

# ThinkPad E540 20C60045++

Region	Keyboard
WE	Numeric Keypad
Machine Type	Fingerprint Reader
20C6	Fingerprint Reader
TopSeller	NFC
TopSeller	No
Processor	Battery Cells
i5-4200M (2C, 2.50 / 3.10GHz, 3MB, 1600MHz)	6-cell (48wh)
vPro	Power Adapter (watt)
No	90W
Graphics	Preload
NVIDIA GeForce GT740, 2GB Memory	Windows 8 64-bit
Chipset	Base Warranty
Intel HM87	1-year depot
Memory	Global
8GBx1	No
Display	Ann Date (mm/yy)
15.6" FHD (1920x1080)	10/13
Multi-touch	
No	
Color	
Black	
Storage	
1TB 5400 rpm	
Optical	
DVD±RW	
WLAN &Bluetooth	
Intel 7260 b/g/n + BT4.0	
WWAN / M.2 SSD	
No	
SIM Card	
No	
Camera	
720p	

Keyboard	
Numeric Keypad	
Fingerprint Reader	
Fingerprint Reader	
NFC	
No	
Battery Cells	
6-cell (48wh)	
Power Adapter (watt)	
90W	
Preload	
Windows 8 64-bit	
Base Warranty	
1-year depot	
Global	
No	
Ann Date (mm/yy)	
10/13	

## Note:

Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "\*\*\*" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries



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Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i></p> <p><b>Intel® Pentium® 3550M processor (2 cores, 2.30GHz, 2MB cache), Intel HD Graphics,</b> DDR3 memory controller (up to 1600MHz)</p> <p><b>Intel Pentium 3560M processor (2 cores, 2.40GHz, 2MB cache), Intel HD Graphics,</b> DDR3 memory controller (up to 1600MHz)</p> <p><b>Intel Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600,</b> DDR3 memory controller (up to 1600MHz), HT technology</p> <p><b>Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600,</b> DDR3 memory controller (up to 1600MHz), HT technology</p> <p><b>Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600,</b> DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology</p> <p><b>Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600,</b> DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p> <p><b>Intel Core i5-4300M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600,</b> DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p> <p><b>Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600,</b> DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p> <p><b>Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600,</b> DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>	<p><b>Preloaded operating system<sup>20</sup></b></p> <ul style="list-style-type: none"> <li>- <i>Some:</i> No operating system</li> <li>- <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit</li> <li>- <i>Some:</i> Windows 8 Pro 64-bit</li> <li>- <i>Some:</i> Windows 8.1 64-bit</li> <li>- <i>Some:</i> Windows 8.1 Pro 64-bit</li> </ul> <p><b>Preloaded applications (only some listed)</b></p> <ul style="list-style-type: none"> <li>• Lenovo Support</li> <li>• Lenovo Companion</li> <li>• Lenovo Cloud Storage</li> <li>• ThinkVantage System Update</li> <li>• Norton™ Internet Security (30 days of virus definitions)</li> <li>• Microsoft Office preloaded; purchase a product key to activate</li> </ul>
Memory	16GB max <sup>7</sup> / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	<i>Some:</i> 15.6" (396mm) <b>HD (1366x768)</b> , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) <b>FHD (1920x1080)</b> , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) <b>HD (1366x768)</b> , anti-glare, 10-point touch screen LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) <b>FHD (1920x1080)</b> , 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 or <b>NVIDIA® Optimus™ technology</b> , auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and <b>NVIDIA GeForce® 710M</b> , PCI Express® x 8, <b>1GB</b> memory, DirectX® 11.1, or <b>NVIDIA GeForce® GT740M</b> , PCI Express® x 8, <b>2GB</b> memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, 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 <sup>13</sup> UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions <sup>3</sup>	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm	
Weight <sup>2</sup>	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 <sup>37</sup>	Lithium Ion 6-cell	
Battery - life <sup>10</sup>	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr	
Chipset	<b>Mobile Intel HM87 Express Chipset</b>	
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 <sup>4</sup>	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth, 2x2	
M.2 Card	One M.2 Card slot for support of 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	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor	
Limited warranty <sup>12</sup>	<b>1-year</b> - depot repair service / service upgrades <sup>22</sup> available	

See footnotes for more detailed information

Supports ThinkVantage® technologies

65-watt/90-watt AC adapter  
EPEAT™ Gold rating  
ENERGY STAR® 6.0-compliant  
RoHS-compliant  
International Warranty Service<sup>17</sup>  
24 hour x 7 day<sup>18</sup> toll-free support during the warranty period<sup>12</sup>

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Lenovo

