

# ThinkPad X250 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Smart card reader	Optional: Smart card reader															
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC)															
	i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD graphics 4400	Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector															
	i3-5010U			2.1 GHz	-	3MB		Intel HD Graphics 5500																	
	i5-5200U			2.2 GHz	2.7 GHz	3MB																			
	i5-5300U			2.3 GHz	2.9 GHz	3MB																			
i7-5600U	2.6 GHz			3.2 GHz	4MB																				
Graphics	Intel HD Graphics 5500 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								Camera (optional)	HD720p resolution, low light sensitive, fixed focus															
Chipset	Intel SoC (System on Chip) platform								Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack															
Memory	8GB max (i5-4300U processor) or 16GB max (other processors above) / 1600MHz DDR3L, one 204-pin SO-DIMM socket								Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight															
Display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio <i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch															
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits								Security	Power-on password, hard disk password, supervisor password, security keyhole															
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory								Security chip	Discrete TPM 1.2, TCG Certified															
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures															
Optical	None								vPro (optional)	Intel vPro Technology															
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)								Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor															
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)															
WLAN <sup>4</sup>	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card</li> <li>11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card</li> <li>11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card</li> <li>11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card</li> </ul>								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)															
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>Wireless WAN upgradable</li> <li>Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card</li> <li>Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card</li> </ul>								Max battery life <sup>10</sup>	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>5.2 hr</td> <td>10.7 hr</td> <td>16.0 hr</td> <td>21.4 hr</td> </tr> </tbody> </table>	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr					
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SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider								AC adapter	45W AC adapter															
Dimensions <sup>3</sup>	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit or Windows 10 Pro 64 <ul style="list-style-type: none"> <li>Lenovo Solution Center</li> <li>Lenovo SHAREit</li> <li>ThinkVantage Product Recovery</li> <li>Rescue and Recovery™</li> <li>ThinkVantage System Update</li> <li>PC Device Stage</li> <li>Adobe® Reader®</li> <li>Microsoft® Office preloaded; purchase a product key to activate</li> <li>Norton™ Internet Security (30 days of virus definitions)</li> </ul>															
Weight <sup>2</sup>	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>No + 6-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-touch</td> <td>2.88 lb / 1.31 kg</td> <td>3.13 lb / 1.42 kg</td> <td>3.23 lb / 1.47 kg</td> <td>3.48 lb / 1.58 kg</td> </tr> <tr> <td>Multi-touch</td> <td>-</td> <td>3.29 lb / 1.49 kg</td> <td>-</td> <td>3.64 lb / 1.65 kg</td> </tr> </tbody> </table>								Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell	Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg	Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg	Limited warranty <sup>12</sup>	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>1-year depot repair service</li> <li>3-year/1-yr battery depot repair service</li> <li>3-year/1-yr battery limited onsite service<sup>24</sup></li> <li>3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)</li> </ul>
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Case material	<i>Display cover:</i> Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); <i>Bottom:</i> Glass-Fiber Reinforced Plastic								Mil-Spec test	MIL-STD-810G military certification															
									Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant															