

ThinkPad E540



Lenovo® ThinkPad E540



Lenovo ThinkPad E540



Lenovo ThinkPad E540
with Numeric Keypad



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen

ThinkPad E540 20C6 (Intel) - TopSeller

Product Specifications Reference (PSREF)

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

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Pentium® 3550M processor (2 cores, 2.30GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1600MHz) Intel Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p>											<p>Preloaded operating system²⁰ - <i>Some:</i> No operating system - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - <i>Some:</i> Windows 8 64-bit</p>
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets											<p>Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader®</p> <p>- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage</p> <p>- All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™											
M.2 SSD	None											
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio											
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator											
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display											
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad											
Touchpad ThinkLight™	TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None											
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm											
Weight ²	6-cell: from 5.4 lb (2.46kg)											
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom											
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type ³⁷	Lithium Ion 6-cell											
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr											
Chipset	Mobile Intel HM87 Express Chipset											
ExpressCard	None											
Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)											
PCIe Mini Card	One PCI Express Half Mini Card slot											
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
M.2 Card	One M.2 Card slot for support of WWAN card or SSD											
M.2 WWAN	<i>Some:</i> Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card											
SIM card	<i>Some:</i> User selectable, contract required with service provider											
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card											
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection											
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											
												Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating (exclude No OS models) ENERGY STAR® 6.0-compliant (exclude No OS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller - II

Product Specifications Reference (PSREF)

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

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

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

Positioning Processor	Sophisticated design with quality, durability and reliability for SMB customers; two spindles Intel® Pentium® 3560M processor (2 cores, 2.40GHz, 2MB cache), Intel HD Graphics, DDR3 memory controller (up to 1600MHz) Intel Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core™ i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-4300M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit - Some: Windows 8.1 64-bit
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader®
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage
M.2 SSD	None	- All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics or Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display	
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
Touchpad ThinkLight™	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm	
Weight ²	6-cell: from 5.4 lb (2.46kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Chipset ExpressCard	Mobile Intel HM87 Express Chipset None	
Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card PCIe WLAN ⁴	One PCI Express Half Mini Card slot Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
M.2 Card M.2 WWAN	One M.2 Card slot for support of WWAN card or SSD Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card	Supports ThinkVantage® technologies
SIM card Bluetooth™	Some: User selectable, contract required with service provider Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	65-watt AC adapter EPEAT™ Gold rating (exclude No OS models) ENERGY STAR® 6.0-compliant (exclude No OS models)
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection	RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller - III

Product Specifications Reference (PSREF)

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

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

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system²⁰ - Some: No operating system - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit - Some: Windows 8.1 64-bit Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics or Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display	
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)	
Weight ²	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Chipset	Mobile Intel HM87 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
PCIe WLAN ⁴	One M.2 Card slot for support of WWAN card or SSD Some: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 Card Some: User selectable, contract required with service provider	
M.2 Card	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
M.2 WWAN	Realtek® RTL8111GUS Gigabit Network Connection	
SIM card	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Bluetooth™	Power-on password, hard disk password, supervisor password, security keyhole	
Ethernet	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled	
Audio support	Some: Fingerprint reader on palm rest, swipe sensor	
Security		
Security chip		
Fingerprint reader		
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for more detailed information

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

Product Specifications Reference (PSREF)

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

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system ²⁰ - <i>Some:</i> No operating system - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8.1 64-bit Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA GeForce® 710M , PCI Express® x 8, 1GB memory, DirectX® 11.1, or NVIDIA GeForce® GT740M , PCI Express® x 8, 2GB memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, External monitor support via analog VGA DB-15 connector / digital HDMI connector	
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm	
Weight ²	6-cell: from 5.4 lb (2.46kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Chipset	Mobile Intel HM87 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
M.2 Card	One M.2 Card slot for support of WWAN card or SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled	
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 90-watt AC adapter EPEAT™ Gold rating (exclude No OS models) ENERGY STAR® 6.0-compliant (exclude No OS models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

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

Product Specifications Reference (PSREF)

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

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

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit or Windows 8.1 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8.1 64-bit Preloaded applications (only some listed, for Windows 8/8.1 models) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot	
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , anti-glare, 10-point touch screen LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) , anti-glare, 10-point touch screen LED backlight, 300 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display	
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm	
Weight ²	6-cell: from 5.4 lb (2.46kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Chipset	Mobile Intel HM87 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
M.2 Card	One M.2 Card slot for support of WWAN card or SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant, some are enabled, some are disabled	
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information