 32	Jul 09
⌵	2776-35U	SU9600	1.60	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	⌵ Intel 5100	WWAN upg	None	Yes	6	XP Pro	Jul 09
⌵	2776-36U	SU9600	1.60	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	⌵ Intel 5100	AT&T ²³	None	Yes	6	Bus 64	Jul 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 - <i>Some:</i> Genuine Windows Vista Business 64 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available					
Diskette drive	None (use optional USB-based diskette drive)					
EIDE DVD±RW	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in					
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high					
Serial ATA disk	<i>Some:</i> 64GB⁸ , 80GB , or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s <i>Some:</i> 250GB (5400 rpm) / SATA 1.5Gb/s, Active Protection System™ <i>All:</i> 1.8" wide, 8mm high, removable, upgradable, shock mounted storage					
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)					
Weight ²						
Case color	Black					
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type	Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries)					
Battery - life ¹⁰	<i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)					
ExpressCard	None					
Multicard reader	None			Supports ThinkVantage® technologies		
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios			65-watt (GMA graphics) AC Adapter		
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable			Next Generation ThinkPad Roll Cage (in display cover)		
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)			EPEAT™ Gold rating		
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)			ENERGY STAR® 5.0-compliant		
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T			RoHS-compliant		
Turbo Memory UWB	None			International Warranty Service ¹⁷		
Modem	None (use optional USB-based modem)			24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1			ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176		
Intel AMT	Intel Active Management Technology (iAMT)			ThinkPlus 4-year LOR 9x5 NBD 41C9177		
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack			ThinkPlus 5-year LOR 9x5 NBD 41C9179		
Security	Power-on password, hard disk password, supervisor password, security keyhole			ThinkPlus 4-year P&L P/U Depot 41C9178		
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			ThinkPlus 5-year P&L P/U Depot 41C9180		
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X300 LiPolymer Battery 3-cell	43R1965			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X300 Li-Ion Battery 6-cell	43R1967			
USB Port Replicator with Digital Video	45K1610	X300 LiPolymer Bay Battery 3-cell	43R1966			
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
US models announced July 7, 2009

⚠ US models withdrawn effective December 2009

♦ Intel Centrino® 2 with vPro™ technology

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lenovo.com/thinkplus/warranty

ThinkPad® X301 (2776) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Low Voltage proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸	SSD/RPM	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery cells	Preload	Avail date
2776-3AU	SU9600	1.60	2GB	13.3" WXGA+	Cam	250GB	5400	DVD±RW	❖ Intel 5100 ²⁸	None	None	Yes	6	XP Pro	Oct 09
2776-3BU	SU9600	1.60	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	❖ Intel 5100	None	None	Yes	6	XP Pro	Oct 09
2776-3CU	SU9600	1.60	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100	None	None	Yes	6	XP Pro	Oct 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available			
Diskette drive	None (use optional USB-based diskette drive)			
EIDE DVD±RW	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in			
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high			
Serial ATA disk	<i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s <i>Some:</i> 250GB (5400 rpm) / SATA 1.5Gb/s, Active Protection System™ <i>All:</i> 1.8" wide, 8mm high, removable, upgradable, shock mounted storage			
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio			
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)			
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)			
Weight ²				
Case color	Black			
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy			
Battery - type	Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries)			
Battery - life ¹⁰	<i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr			
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)			
ExpressCard	None			
Multicard reader	None			
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)			
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios			
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable			
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)			
WWAN upg	None			
Turbo Memory	None			
UWB	None			
Modem	None (use optional USB-based modem)			
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1			
Intel AMT	Intel Active Management Technology (iAMT)			
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack			
Security	Power-on password, hard disk password, supervisor password, security keyhole			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X300 LiPolymer Battery 3-cell	43R1965	
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X300 Li-Ion Battery 6-cell	43R1967	
USB Port Replicator with Digital Video	45K1610	X300 LiPolymer Bay Battery 3-cell	43R1966	
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories			

Supports ThinkVantage® technologies			
65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) 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			
ThinkPlus™.22 3-year LOR²⁴ 9x5 NBD 41C9176			
ThinkPlus 4-year LOR 9x5 NBD 41C9177			
ThinkPlus 5-year LOR 9x5 NBD 41C9179			
ThinkPlus 4-year P&L P/U Depot 41C9178			
ThinkPlus 5-year P&L P/U Depot 41C9180			
Post-warranty annual maintenance agreements at **lenovo.com/thinkplus/warranty**			

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(KOD2-7) October 2009

ThinkPad® X301 (2776) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Low Voltage processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	SSD/RPM	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Battery cells	Preload	Avail date
2776-3DU	SU9600	1.60	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100 ²⁸	AT&T ²³	None	Yes	6	Pro 64	Oct 09
2776-3NU	SU9600	1.60	2GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ WiMAX		None	Yes	6	Pro 32	Nov 09
2776-3PU	SU9600	1.60	2GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100	Verizon ¹⁶	None	Yes	6	Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64		
Memory	2GB or 4GB std / 4GB 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 (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Password Manager• ThinkVantage Power Manager• ThinkVantage System Update• Fingerprint Software (fingerprint models)• ThinkVantage Toolbox• Lenovo Online Data Backup• Norton™ Internet Security 2009 (30 days of virus definitions)• Adobe® Reader®• Adobe Flash® Player• Skype™ for Windows• Microsoft® Office 2007 Trial (60-day)• Microsoft Research AutoCollage Touch• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Diskette drive	None (use optional USB-based diskette drive)					
EIDE DVD±RW	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in					
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high					
Serial ATA disk	128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage					
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)					
Weight ²						
Case color	Black					
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type	Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries)					
Battery - life ¹⁰	<i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)					
ExpressCard	None					
Multicard reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios					
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable					
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WiMAX	<i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)					
Verizon ¹⁶	<i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with <u>Verizon</u>					
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with <u>AT&T</u>					
Turbo Memory	None					
UWB	None					
Modem	None (use optional USB-based modem)					
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years /1-yr battery - EasyServ™, 19 depot repair service / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X300 LiPolymer Battery 3-cell	43R1965			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X300 Li-Ion Battery 6-cell	43R1967			
USB Port Replicator with Digital Video	45K1610	X300 LiPolymer Bay Battery 3-cell	43R1966			
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories					
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

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US models announced November 3, 2009; previous model on October 22, 2009

(KOD2-8) November 2009

	Low Voltage proc- essor			Wide- screen display	Cam- era	Disk SATA Gb ⁸	SSD	EIDE optical or battery	Mini PCIe 802.11 wireless	Mini PCIe WWAN or Turbo	Mini PCIe UWB wireless	Blue/ Fing	Bat- tery cells	Workhorse (W) Global (G) Avail Preload date
Type-model	GHz	Memory												
2774-17U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg		Yes	3	Bus 32 G Aug 08
2774-18U	SU9400	1.40	4GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	6	Bus 32 G Aug 08
2774-LCU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	Battery	❖ Intel 5100	WWAN upg		Yes	6+3	Bus 32 Aug 08
2774-LDU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	3	XP Pro Aug 08
2774-PBU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	Battery	❖ Intel 5100	WWAN upg		Yes	6+3	XP Pro Sep 08
2774-PCU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	3	XP Pro Sep 08
2774-21U	SU9400	1.40	2GB	13.3" WXGA+	Cam	80GB	SSD	Battery	❖ Intel 5100	WWAN upg		Yes	6	Bus 32 Nov 08
2774-23U	SU9400	1.40	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	❖ Intel 5100	Verizon ¹⁶		Yes	6	Bus 32 Nov 08
2774-HBU	SU9400	1.40	2GB	13.3" WXGA+	Cam	128G	SSD	DVD±RW	❖ WiMAX	WWAN upg	UWB	Yes	3	Bus 32 Dec 08
2774-HCU	SU9400	1.40	4GB	13.3" WXGA+	Cam	128G	SSD	DVD±RW	❖ WiMAX	WWAN upg	UWB	Yes	6	Bus 32 Dec 08
2774-HDU	SU9400	1.40	2GB	13.3" WXGA+	Cam	128G	SSD	DVD±RW	❖ Intel 5100	WWAN upg		Yes	6	Bus 32 Dec 08
• Latest connectivity options including WLAN, WWAN, UWB, and GPS • Cutting edge technologies including LED backlight, Solid State Drive, and ultrathin DVD														
Positioning Processor	Thin and light; two spindles Intel® Core™ 2 Duo processor SU9400 with ultra low voltage, dual-core, Intel HD Boost, 800MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSES; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
Memory	2GB or 4GB std / 4GB 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 1 socket; 1 socket available													
Diskette drive	None (use optional USB-based diskette drive)													
EIDE DVD±RW	Some: Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in													
Option Bay battery	Some: 3-cell Li-Polymer second battery in Option Bay													
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high													
Serial ATA disk	64GB⁸ , 80GB , or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage													
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio													
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0													
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536 @ 75Hz													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	3-cell: (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm 6-cell: (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm 3-cell: from 3.16 lb (1.43kg); 6-cell: from 3.35 (1.52kg)													
Weight ²														
Case color	Black													
Case material	Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy													
Battery - type	Lithium Polymer 3-cell or Lithium Ion 6-cell ;													
Battery - life ¹⁰	supports standard or optional Option Bay 3-cell battery (for two batteries) 3-cell: up to 3.4 hr; 6-cell: up to 5.5 hr; 6-cell and Option Bay battery: up to 9.5 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)													
ExpressCard	None													
Multicard reader	None													
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios													
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable													
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)													
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
Verizon ¹⁶	Some: Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon													
Turbo Memory	None													
UWB	Some: Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter													
Modem	None (use optional USB-based modem)													
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM			55Y3706			X300 LiPolymer Battery 3-cell			43R1965	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
2GB PC3-8500 DDR3 L-H SODIMM			55Y3707			X300 Li-Ion Battery 6-cell			43R1967					
Other accessories on O-X300 sheet														
Other accessories at lenovo.com/accessories														

See footnotes for important warranty information

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US models announced Nov 25 or December 2, 2008; previous models on Aug 26, or Sep 2, 2008

(KOD2-2) December 2008

US models withdrawn effective July 2009

ThinkPad® X301 (4057) - Onsite

Personal Systems Reference (PSREF)

Type-model	Low Voltage proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸ SSD	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN or Turbo	Mini PCIe UWB wireless	Blue/ Fing	Bat- tery cells	Workhorse (W) Gbl (G) Avail Preload GMP (P) date
4057-17U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB SSD	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	3	Bus 32 G P Aug 08
4057-18U	SU9400	1.40	4GB	13.3" WXGA+	Cam	64GB SSD	DVD±RW	❖ Intel 5100	WWAN upg	None	Yes	6	Bus 32 G P Aug 08
4057-LDU	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GB SSD	DVD±RW	❖ Intel 5100	WWAN upg	None	Yes	3	XP Pro G P Aug 08

- **These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**
- **Latest connectivity options including WLAN, WWAN, UWB, and GPS**
- **Cutting edge technologies including LED backlight, Solid State Drive, and ultrathin DVD**
- **Environmentally-friendly EPEAT Gold rating**

Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9400 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache			Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✧ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)• Roxio® Creator® Business Edition (DVD±RW)• Roxio MyDVD® (DVD±RW)• Corel® WinDVD® (DVD±RW)		
Memory	2GB or 4GB std / 4GB 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;					
Diskette drive	None (use optional USB-based diskette drive)					
EIDE DVD±RW	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in					
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high					
Serial ATA disk	64GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage					
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio					
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz					
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass					
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions					
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)					
Weight ²						
Case color	black					
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy					
Battery - type	Lithium Polymer 3-cell or Lithium Ion 6-cell ;					
Battery - life ¹⁰	supports optional Option Bay 3-cell battery (for two batteries) <i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr					
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)					
ExpressCard slot	None					
Multicard Reader	None					
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)					
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios					
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable					
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)					
WWAN upg	Wireless WAN upgradable, requires <u>Verizon®</u> (43R9151) or <u>AT&T®</u> (43R9152)					
Turbo Memory	None					
UWB	None					
Modem	None (use optional USB-based modem)					
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator					
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1					
Intel AMT	Intel Active Management Technology (iAMT)					
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack					
Security	Power-on password, hard disk password, supervisor password, security keyhole					
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant					
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip					
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available					
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	X300 LiPolymer Battery 3-cell	43R1965			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	X300 Li-Ion Battery 6-cell	43R1967			
USB Port Replicator with Digital Video	45K1610	X300 LiPolymer Bay Battery 3-cell	43R1966			
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories					

Supports ThinkVantage® technologies
65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) 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 3-year LOR ²⁴ 9x5 NBD 41C9176
ThinkPlus 4-year LOR 9x5 NBD 41C9177
ThinkPlus 5-year LOR 9x5 NBD 41C9179
ThinkPlus 4-year P&L P/U Depot 41C9178
ThinkPlus 5-year P&L P/U Depot 41C9180
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced August 26, 2008

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(KOD2-3) September 2008

ThinkPad® X301 (2774) - Education

Personal Systems Reference (PSREF)

Type-model	Low Voltage proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸ SSD	EIDE optical or battery	Mini PCIe 802.11 wireless	Mini PCIe WWAN or Turbo	Mini PCIe UWB wireless	Bat- tery Blue/ Fing cells	Workhorse (W) Global (G) Avail date			
2774-E1U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GBSSD	Blank bezel	❖ Intel 5300 ²⁸	WWAN upg	None	Yes	3	Ult 32	No	Feb 09
<ul style="list-style-type: none">• These models have an EasyServ™, 19 depot repair service 3-year limited warranty• Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.• Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.															
Positioning Processor	Thin and light; two spindles Intel® Core™ 2 Duo processor SU9400 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Ultimate 32 ❖ Vista Premium logo				
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed)				
Diskette drive	None (use optional USB-based diskette drive)														
EIDE DVD±RW	None														
Option Bay battery	None														
Option Bay	Modular bay for devices (DVD burner, battery), 7mm high														
Serial ATA disk	64GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage														
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio														
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	3-cell: (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm 6-cell: (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm														
Weight ²	3-cell: from 3.16 lb (1.43kg); 6-cell: from 3.35 (1.52kg)														
Case color	Black														
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type	Lithium Polymer 3-cell ;														
Battery - life ¹⁰	supports standard or optional Option Bay 3-cell battery (for two batteries) 3-cell: up to 3.4 hr; 6-cell: up to 5.5 hr; 6-cell and Option Bay battery: up to 9.5 hr														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)														
ExpressCard	None														
Multicard reader	None														
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)														
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios														
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable														
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)														
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)														
Turbo Memory	None														
UWB	None														
Modem	None (use optional USB-based modem)														
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator														
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1														
Intel AMT	Intel Active Management Technology (iAMT)														
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, 19 depot repair service / service upgrades ²² available														
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706					X300 LiPolymer Battery 3-cell					43R1965				
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707					X300 Li-Ion Battery 6-cell					43R1967				
USB Port Replicator with Digital Video	45K1610					X300 LiPolymer Bay Battery 3-cell					43R1966				
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories														
												Supports ThinkVantage® technologies			
												65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) 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			
												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US model announced February 17, 2009

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ThinkPad® X301 (4057) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Low Voltage proc- essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁸ SSD	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN or Turbo	Mini PCIe UWB wireless	Blue/ Fing	Bat- tery cells	Workhorse (W) Gbl (G) Avail date
4057-E1U	SU9400	1.40	2GB	13.3" WXGA+	Cam	64GBSSD	Blank bezel	❖ Intel 5300 ²⁸	WWAN upg	None	Yes	3	Ult 32 No Feb 09
<ul style="list-style-type: none">• This model has a limited onsite service²⁴ 3-year limited warranty• Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.• Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.													
Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9400 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Ultimate 32 ❖ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed)		
Diskette drive EIDE DVD±RW Option Bay Serial ATA disk	None (use optional USB-based diskette drive) None Modular bay for devices (DVD burner, battery), 7mm high 64GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage										<ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Client Security Solution™• ThinkVantage Productivity Center• ThinkVantage System Update• Fingerprint Software (fingerprint models)• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions)• Lenovo System Toolbox• ThinkPad Utilities (Power Manager and Presentation Director)• Adobe® Reader®• Windows Live™ Toolbar• Microsoft® Office 2007 Trial (60-day)		
Widescreen display Camera	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @ 75Hz												
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)												
TrackPoint® Touch pad ThinkLight™	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm <i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)												
Weight ² Case color Case material	black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy												
Battery - type	Lithium Polymer 3-cell ; supports optional Option Bay 3-cell battery (for two batteries)												
Battery - life ¹⁰	<i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)												
ExpressCard slot Multicard Reader Ports	None None Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)												
Wireless antenna Mini PCI Express Intel 5300 ²⁸ WWAN upg Turbo Memory UWB	UltraConnect™ II Antenna / on-off switch for all wireless radios Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None												
Modem Bluetooth™	None (use optional USB-based modem) Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator										Supports ThinkVantage® technologies		
Ethernet Intel AMT Audio support	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) 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		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM USB Port Replicator with Digital Video Other accessories on O-X300 sheet	55Y3706 55Y3707 45K1610		X300 LiPolymer Battery 3-cell X300 Li-Ion Battery 6-cell X300 LiPolymer Bay Battery 3-cell Other accessories at lenovo.com/accessories		43R1965 43R1967 43R1966		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						

See footnotes for important warranty information
US model announced February 17, 2009

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Memory**X300:**

1GB PC2-5300 DDR2 SODIMM	40Y7734	ann	01/05/06
1GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0502	ann	03/17/09
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann	11/28/06
2GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0548	ann	03/17/09

X301:

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Storage and removable storage**X301:**

1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	ann	06/23/09
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All:

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08

USB Portable Diskette Drive	05K9276	ann	06/05/00
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 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07

Wireless WAN (Mini PCI Express)**X301 WWAN upgradeable models:**

Verizon WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Adjustable Notebook Stand	40Y7676	ann	09/20/05

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
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 Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann	06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06

Modem

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

X300 LiPolymer Battery 3-cell	43R1965	ann	02/26/08
X300 Li-Ion Battery 6-cell	43R1967	ann	02/26/08
X300 LiPolymer Bay Battery 3-cell	43R1966	ann	02/26/08
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	40Y7696	ann	01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
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*

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•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
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Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
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

Lenovo luxury cases at www.lenovoluxurycases.com**Monitors**

ThinkVision® L174 17" Monitor	9227AE1	ann	04/15/08
ThinkVision L1700p 17" Monitor	9417HE2	ann	09/17/08
ThinkVision L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1940p Wide 19" Monitor	4424HB6	ann	09/17/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2240p Wide 22" Monitor	4422HB6	ann	09/17/08
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 L2440p Wide 24" Monitor	4420HB2	ann	09/17/08
ThinkVision L2440x Wide 24" Monitor	4421HB2	ann	09/17/08

Monitor Accessories⁴⁶**X301:**

Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08

All:

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 Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessoriesAccessories Guide pdf at www.lenovo.com/accessoriesguide

Partial list of Lenovo® ThinkPlus Services²² for ThinkPad notebooksFor more information see: http://www.lenovo.com/services_warranty/us/en/index.html

<p>ThinkPlus service upgrade options for ThinkPad W/X series</p> <p>ThinkPad W/X series notebook with 1-year Depot warranty <i>Depot = Depot repair</i> 2-year parts and labor depot repair service 41C9169 3-year parts and labor depot repair service 41C9170 4-year parts and labor depot repair service 41C9172 5-year parts and labor depot repair service 41C9174 <i>LOR = Lenovo Onsite Repair</i> 1-year LOR 9x5 Next Business Day 41C9166 2-year LOR 9x5 Next Business Day 41C9167 3-year LOR 9x5 Next Business Day 41C9168 4-year LOR 9x5 Next Business Day 41C9171 5-year LOR 9x5 Next Business Day 41C9173</p> <p>ThinkPad W/X series notebook with 3-year Depot warranty <i>Depot = Depot repair</i> 4-year parts and labor depot repair service 41C9178 5-year parts and labor depot repair service 41C9180 <i>LOR = Lenovo Onsite Repair</i> 3-year LOR 9x5 Next Business Day 41C9176 4-year LOR 9x5 Next Business Day 41C9177 5-year LOR 9x5 Next Business Day 41C9179</p> <p>ThinkPad W/X series notebook with 3-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i> 4-year LOR 9x5 Next Business Day 12X5630 5-year LOR 9x5 Next Business Day 43R2162</p>	<p>ThinkPlus Secure Business</p> <p>Lenovo Online Data Backup</p> <ul style="list-style-type: none"> Secure offsite data storage 256-bit Advanced Encryption System Data recovery or access in case of an unforeseen event Automatic, remote management Choose which business critical data to back up <p>1-year Lenovo Online Data Backup - 10GB 51J0787 1-year Lenovo Online Data Backup - 25GB 51J0795 1-year Lenovo Online Data Backup - 50GB 45K5849 1-year Lenovo Online Data Backup - Unlimited 45K5870</p> <p>ThinkPad notebook with 1-year Depot warranty <i>Depot = Depot repair</i> 1-year Secure Business 55Y2380 <ul style="list-style-type: none"> 1-year Lenovo Onsite Repair service upgrade 1-year ThinkPad Protection 1-year 50GB Lenovo Online Data Backup 3-year Secure Business 55Y2381 <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup </p> <p>ThinkPad notebook with 3-year Depot warranty <i>Depot = Depot repair</i> 3-year Secure Business 45K5893 <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup </p>
<p>ThinkPlus service upgrade options for ThinkPad T/R series</p> <p>ThinkPad T/R series notebook with 1-year Depot warranty <i>Depot = Depot repair</i> 2-year parts and labor depot repair service 45K5971 3-year parts and labor depot repair service 45K5972 4-year parts and labor depot repair service 45K5974 5-year parts and labor depot repair service 45K5976 <i>LOR = Lenovo Onsite Repair</i> 1-year LOR 9x5 Next Business Day 45K5968 2-year LOR 9x5 Next Business Day 45K5969 3-year LOR 9x5 Next Business Day 45K5970 4-year LOR 9x5 Next Business Day 45K5973 5-year LOR 9x5 Next Business Day 45K5975</p> <p>ThinkPad T/R series notebook with 3-year Depot warranty <i>Depot = Depot repair</i> 4-year parts and labor depot repair service 45K6023 5-year parts and labor depot repair service 45K6025 <i>LOR = Lenovo Onsite Repair</i> 3-year LOR 9x5 Next Business Day 45K6021 4-year LOR 9x5 Next Business Day 45K6022 5-year LOR 9x5 Next Business Day 45K6024</p> <p>ThinkPad T/R series notebook with 3-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i> 4-year LOR 9x5 Next Business Day 45K6038 5-year LOR 9x5 Next Business Day 43R2162</p>	<p>ThinkPlus Priority Support for enterprise customers</p> <ul style="list-style-type: none"> 9x5 next-business-day response Lenovo Onsite Repair 24x7 support with priority routing and advanced level technicians <p>ThinkPad notebook with 1-year Depot warranty 3-year Priority Support 45J9094</p> <p>ThinkPad notebook with 3-year Depot warranty 3-year Priority Support 45J9095 4-year Priority Support 45J9096 5-year Priority Support 45J9097 3-year Priority Support 4-hour response 45J9101 4-year Priority Support 4-hour response 45J9102 5-year Priority Support 4-hour response 45J9103</p> <p>ThinkPad notebook with 3-year Onsite (GMP) warranty 3-year Priority Support 45J9098 4-year Priority Support 45J9099 5-year Priority Support 45J9100 3-year Priority Support 4-hour response 45J9104 4-year Priority Support 4-hour response 45J9105 5-year Priority Support 4-hour response 45J9106</p> <p>ThinkPad Workstation (W500, W700) notebook with 1-year Depot warranty 3-year Priority Support 45J9107</p> <p>ThinkPad Workstation (W500, W700) notebook with 3-year Depot warranty 3-year Priority Support 45J9108 4-year Priority Support 45J9109 5-year Priority Support 45J9110 3-year Priority Support 4-hour response 45J9114 4-year Priority Support 4-hour response 45J9115 5-year Priority Support 4-hour response 45J9116</p> <p>ThinkPad Workstation (W500, W700) notebook with 3-year Onsite (GMP) warranty 3-year Priority Support 45J9111 4-year Priority Support 45J9112 5-year Priority Support 45J9113 3-year Priority Support 4-hour response 45J9117 4-year Priority Support 4-hour response 45K1520 5-year Priority Support 4-hour response 45K1521</p>

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.

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

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

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

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

⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.

¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

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

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

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.

²¹ **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

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.

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

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 not been finalized and is currently in draft release. The ThinkPad 11a/b/g/n (11n) Wireless LAN Mini PCI Express Adapters are based on the Draft Release, Version 1.02, of the IEEE 802.11n specification. The Intel Mini PCI Express Adapters are based on the Draft Release, Version 2.0 of the IEEE 802.11n specification. 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, 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.

³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

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December 2009
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