

ThinkPad X270 Platform Specifications

Product Specifications Reference (PSREF)

<p>Processor 6th Generation Intel® Core™ i3 / i5 / i7 Processor</p> <table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-6006U</td> <td rowspan="6">2</td> <td rowspan="6">4</td> <td>2.0 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="6">DDR4-2133</td> <td rowspan="6">Intel HD Graphics 520</td> </tr> <tr> <td>i3-6100U</td> <td>2.3 GHz</td> <td>-</td> <td>3MB</td> </tr> <tr> <td>i5-6200U</td> <td>2.3 GHz</td> <td>2.8 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-6300U</td> <td>2.4 GHz</td> <td>3.0 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-6500U</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-6600U</td> <td>2.6 GHz</td> <td>3.4 GHz</td> <td>4MB</td> </tr> </tbody> </table> <p>or 7th Generation Intel Core i3 / i5 / i7 Processor</p> <table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-7100U</td> <td rowspan="6">2</td> <td rowspan="6">4</td> <td>2.4 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="6">DDR4-2133</td> <td rowspan="6">Intel HD Graphics 620</td> </tr> <tr> <td>i5-7200U</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-7300U</td> <td>2.6 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-7500U</td> <td>2.7 GHz</td> <td>3.5 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-7600U</td> <td>2.8 GHz</td> <td>3.9 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	i3-6006U	2	4	2.0 GHz	-	3MB	DDR4-2133	Intel HD Graphics 520	i3-6100U	2.3 GHz	-	3MB	i5-6200U	2.3 GHz	2.8 GHz	3MB	i5-6300U	2.4 GHz	3.0 GHz	3MB	i7-6500U	2.5 GHz	3.1 GHz	4MB	i7-6600U	2.6 GHz	3.4 GHz	4MB	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	i3-7100U	2	4	2.4 GHz	-	3MB	DDR4-2133	Intel HD Graphics 620	i5-7200U	2.5 GHz	3.1 GHz	3MB	i5-7300U	2.6 GHz	3.5 GHz	3MB	i7-7500U	2.7 GHz	3.5 GHz	4MB	i7-7600U	2.8 GHz	3.9 GHz	4MB	<p>Dimensions <i>WxDxH:</i> 12.03" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm</p> <p>Weight</p> <table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3 + 6-cell</th> </tr> </thead> <tbody> <tr> <td><i>Weight</i></td> <td>2.79 lb / 1.27 kg</td> <td>2.98 lb / 1.36 kg</td> <td>3.33 lb / 1.52 kg</td> </tr> </tbody> </table> <p>Case color Black</p> <p>Case material <i>Display cover:</i> Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Glass-Fiber Reinforced Plastic</p> <p>Smart card reader Optional: Smart card reader</p> <p>Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC)</p> <p>Ports Two USB 3.1 Gen 1 (USB 3.0, one Always On), USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort), HDMI 1.4b, Ethernet (RJ-45), Dock connector</p> <p><i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i></p> <p>WiGig dock (opt) ThinkPad WiGig dock, mutually exclusive with WWAN (US only)</p> <p>Monitor cable (optional) <i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter <i>USB-C to VGA:</i> Lenovo USB-C to VGA Adapter <i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter</p> <p>Camera (optional) HD720p resolution, fixed focus</p> <p>Audio support HD Audio, Realtek ALC3268 codec / stereo speakers, 1.5W x 2 / optional dual array microphone, combo audio/microphone jack</p>	Models	No + 3-cell	3-cell + 3-cell	3 + 6-cell	<i>Weight</i>	2.79 lb / 1.27 kg	2.98 lb / 1.36 kg	3.33 lb / 1.52 kg
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<p>Graphics Intel HD Graphics 520 or 620 in processor; supports external digital monitor via HDMI or USB Type-C; supports three independent displays; Max resolution: 4096x2160@60Hz (USB Type-C); 4096x2160@24Hz (HDMI)</p>	<p>Keyboard 6-row, spill-resistant, multimedia Fn keys, optional LED backlight</p> <p>UltraNav™ TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad</p>																																																																												
<p>Chipset Intel SoC (System on Chip) platform</p> <p>Memory 16GB max / 2400MHz DDR4, one DDR4 SO-DIMM socket</p> <p><i>* System clocks down for processors with lower memory controller</i></p>	<p>Security Power-on password, hard disk password, supervisor password, security keyhole</p> <p>Security chip Discrete TPM 1.2 or TPM 2.0, TCG Certified (may be disabled in some region)</p> <p>vPro (optional) Intel vPro Technology</p> <p>Fingerprint reader Optional: Touch style match on chip fingerprint reader on the palm rest</p> <p>NFC (optional) Near Field Communication</p>																																																																												
<p>Display</p> <p><i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</p> <p><i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 800:1 contrast ratio, 170° viewing angle</p> <p><i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle</p> <p>Multi-touch (opt) On-cell touch, supports 10-finger gesture (FHD only)</p>	<p>Internal battery Optional: Integrated Li-ion or Li-Polymer 3-cell (23Wh)</p> <p>External battery Li-ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)</p> <p>Max battery life (MobileMark® 2014)</p> <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><i>Max battery life</i></td> <td>6.52 hr</td> <td>13.04 hr</td> <td>20.1 hr</td> <td>26.9 hr</td> </tr> </tbody> </table> <p><i>* Battery life varies significantly with settings, usage, & other factors</i></p> <p>AC adapter</p> <ul style="list-style-type: none"> • 45W USB-C AC adapter • 45W slim tip AC adapter • 65W USB-C AC adapter • 65W slim tip AC adapter 	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	<i>Max battery life</i>	6.52 hr	13.04 hr	20.1 hr	26.9 hr																																																																		
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<p>Storage System has one HDD slot or one M.2 2280 slot exclusively for storage</p> <p><i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™</p> <p><i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD)</p> <p><i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s</p> <p><i>Some:</i> 128GB M.2 SSD / SATA 6.0Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN and WiGig</p>	<p>Operating system One of the following, configurable by model:</p> <ul style="list-style-type: none"> • Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64 • Windows 10 Home 64 • Windows 10 Pro 64 																																																																												
<p>Optical None</p>	<p>Limited warranty One of the following, configurable by model:</p> <ul style="list-style-type: none"> • 1-year depot repair service • 1-year depot with 2-year system board repair service • 1-year/3-yr battery depot repair service • 1-year limited onsite service • 3-year/1-yr battery depot repair service • 3-year/3-yr battery depot repair service • 3-year/1-yr battery limited onsite service • 3-year/3-yr battery limited onsite service 																																																																												
<p>Ethernet Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)</p> <p>vPro model: Intel Ethernet Connection I219-LM (Jacksonville)</p>	<p>Mil-Spec test MIL-STD-810G military testing</p>																																																																												
<p>WLAN (optional) One of the following, configurable by model (WiGig is mutually exclusive with WWAN):</p> <ul style="list-style-type: none"> • Realtek® RTL8822BE, Wi-Fi 2x2 802.11ac + BT4.1 • Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1 • Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1 • Intel Tri-Band Wireless-AC 18265, WiGig 802.11ad + Wi-Fi 2x2 802.11ac + BT4.1 (US only) 	<p>Environment EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant</p>																																																																												
<p>Bluetooth™ (opt) Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p> <p><i>* Intel 8265ac / 18265ac card support BT4.2 but is limited to BT4.1 by Windows OS</i></p>	<p>WWAN (optional) One of the following, configurable by model (mutually exclusive with WiGig):</p> <ul style="list-style-type: none"> • Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE-A, Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455) • Integrated Mobile Broadband 4G LTE, Intel XMM™ 7160 (Fibocom L831-EAU) (EMEA only) 																																																																												
<p>SIM card (opt) Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card</p>																																																																													