

ThinkPad P1 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor or Intel Xeon® E Processor								Smart card reader <i>Optional</i> : Smart card reader ExpressCard None Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Two USB 3.1 Gen 1 (one Always On), two USB Type-C / Thunderbolt 3, HDMI 2.0, Ethernet extension connector, headphone / microphone combo jack, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), security keyhole Monitor cable <i>(optional)</i> HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter USB-C to DP: Lenovo USB-C to DisplayPort Adapter Camera <i>(optional)</i> One of the following, configurable by model: • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera, fixed focus Audio support HD Audio, Realtek® ALC3286 codec, stereo speakers, 2W x 2, Dolby® Audio™ Premium, headphone / microphone combo jack, Dolby Atmos® headphone, dual array microphone Keyboard 6-row, spill-resistant, multimedia Fn keys, LED backlight UltraNav™ TrackPoint® pointing device and buttonless glass surface multi-touch touchpad Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Discrete TPM 2.0, TCG Certified vPro <i>(optional)</i> Intel vPro Technology Fingerprint reader Touch style match on chip fingerprint reader on the keyboard bezel Color calibration None NFC None Battery Integrated Li-Ion 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr) Max battery life <i>Discrete mode:</i> 7.36 hr; <i>Hybrid mode:</i> 13.87 hr <i>(MobileMark® 2014)</i> * Battery life varies significantly with settings, usage, & other factors AC adapter 135W slim tip AC adapter Preload <i>One of the following, configurable by model:</i> • Windows® 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations Limited warranty <i>One of the following, configurable by model:</i> • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service Mil-Spec test MIL-STD-810G military certification Environment EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	
	i5-8400H	4	8	2.5 GHz	4.2 GHz	8MB	DDR4-2400	Intel UHD Graphics 630	
	i7-8750H	6	12	2.2 GHz	4.1 GHz	9MB			
	i7-8850H			2.6 GHz	4.3 GHz	9MB			
E-2176M	2.7 GHz			4.4 GHz	12MB				
Graphics	Intel UHD Graphics 630 in processor and NVIDIA® Quadro® P1000 (4GB memory) or P2000 (4GB memory); supports external digital monitor via HDMI or Thunderbolt™; supports four independent displays; Max resolution: 5120x2880@30Hz (Thunderbolt); 4096x2160@60Hz (HDMI)								
Chipset	Mobile Intel CM246 Chipset								
Memory	64GB non-ECC or 32GB ECC max / 2400MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, two DDR4 SO-DIMM sockets * <i>Installed DIMMs are actually 2666MHz but run at 2400MHz due to Intel limitation</i>								
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 72% gamut, 170° viewing angle <i>Some:</i> 15.6" (396mm) 4K (3840x2160), anti-glare, LED backlight, IPS, 400 nits, 16:9 aspect ratio, 1200:1 contrast ratio, 100% gamut, 170° viewing angle, multi-touch, anti-reflection (AR)								
Multi-touch <i>(opt)</i>	Capacitive-type multi-touch, supports 10-finger gesture (4K only)								
Pen	Supports pen accessory, please see the accessory compatibility for details								
Storage	<i>Up to 2 drives (two M.2 SSD)</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s								
RAID <i>(optional)</i>	RAID 0/1 support								
Optical	None								
Ethernet	Native Intel Ethernet Connection I219-V (<i>Non-vPro</i>) or I219-LM (<i>vPro</i>) via optional ThinkPad Ethernet Extension Cable								
WLAN	Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card								
Bluetooth™	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								
WWAN	None								
SIM card	None								
Dimensions	<i>WxDxH (non-touch):</i> 14.24" x 9.67" x 0.72"; 361.8mm x 245.7mm x 18.4mm <i>WxDxH (multi-ouch):</i> 14.24" x 9.67" x 0.74"; 361.8mm x 245.7mm x 18.7mm								
Weight	<i>Non-touch model:</i> starting at 3.76 lb (1.7 kg); <i>Multi-touch model:</i> starting at 4.06 lb (1.8 kg)								
Case color	Black								
Case material	<i>Display cover:</i> CFRP/GFRP hybrid; <i>Bottom:</i> Aluminum alloy								

Note: The specifications above may not be available in all regions.

Lenovo
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