

ThinkPad P70 Platform Specifications

Product Specifications Reference (PSREF)

Processor	<p>6th Generation Intel® Core™ i7 Processor or Intel Xeon® Processor E3 v5 Family</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>i7-6700HQ</td> <td rowspan="4">4</td> <td rowspan="4">8</td> <td>2.6 GHz</td> <td>3.5 GHz</td> <td>6MB</td> <td rowspan="4">DDR4-2133</td> <td>Intel HD Graphics 530</td> </tr> <tr> <td>i7-6820HQ</td> <td>2.7 GHz</td> <td>3.6 GHz</td> <td>8MB</td> <td>Intel HD Graphics P530</td> </tr> <tr> <td>E3-1505M v5</td> <td>2.8 GHz</td> <td>3.7 GHz</td> <td rowspan="2">8MB</td> <td rowspan="2">Intel Iris™ Pro Graphics P580</td> </tr> <tr> <td>E3-1575M v5</td> <td>3 GHz</td> <td>3.9 GHz</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	i7-6700HQ	4	8	2.6 GHz	3.5 GHz	6MB	DDR4-2133	Intel HD Graphics 530	i7-6820HQ	2.7 GHz	3.6 GHz	8MB	Intel HD Graphics P530	E3-1505M v5	2.8 GHz	3.7 GHz	8MB	Intel Iris™ Pro Graphics P580	E3-1575M v5	3 GHz	3.9 GHz	<p>Smart card reader <i>Optional</i>: Smart card reader</p> <p>ExpressCard One slot (ExpressCard/34)</p> <p>Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card</p> <p>Ports Four USB 3.0 (one Always On), two USB Type-C / Thunderbolt 3, Mini DisplayPort, HDMI, Ethernet (RJ-45), Dock connector</p> <p>Camera <i>(optional)</i> HD720p resolution, low light sensitive, fixed focus</p> <p>Audio support HD Audio, Realtek® ALC3268 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack</p>
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics																								
i7-6700HQ	4	8	2.6 GHz	3.5 GHz	6MB	DDR4-2133	Intel HD Graphics 530																								
i7-6820HQ			2.7 GHz	3.6 GHz	8MB		Intel HD Graphics P530																								
E3-1505M v5			2.8 GHz	3.7 GHz	8MB		Intel Iris™ Pro Graphics P580																								
E3-1575M v5			3 GHz	3.9 GHz																											
Graphics	<p>Intel HD Graphics 530, Intel HD Graphics P530, or Intel Iris™ Pro Graphics P580 in processor and NVIDIA Quadro® M600M (2GB memory), M3000M (4GB memory), M4000M (4GB memory), or M5000M (8GB memory); supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™; supports five independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160@60Hz (Thunderbolt); 3840x2160@30Hz (HDMI)</p>	<p>Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight</p> <p>UltraNav™ 3-button TrackPoint® pointing device and 3-button crystal silk surface multi-touch touchpad</p> <p>Security Power-on password, hard disk password, supervisor password, security keyhole</p> <p>Security chip Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset</p> <p>ThinkEngine Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures</p> <p>vPro <i>(optional)</i> Intel vPro Technology</p> <p>Fingerprint reader Touch style fingerprint reader on the keyboard bezel</p> <p>Color calibration <i>Optional</i>: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest</p>																													
Chipset	<p>Mobile Intel CM236 Chipset (Intel GL82CM236 PCH)</p>	<p>Battery Li-Ion 8-cell (96Wh)</p>																													
Memory	<p>64GB max⁷ / 2133MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets</p>	<table border="1"> <thead> <tr> <th>Mode</th> <th>Discrete Graphics</th> <th>Hybrid Graphics</th> </tr> </thead> <tbody> <tr> <td>Max battery life¹⁰ (MobileMark® 2014)</td> <td>8.5 hr</td> <td>10.8 hr</td> </tr> </tbody> </table>	Mode	Discrete Graphics	Hybrid Graphics	Max battery life ¹⁰ (MobileMark® 2014)	8.5 hr	10.8 hr																							
Mode	Discrete Graphics	Hybrid Graphics																													
Max battery life ¹⁰ (MobileMark® 2014)	8.5 hr	10.8 hr																													
Display	<p><i>Some</i>: 17.3" (439mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 800:1 contrast ratio, 72% gamut, 170° viewing angle</p> <p><i>Some</i>: 17.3" (439mm) 4K (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 800:1 contrast ratio, 90% gamut, 170° viewing angle</p>	<p>AC adapter 170W or 230W AC adapter</p>																													
Multi-touch <i>(opt)</i>	<p>Capacitive-type multi-touch, supports 10-finger gesture, 270 nits</p>	<p>Preload <i>Some</i>: Genuine Windows® 7 Professional 64</p>																													
Pen <i>(optional)</i>	<p>ThinkPad Pen Pro, active pen for multi-touch display</p>	<p><i>Some</i>: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64</p> <ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • Lenovo Setting • Microsoft Office preloaded; purchase a product key to activate • McAfee® LiveSafe™ (30-day trial) 																													
Storage	<p>Up to 4 drives (two M.2 SSD and two HDD, one of which is in the optical bay)</p> <p><i>Some</i>: M.2 SSD / SATA 6.0Gb/s (e.g. xxxG SSD)</p> <p><i>Some</i>: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxG SSD PCIe NVMe)</p> <p><i>Some</i>: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Shock Mounted Hard Drive, Active Protection System™</p>	<p>• Microsoft Office preloaded; purchase a product key to activate</p> <p>• McAfee® LiveSafe™ (30-day trial)</p>																													
Optical <i>(optional)</i>	<p>DVD burner, 9.5mm high, fixed, tray-in</p>	<p>• Adobe® Reader®</p> <p>• ThinkVantage System Update</p>																													
Ethernet	<p><i>Non-vPro model</i>: Intel Ethernet Connection I219-V (Jacksonville)</p> <p><i>vPro model</i>: Intel Ethernet Connection I219-LM (Jacksonville)</p>	<p>• Microsoft® Office preloaded; purchase a product key to activate</p> <p>• McAfee® LiveSafe™ (30-day trial)</p> <p><i>For ISV certifications, please visit www.lenovo.com/support/ISV</i></p>																													
WLAN ⁴	<p>11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card</p>	<p>Limited warranty¹² <i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service²⁴ • 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery) 																													
Bluetooth™	<p>Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p>	<p>Mil-Spec test MIL-STD-810G military certification</p>																													
WWAN <i>(optional)</i>	<p>Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA+/HSPA/UMTS/GNSS, M.2 card</p>	<p>Environment EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																													
SIM card	<p>Micro-SIM card slot</p>																														
Dimensions ³	<p><i>WxDxH</i>: 16.38" x 10.85" x 1.18-1.35"; 416mm x 275.5mm x 29.9-34.2mm</p> <p><i>WxDxH(Touch)</i>: 16.38" x 10.85" x 1.20-1.37"; 416mm x 275.5mm x 30.6-34.9mm</p>																														
Weight ²	<p><i>Non-touch model</i>: from 7.3 lb (3.3kg);</p> <p><i>Multi-touch model</i>: from 8.1 lb (3.7kg)</p>																														
Case material	<p><i>Display cover</i>: Glass-Fiber + PPS;</p> <p><i>Bottom</i>: Magnesium/Aluminum</p>																														

Model	20ER003W++
Product	ThinkPad P70
Region	EMEA
Machine Type	20ER
TopSeller	TopSeller
Processor	Core i7-6820HQ (4C, 2.7 / 3.6GHz, 8MB)
vPro	vPro
Graphics	NVIDIA Quadro M3000M 4GB
Chipset	Intel CM236
Memory	8GBx2 non-ECC
Display	17.3" FHD (1920x1080) IPS
Multi-touch	None
Pen	None
Storage	256GB SSD M.2 PCIe NVMe Opal2
RAID	No
Optical	DVD±RW
WLAN + Bluetooth	Intel 8260 ac, 2x2 + BT4.1
WWAN	WWAN Upgradable
SIM Card	None
Smart Card Reader	Smart Card Reader
Camera	720p
Keyboard	Backlit
Fingerprint Reader	Fingerprint Reader
Color Calibrator	X-Rite
Battery	8-cell (96Wh)
Power Adapter	230W
Operating System	Windows 10 Pro 64
Warranty	3-year, Onsite
Global	No
Ann Date (mm/yy)	12/16







