ThinkPad_®



Lenovo® ThinkPad T420



Lenovo ThinkPad T420



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Lenovo ThinkPad T420



ThinkPad triple external monitor configuration using NVIDIA's Optimus technology



Lenovo ThinkPad T420

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Modem	Finger print reader	Blue- tooth	Bat- tery cells	Intel vPro	Preload	Ann Date (mm/yy)
4177-25G	i5-2410M	2GBx1	14.0" HD	720p	320G 5400	TP 11b/a/n	WWAN upa	Modem	None	ВТ	6	No	Pro 64	02/11

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

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Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2410M processor (dual-core, 2.30GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™
Optical Ultrabay Disk mSATA™ SSD	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive None	 Access Connections™ Fingerprint Software (fingerprint models) Password Manager (fingerprint models) ThinkVantage® System Update
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wider view angle, low light sensitive, fixed focus	ThinkVantage Power Manager ThinkVantage Toolbox Lenovo® SimpleTap Preloaded applications¹⁴ (only some
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage [®] button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	 Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW)
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-Fiber Feinforced Plastic Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 9.0 hr; 9-cell (94Whr): up to 15.0 hr; 9-cell plus Slice battery: up to 30 hr	Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard Smart Card read Multicard reader Ports PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN	One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45) Two PCI Express® Mini Card slots 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 Wireless WAN upgradable	
Carrier	None	
Modem IEEE 1394	56K V.92 modem	Supports ThinkVantage technologies
Bluetooth TM Ethernet Intel AMT Audio support Security	None Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole	Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant
Security chip	Trusted Platform Module, TCG 1.2-compliant	ROHS-compliant International Warranty Service ¹⁷
Fingerprint reader Limited Warranty ¹	r None ² 1-year - depot repair service / service upgrades ²² available	24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
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See footnotes for more detailed information WE model(s) announced February 22, 2011 WE model(s) withdrawn effective December 2012 ©Lenovo

(G-NZ3-1) February 2013

ThinkPad® T420 4178 (TopSeller) - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Carrier	Modem		Blue-			Preload (Ann Date (mm/yy)
4178-B9G	i5-2430M	4GBx1	14.0" HD	720p	500G 7200	Intel 1000	WWAN upg	None	None	Finger	ВТ	6	No	Pro 64	10/11
4178-83G	i5-2410M	2GBx2	14.0" HD	720p	320G 7200	Intel 1000	WWAN upg	None	Modem	Finger	BT	6	No	Pro 64	03/11
4178-BAG	i3-2350M	4GBx1	14.0" HD	720p	320G 7200	Intel 1000	WWAN upg	None	None	Finger	BT	6	No	Pro 64	10/11
4178-84G	i3-2310M	2GBx2	14.0" HD	720p	320G 7200	Intel 1000	WWAN upg	None	Modem	Finger	BT	6	No	Pro 64	03/11
4178-CJG	i5-2450M	4GBx1	14.0" HD	720p	500G 7200	Intel 1000	WWAN upg	None	None	Finger	BT	6	No	Pro 64	01/12

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

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Positioning Processor	Premiere performance; two spindles Intel® Core™ i3-2310M processor (dual-core, 2.10GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-2350M processor (dual-core, 2.30GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), HT technology Intel Core i5-2410M processor (dual-core, 2.30GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i5-2430M processor (dual-core, 2.40GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.0GHz), HT technology Intel Core i5-2450M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-2450M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	 ThinkVantage® System Update ThinkVantage Power Manager
Optical Ultrabay Disk mSATA™ SSD	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive None	 ThinkVantage Toolbox Lenovo® SimpleTap Preloaded applications¹⁴ (only some listed) Norton™ Internet Security 2011 (30 days of virus definitions)
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight,	 Adobe[®] Reader[®]
Camera	200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wider view angle, low light sensitive, fixed focus	 Skype™ for Windows Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	 Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage® button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 9.0 hr; 9-cell (94Whr): up to 15.0 hr; 9-cell plus Slice battery: up to 30 hr	
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard	One slot (ExpressCard/34)	
Smart Card read Multicard reader Ports	None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN Carrier	Two PCI Express® Mini Card slots 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable None	
Modem	Some: 56K V.92 modem	
IEEE 1394 Bluetooth™	None Bluetooth 3.0 wireless, LED indicator	Supports ThinkVantage technologies
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1	Integrated model: 65W AC Adapter
Intel AMT Audio support Security Security chip Fingerprint reader	None High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator,	Optimus [™] model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT [™] Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷
Limited Warranty ¹²	Power On Authentication, supports the security chip 2 3-years/1-yr battery - depot repair service / service upgrades ²² available	24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
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ThinkPad® T420 4178 (Optimus) - TopSeller - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Carrier	Modem	Smart Card Reader	Finger print reader	terv	Intel		Ann Date mm/yy)
4178-B8G	i5-2430M	4GBx1	14.0" HD+	720p	500G 7200	Intel 1000	Ericsson	select	None	None	Finger	6	No	Pro 64	10/11
4178-82G	i5-2410M	4GBx1	14.0" HD+	720p	500G 7200	Intel 1000	Ericsson	select	Modem	None	Finger	6	No	Pro 64	03/11
4178-CHG	i5-2450M	4GBx1	14.0" HD+	720p	500G 7200	Intel 1000	Ericsson	select	None	Smart	Finger	6	No	Pro 64	01/12

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

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2410M processor (dual-core, 2.30GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i5-2430M processor (dual-core, 2.40GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.0GHz), HT technology Intel Core i5-2450M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) ■ Rescue and Recovery™ ■ Access Connections™ ■ Fingerprint Software (fingerprint
Memory	8GB max' / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	models)
Optical Ultrabay Disk mSATA™ SSD	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ removable, upgradable, supports the second disk, Shock Mounted Hard Drive None	 Password Manager (fingerprint models) ThinkVantage® System Update ThinkVantage Power Manager ThinkVantage Toolbox Lenovo® SimpleTap
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions)
Graphics	HD720p resolution, wider view angle, low light sensitive, fixed focus NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M, PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports three independent displays; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	 Adobe® Reader® Skype™ for Windows Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage [®] button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Edition (DVD±RW)
Dimensions ³ Weight ² Case material Battery - type	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery	
Battery - life ¹⁰ Chipset	6-cell (57Whr): up to 8.8 hr; 9-cell (94Whr): up to 14.7 hr; 9-cell plus Slice battery: up to 29.5 hr Mobile Intel QM67 Express Chipset	
ExpressCard	One slot (ExpressCard/34)	
Smart Card read Multicard reader Ports	Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN	Two PCI Express Mini Card slots 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN, Ericsson F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
Carrier Modem	User selectable, contract required with service provider Some: 56K V.92 modem	
IEEE 1394 Bluetooth™	None Bluetooth 3.0 wireless, LED indicator	Supports ThinkVantage technologies
Ethernet Intel AMT Audio support	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCle x1 None High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack	Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame)
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module. TCG 1.2-compliant	EPEĂT™ Gold rating ENERGY STAR® 5.0-compliant
Fingerprint reade	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support
Limited Warranty ¹	² 3-years /1-yr battery - depot repair service / service upgrades ²² available	during the warranty period ¹²

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Carrier	IEEE 1394	Finger print reader	Blue- tooth		Intel vPro	Preload	Ann Date (mm/yy)
4179-GEG	i5-2520M	2GBx2	14.0" HD	No	320G 7200	Intel 1000	WWAN upa	None	1394	None	ВТ	6	No	Pro 64	03/11

• Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows [®] 7 Professional 64
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Ready to install applications ¹⁴ (only some listed)
Optical Ultrabay Disk mSATA™ SSD	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive None	 Rescue and Recovery™ Access Connections™ Fingerprint Software (fingerprint models) Password Manager (fingerprint models) ThinkVantage® System Update
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	ThinkVantage Power Manager ThinkVantage Toolbox Lenovo® SimpleTap
Camera	None	Preloaded applications ¹⁴ (only some
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Ilisted) Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Windows Live™ Essentials Misrosoft® Office 2010 prolocold
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage® button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW)
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-Fiber Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 9.0 hr; 9-cell (94Whr): up to 15.0 hr; 9-cell plus Slice battery: up to 30 hr	Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard	One slot (ExpressCard/34)	
Smart Card read Multicard reader Ports	None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN Carrier	Two PCI Express® Mini Card slots 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable None	
Modem IEEE 1394 Bluetooth™ Ethernet Intel AMT Audio support	None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 /	Supports ThinkVantage technologies Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame) EDEATIM Cold sting
Security Security chip Fingerprint reader	volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	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
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See footnotes for more detailed information WE model(s) announced March 1, 2011 WE model(s) withdrawn effective December 2012 ©Lenovo

ThinkPad® T420 4180 - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Dis SA GB ⁸	TA	PCle Mini Card WLAN	PCle Mini Card WWAN/ mSATA	Modem	IEEE 1394	Smart Card Reader	Finger print reader		Bat- tery cells		Globa (G) GMP (al Pre- P)load (Ann Date (mm/yy)
4180-PCG	i5-2520M	4GBx1	14.0" HD	720p	320G	7200	Intel 6205	WWAN upg	None	1394	Smart	Finger	ВТ	6	vPro		Pro 64	04/11
4180-PBG	i5-2520M	4GBx1	14.0" HD	720p	320G	7200	Intel 6205	Ericsson	None	1394	Smart	Finger	BT	6	vPro		Pro 64	04/11
4180-PAG	i5-2520M	4GBx1	14.0" HD	720p	128G	SSD	Intel 6205	WWAN upg	None	None	None	Finger	BT	6	vPro	G	Pro 64	04/11
4180-MNG	i5-2520M	4GBx1	14.0" HD	720p	500G	7200	Intel 6205	WWAN upg	None	1394	None	Finger	BT	6	vPro	G	Pro 64	02/11
4180-MBG	i5-2540M	4GBx1	14.0" HD	+ 720p	320G	7200	Intel 6205	WWAN upg	Modem	None	None	Finger	BT	6	vPro	G	Pro 64	02/11
4180-M9G	i5-2520M	2GBx1	14.0" HD	720p	320G	7200	Intel 6205	WWAN upg	Modem	None	None	None	BT	6	vPro		Pro 64	02/11
4180-63G	i5-2540M	2GBx2	14.0" HD	+ 720p	320G	7200	Intel 6205	WWAN upg	None	1394	None	Finger	BT	6	vPro	G	Pro 64	02/11
4180-62G	i5-2520M	2GBx2	14.0" HD	720p	320G	7200	Intel 6205	WWAN upg	None	1394	None	None	BT	6	vPro	G	Pro 64	02/11
4180-QFG	i5-2520M	4GBx1	14.0" HD	720p	160G	SSD	Intel 6205	WWAN upg	None	None	None	Finger	BT	6	vPro	G	Pro 64	01/12

- A depot repair service 3-year limited warranty
 Microsoft Office 2010 Product Key Ready (O10PKR)

Memory BGB max ⁷ / PC3-10600 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Memory BGB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets Optical Optical Ultrabay One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive MSATA™ SSD Display Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera HD720p resolution, wider view angle, low light sensitive, fixed focus Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort) @60Hz; Some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint models) • Fingerprint software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Toolbox • Lenovo® SimpleTap • Preloaded applications¹⁴ (only s listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloades	Positioning		
Optical Optical Optical Optical One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive None Display Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera HD720p resolution, wider view angle, low light sensitive, fixed focus Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort) @ 60Hz; Access Connections™ Fingerprint software (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Phassword Man	Processor	Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache),	Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed)
Optical Ultrabay One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ Mone MSATA™ SSD Display Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wider view angle, low light sensitive, fixed focus Intel HD Graphics 3000 in processor, external analog monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort) @ 60Hz; models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models) Password Manager (fingerprint models)	Memory		 Access Connections[™]
Display Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera HD720p resolution, wider view angle, low light sensitive, fixed focus Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort) @60Hz; • Lenovo® SimpleTap Preloaded applications¹⁴ (only s listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloade	Uİtrabay Disk	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some</i> : Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some</i> : Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive	models) Password Manager (fingerprint models) ThinkVantage® System Update ThinkVantage Power Manager
Graphics Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort) @ 60Hz; (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloader	, ,	200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	Lenovo® SimpleTap Preloaded applications¹⁴ (only some listed)
		Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display;	(30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate
rrackPoint irackPoint pointing device, Press-to-Select, internet Scroll Bar , magnifying glass (DVD±RW)	TrackPoint® Touchpad	TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch	Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo
Dimensions ³ 14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm Weight ² Case material Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic Battery - type Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery	Weight ² Case material	4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic	
Battery - life 6-cell (57Whr): up to 9.0 hr; 9-cell (94Whr): up to 15.0 hr; 9-cell plus Slice battery: up to 30 hr	Battery - life ¹⁰		
Chipset Mobile Intel QM67 Express Chipset	Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard Smart Card read Multicard reader Ports One slot (ExpressCard/34) Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	Smart Card read Multicard reader	Some: Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port,	
PCIe Mini Card PCIe WLAN ⁴ PCIe WLAN ⁴ PCIe WWAN PCIe Wireless WAN upgradable Some: Wireless WAN upgradable GPRS/WCDMA/HSPA/HSPA+, GPS	PCIe WLAN ⁴ PCIe WWAN	11a/b/g/n ²⁸ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
Carrier Some: User selectable, contract required with service provider Modem Some: 56K V.92 modem Some: USER 12014 First 12014 in connectors 12014 and 12014 in connectors 12014 in conn	Modem	Some: 56K V.92 modem	
Ethernet Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCle x1	Bluetooth™ Ethernet	Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1	Supports ThinkVantage technologies Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter ThinkPad Ball Cong (one priore)
Audio support High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Security Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader Fingerprint reader UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹¹² 24 hour x 7 day¹¹ toll-free support	Security Security chip Fingerprint reader	volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant
Limited Warranty ¹² 3-years /1-yr battery - depot repair service / service upgrades ²² available during the warranty period ¹²	Limited Warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

ThinkPad® T420 4180 (Optimus) - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Carrier	IEEE 1394		Blue-				Pre-	Ann Date (mm/yy)
4180-65G	i5-2540M	2GBx2	14.0" HD+	720p	500G 7200	Intel 6205	WWAN upg	None	1394	Finger	ВТ	9	vPro	G	Pro 64	02/11
4180-64G	i5-2520M	2GBx2	14.0" HD	720p	320G 7200	Intel 6205	WWAN upg	None	1394	None	BT	6	vPro	G	Pro 64	02/11

- A depot repair service 3-year limited warranty
 Microsoft[®] Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	 Rescue and Recovery[™] Access Connections[™]
Optical Ultrabay Disk mSATA™ SSD	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive None	 Fingerprint Software (fingerprint models) Password Manager (fingerprint models) ThinkVantage® System Update ThinkVantage Power Manager
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	 ThinkVantage Toolbox Lenovo® SimpleTap Preloaded applications¹⁴ (only some listed)
Camera Graphics	HD720p resolution, wider view angle, low light sensitive, fixed focus NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M, PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports three independent displays; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	 Norton™ Internet Security 2011 (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage [®] button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	(DVD±RW) ◆ Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Dimensions ³ Weight ² Case material	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 8.8 hr; 9-cell (94Whr): up to 14.7 hr; 9-cell plus Slice battery: up to 29.5 hr	
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard Smart Card read Multicard reader Ports	One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN Carrier Modem	Two PCI Express Mini Card slots 11a/b/g/n ²⁸ , PCIe Half Mini Card, Intel Centrino [®] Advanced-N 6205, 2x2 Wireless WAN upgradable None None	
IEEE 1394 Bluetooth™	IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) Bluetooth 3.0 wireless, LED indicator	Supports ThinkVantage technologies
Ethernet Intel AMT Audio support	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 /	Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame)
Security Security chip	volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	EPEĂT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant
	r Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support
Limited warranty	² 3-years/1-yr battery - depot repair service / service upgrades ²² available	during the warranty period12

ThinkPad® T420 4236 (Onsite) - withdrawn

							201 141 1								<u> </u>					
Type-model Proces	ssor Memory	Wide- screen display (Camera		PCI Mini C WLA	ard Ca	PCIe Mini ard WWAN/ mSATA		Modem	IEEE 1394	Card	Finger print reader	tery			Pre-	Ann Date (mm/yy			
	20M 4GBx1			128G SSD	Intel	6205	upa	None	None			Finger				-				
4236-P3G i5-252			720p												.	Pro 64				
4236-NUG i5-252	20M 4GBx1	14.0" HD	720p					None				Finger			GΡ					
4236-MBG i5-254	10M 4GBx1	14.0" HD+	720p	320G 7200	Intel	6205	upg	None	Modem	None	None	Finger	6	vPro	GΡ	Pro 64	02/11			
4236-NHG i5-254	10M 4GBx1	14.0" HD+	720p	320G 7200	Intel	6205	upg	None	Modem	None	None	Finger	6	vPro	GΡ	Pro 64	02/11			
4236-63G i5-254	10M 2GBx2	14.0" HD+	720p	320G 7200	Intel	6205	upg	None	None			Finger			GΡ	Pro 64	02/11			
4236-62G i5-252	20M 2GBx2	14.0" HD	720p	320G 7200	Intel	6205	upg	None	None	1394	None	None	6	vPro	GΡ	Pro 64	02/11			
4236-N5G i5-254	40M 4GBx1	14.0" HD	720p	250G 5400	Intel	6205	upg	None	Modem	None	None	Finger	6	vPro		Pro 64	02/11			
4236-N3G i5-252	20M 4GBx1	14.0" HD	No	320G 7200	Intel	6205	upg	None	Modem	None	Smart	Finger	6	vPro		Pro 64	02/11			
4236-N2G i5-254	40M 4GBx1	14.0" HD	720p	320G 5400	Intel	6205	Ericsson	select	Modem	None	None	Finger	6	vPro		Pro 64	02/11			
4236-QFG i5-252				160G SSD					None	None	None	Finger	6	vPro	GΡ	Pro 64	01/12			
4236-PGG i7-264	40M 4GBx1	14.0" HD+	720p	500G 7200	Intel	6300	Ericsson	select	None	None	None	Finger	6	vPro		Pro 64	08/11			
Positioning	Premiere pe	erformance;	two sp	indles								Preload	ded (opera	ting s	vstem ²⁰)			
Processor	DDR3 mem Intel Core i DDR3 mem Intel Core i	ory controlle 5-2540M pro ory controlle 7-2640M pro	er (up to ocesso er (up to ocesso	ssor (dual-co o 1333MHz), or (dual-core o 1333MHz), or (dual-core o 1333MHz),	Intel e, 2.60 Intel e, 2.80	Turbo)GHz , Turbo)GHz ,	Boost 2.0 3MB Cad Boost 2.0 4MB Cad	(3.20Ĝ : he) , (3.30G : he) ,	Hz), HT	technol	ogy	Genuine Profess Ready some list • Rescu	e Wi iona to in sted) ue ai	ndows I 64 I stall a I Ind Re	s" 7 applic covery	ations¹⁴	4			
Memory				IHz DDR3, n -pin SO-DIM				·	,			Access Connections TM Fingerprint Software (fingerprint models) Password Manager (fingerprint								
Optical				Enhanced, r								mode		ivialia	ger (II	ngerpill	ıı			
Ultrabay	One bay for	removable of	devices	s, Ultrabay SI	im-co	mpatil			bottom	access		• Think	Vant	age® S	Syster	n Updat	е			
Disk	Some: Har	d Disk Drive	/ SATA	0) / SATA 3.0 A 3.0Gb/s, 2. e, supports th	5" wid	le, 9.5	mm high,	Active F			m™	ThinkThink	Vant Vant	age Po age To	ower l oolbox	Manage				
mSATA™ SSD	None			.,	_							• Lenov	, O S	ompie	ιαμ					
Display	200	nits, 16:9 a	spect r	366x768) col atio, 300:1 co	ontras	t ratio						Preloaded applications ¹⁴ (only some listed)								
				1 600x900) c o atio, 300:1 co				Jackiigh	ι,							urity 201 iitions)	1.1			
Camera								fixed fo	cus			Adobe				11110115)				
Graphics	Some: HD720p resolution, wider view angle, low light sensitive, fixed focus Intel HD Graphics 3000 in processor,											Skype™ for Windows								
	digital monit supports du Max externa	tor support v al independ al resolution:	ria Disp ent dis : 2560	rt via VGA D blayPort™ (su play; x1600 (Displ 0x1200@60	ıpport ayPor	s sing t)@60	le-link DV)Hz;			,.		 Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) 								
Keyboard				outton, spill-re											eFact	ory® Ler	novo			
TrackPoint [®]				ess-to-Selec							.			VD±R'		,				
Touchpad	UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions									ch										
ThinkLight™																				
Dimensions ³				7" x 1.18–1.2																
Weight ²				6-cell: from			20kg); <i>9</i> -	<i>cell:</i> fro	m 5.22 l	b (2.37	kg)									
Case material				Glass-fiber h																
Dotton, time	Bottom:			Reinforced P		nal Cl	iaa hattari		lbattarı											
Battery - type Battery - life ¹⁰				ell, supports <i>-cell (94Whr)</i>						rv: un t	20 hr									
	,			,	. up it	7 15.0	111, 3-0011	pius Sil	ice balle	ry. up to	30111									
Chipset	Mobile Inte			mpset																
ExpressCard	One slot (Ex																			
Smart Card read Multicard reader	Some: Sma 4-in-1 reade			SDYC)																
Ports				one USB 2.	0/eS4	TA co	mho nort													
. 51.0				DisplayPort)																
PCIe Mini Card	Two PCI Ex					/.	- /													
PCIe WLAN ⁴	Some: 11a	/b/g/n ²⁸ , PCI	le Half	Mini Card, Ir Iini Card, Inte	itel Ce	entrino trino l	[®] Advanc Jltimate-N	ed-N 62 6300. 3	205, 2x2 3x3											
PCIe WWAN	Some: Wire Some: Wire	eless WAN ι eless WAN,	ipgrada Ericsso	able on F5521gw	Mobil					Card,										
	GPI	RS/WCDMA	/HSPA	/HSPA+, GP	S			•		•										
Carrier				act required v	vith s	ervice	provider													
Modem		V.92 moder		20 (4!-		400	4- 0000	ا اسما	1)											
IEEE 1394				00 (4-pin con	necto	r; 139	4a-2000 s	iandard	1)											
Bluetooth™ Ethernet	Bluetooth 3.			dicator c Connection	(1 0)4	ieville)	י סאט פר	lo v1				_								
Intel AMT				rology (iAMT		isville,	,, FIII, PC	VIC X I				Support	ts Th	ninkVa	ntage	technol	ogies			
Audio support	High Definit	ion (HĎ) Au	dio, Co	nexant 2067 s / dual array	2 cod	ec / st mic m	ereo spea ute button	kers, 1 , combo	watt x 2 / audio/m	/ nic jack		Optimu:	$s^{TM} n$	nodel:	90W	AC Ada	pter			
Security	Power-on pa	assword, hai	rd disk	password, s	uperv					•						e-piece				
Security chip	Trusted Plat	form Module	e, TCG	1.2-complia	nṫ		•	•	•		ļ	magn EPEAT	M C	ııı ııanı old rati	ina					
Fingerprint reader				ler on palm r on, supports				D indica	ator,			ENERG	iY S	TAR® :		mpliant				
Limited Warranty ¹²	3-years /1-ye public and n	ear battery, l	limited lays. C	l onsite servalls received ce upgrades	rice ²⁴ , after	8 am 3 pm	- 5 pm, M	on - Fri e an add	coverage dtional ne	e exclue	ding ness	ROHS-o Internat 24 hour during	iona x 7	l Warr day ¹⁸ 1	toll-fre	e suppo				
See footnotes for				1.0 22.30											7 1: 3		enovo			

ThinkPad® T420 4236 (Onsite) - November 2012 - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA		Modem	IEEE 1394		tery	Intel	Preload(Ann Date mm/yy)
4236-QPG	i7-2640M	4GBx1	14.0" HD+	None	500G 7200	Intel 6205	Ericsson	select	None	1394	Finger	6	vPro	Pro 64	11/12
4236-QNG	i5-2540M	4GBx1	14.0" HD+	None	500G 7200	Intel 6205	WWAN upg	None	None	1394	Finger	6	vPro	Pro 64	11/12
4236-QMG	i5-2520M	4GBx1	14.0" HD+	None	500G 7200	Intel 6205	WWAN upg	None	None	1394	Finger	6	vPro	Pro 64	11/12

• Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Fingerprint Software (fingerprint models) Page yourd Manager /fingerprint
Optical Ultrabay Disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive	 Password Manager (fingerprint models) ThinkVantage® System Update ThinkVantage Power Manager ThinkVantage Toolbox Lenovo® SimpleTap
mSATA™ SSD	None	• Lenovo Simple lap
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio	Preloaded applications ¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions)
Camera	None	Adobe Reader
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort™ (supports single-link DVI-D via cable 45J7915); supports dual independent display; Max external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	 Skype™ for Windows Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW)
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage [®] button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Dimensions ³ Weight ² Case material	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 9.0 hr; 9-cell (94Whr): up to 15.0 hr; 9-cell plus Slice battery: up to 30 hr	
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard	One slot (ExpressCard/34)	
Smart Card read Multicard reader Ports	None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴ PCIe WWAN	Two PCI Express® Mini Card slots 11a/b/g/n²8, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
Carrier Modem IEEE 1394	Some: User selectable, contract required with service provider None IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Bluetooth™ Ethernet Intel AMT Audio support	Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 26672 codec / stereo speakers, 1 watt x 2 /	Supports ThinkVantage technologies Integrated model: 65W AC Adapter Optimus™ model: 90W AC Adapter
Security Security chip Fingerprint reader	volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant r UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant
Limited Warranty ¹	² 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available	International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

ThinkPad® T420 4236 (Optimus) - Onsite - withdrawn

Type-model	Processor	Memory	Wide- screen display	Camera	Disk SATA GB [®] rpm	PCle Mini Card WLAN	PCIe Mini Card WWAN/ mSATA	Carrier	IEEE 1394	Finger print reader		Bat- tery cells		Global (G) GMP (P	Pre-) load	Ann Date (mm/yy)
4236-PRG	i7-2640M	4GBx1	14.0" HD+	720p	500G 7200	Intel 6205	WWAN upg	None	1394	Finger	BT	9	vPro	GΡ	Pro 64	11/11
4236-65G	i5-2540M	2GBx2	14.0" HD+	720p	500G 7200	Intel 6205	WWAN upg	None	1394	None	BT	9	vPro	GΡ	Pro 64	02/11
4236-64G	i5-2520M	2GBx2	14.0" HD	720p	320G 7200	Intel 6205	WWAN upg	None	1394	None	BT	6	vPro	GΡ	Pro 64	02/11
4236-PFG	i7-2640M	4GBx1	14.0" HD+	720p	500G 7200	Intel 6300	Ericsson	select	None	Finger	BT	9	vPro		Pro 64	08/11

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
 Microsoft[®] Office 2010 Product Key Ready (O10PKR)

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology	Preloaded operating system ²⁰ Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) ■ Rescue and Recovery™ ■ Access Connections™
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Fingerprint Software (fingerprint models)
Optical Ultrabay Disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive	 Password Manager (fingerprint models) ThinkVantage® System Update ThinkVantage Power Manager ThinkVantage Toolbox Lenovo® SimpleTap
mSATA™ SSD	None	· · ·
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900) color, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 300:1 contrast ratio HD720p resolution, wider view angle, low light sensitive, fixed focus	Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader®
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M, PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via biplayPort™ (supports single-link DVI-D via cable 45J7915); supports three independent displays; Max external resolution: 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	 Skype™ for Windows Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW) Corel Burn.Now™ Lenovo Edition (DVD±RW) Corel DVD MovieFactory® Lenovo
Keyboard TrackPoint [®] Touchpad ThinkLight™	7 row, 89-key, ThinkVantage® button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Edition (DVD±RW)
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	14.0W" (WxDxH): 13.4" x 9.17" x 1.18–1.20"; 340.5 x 233.0mm x 30.1–30.5mm 4-cell: from 4.65 lb (2.11kg); 6-cell: from 4.84 lb (2.20kg); 9-cell: from 5.22 lb (2.37kg) Display cover: Carbon-Fiber Glass-fiber hybrid; Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 4-cell, 6-cell, or 9-cell, supports optional Slice battery as 2nd battery 6-cell (57Whr): up to 8.8 hr; 9-cell (94Whr): up to 14.7 hr; 9-cell plus Slice battery: up to 29.5 hr	
Chipset	Mobile Intel QM67 Express Chipset	
ExpressCard Smart Card read Multicard reader Ports	One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴	Two PCI Express Mini Card slots Some: 11a/b/g/n ²⁸ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3	
PCIe WWAN	Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS	
Carrier Modem	Some: User selectable, contract required with service provider None	
IEEE 1394	Some: IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Bluetooth™ Ethernet	Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1	Supports ThinkVantage technologies
Intel AMT	Intel Active Management Technology (iAMT)	Integrated model: 65W AC Adapter
Audio support Security Security chip Fingerprint reader	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator,	Optimus™ model: 90W AC Adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEĀT™ Gold rating ENERGY STAR® 5.0-compliant
Limited Warranty ¹²	Power On Authentication, supports the security chip ² 3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available	ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
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