

ThinkPad P70 Platform Specifications

Product Specifications Reference (PSREF)

Processor	6th Generation Intel® Core™ i7 Processor or Intel Xeon® Processor E3 v5 Family													
	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	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)													
Chipset	Mobile Intel CM236 Chipset (Intel GL82CM236 PCH)													
Memory	64GB max ⁷ / 2133MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets													
Display	<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 <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													
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits													
Pen (optional)	ThinkPad Pen Pro, active pen for multi-touch display													
Storage	Up to 4 drives (two M.2 SSD and two HDD, one of which is in the optical bay) <i>Some:</i> M.2 SSD / SATA 6.0Gb/s (e.g. xxxG SSD) <i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxG SSD PCIe NVMe) <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Shock Mounted Hard Drive, Active Protection System™													
Optical (optional)	DVD burner, 9.5mm high, fixed, tray-in													
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)													
WLAN ⁴	11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card													
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
WWAN (optional)	Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA/UMTS/GNSS, M.2 card													
SIM card	Micro-SIM card slot													
Dimensions ³	<i>WxDxH:</i> 16.38" x 10.85" x 1.18-1.35"; 416mm x 275.5mm x 29.9-34.2mm <i>WxDxH(Touch):</i> 16.38" x 10.85" x 1.20-1.37"; 416mm x 275.5mm x 30.6-34.9mm <i>Non-touch model:</i> starting at 7.3 lb (3.3kg); <i>Multi-touch model:</i> starting at 8.1 lb (3.7kg)													
Weight ²	<i>Display cover:</i> Glass-Fiber + PPS; <i>Bottom:</i> Magnesium/Aluminum													
Case material														
Smart card reader														
Optional: Smart card reader														
ExpressCard														
One slot (ExpressCard/34)														
Media reader														
4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card														
Ports														
Four USB 3.0 (one Always On), two USB Type-C / Thunderbolt 3, Mini DisplayPort, HDMI, Ethernet (RJ-45), Dock connector														
Camera (optional)														
HD720p resolution, low light sensitive, fixed focus														
Audio support														
HD Audio, Realtek® ALC3268 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack														
Keyboard														
6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight														
UltraNav™														
3-button TrackPoint® pointing device and 3-button crystal silk surface multi-touch touchpad														
Security														
Power-on password, hard disk password, supervisor password, security keyhole														
Security chip														
Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset														
ThinkEngine														
Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures														
vPro (optional)														
Intel vPro Technology														
Fingerprint reader														
Touch style fingerprint reader on the keyboard bezel														
Color calibration														
Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest														
Battery														
Li-Ion 8-cell (96Wh)														
Max battery life ¹⁰														
<table><tr><td>Mode</td><td>Discrete Graphics</td><td>Hybrid Graphics</td></tr><tr><td>Max battery life</td><td>8.5 hr</td><td>10.8 hr</td></tr></table>									Mode	Discrete Graphics	Hybrid Graphics	Max battery life	8.5 hr	10.8 hr
Mode	Discrete Graphics	Hybrid Graphics												
Max battery life	8.5 hr	10.8 hr												
(MobileMark® 2014)														
AC adapter														
170W or 230W AC adapter														
Preload														
<i>Some:</i> Genuine Windows® 7 Professional 64														
Windows 10 Pro 64														
• Lenovo Solution Center														
• Lenovo SHAREit														
• Lenovo Companion														
• Lenovo Setting														
• Microsoft Office preloaded;														
purchase a product key to activate														
• McAfee® LiveSafe™ (30-day trial)														
<i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64														
• Lenovo Solution Center														
• Lenovo SHAREit														
• ThinkVantage Product Recovery														
• Rescue and Recovery™														
• ThinkVantage System Update														
• Adobe® Reader®														
• Microsoft® Office preloaded;														
purchase a product key to activate														
• McAfee® LiveSafe™ (30-day trial)														
For ISV certifications, please visit www.lenovo.com/support/ISV														
Limited warranty ¹²														
One of the following, configurable by model:														
• 3-year/1-yr battery depot repair service														
• 3-year/1-yr battery limited onsite service ²⁴														
• 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)														
Mil-Spec test														
MIL-STD-810G military certification														
Environment														
EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant														