

ThinkPad P1 20MD000HPB

Product
ThinkPad P1

Region
EET

Country/Region
Poland

Machine Type
20MD

TopSeller
TopSeller

Processor
Core i7-8850H (6C / 12T, 2.6 / 4.3GHz, 9MB)

Graphics
NVIDIA Quadro P1000 4GB GDDR5

Chipset
Intel CM246

Memory
1x 16GB DIMM DDR4-2666 non-ECC

Display
15.6" UHD (3840x2160) IPS 400nits Anti-glare, AR

Multi-touch
10-point Multi-touch

Storage
512GB SSD M.2 2280 PCIe NVMe Opal2

Optane Memory
None

RAID
No

Optical
None

WLAN + Bluetooth
Intel 9560 11ac, 2x2 + BT5.0

WWAN
None

SIM Card
None

Smart Card Reader
Smart Card Reader

Monitor Cable
None

Bundled Accessories
ThinkPad Ethernet Extension Cable

Color
Black

Camera
720p + IR

Keyboard
Backlit

Pen
None

Fingerprint Reader
Fingerprint Reader

NFC
None

TPM
Discrete TPM 2.0

Battery
Integrated 80Wh

Power Adapter
135W Slim Tip

System Management
Intel vPro

Operating System
Windows 10 Pro 64

Bundled Software
None

Base Warranty
3-year, Onsite

Upsell Service Bundles
None

End of Support
2024-09-28

Announce Date
2018-08-28

Notes:

Battery life is an estimated maximum. Actual battery life may vary based on many factors, including screen brightness, active applications, features, power management settings, battery age and conditioning, and other customer preferences.



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ThinkPad P1 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor or Intel Xeon® E Processor								Smart card reader ExpressCard Media reader Ports	Optional: Smart card reader None SD Card reader (SD, SDHC, SDXC), supports UHS-II SD card Two USB 3.1 Gen 1 (one Always On), two USB Type-C / Thunderbolt 3 (with the function of Power Delivery and DP), HDMI 2.0, Ethernet extension connector, headphone / microphone combo jack, optional smart card reader, SD card reader, security keyhole * Power Delivery only supports power-out for charging peripherals * Depending on many factors, actual data transfer speed may be lower than theoretical speed
	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	DDR4-2666	Intel UHD Graphics 630		
	i7-8750H	6	12	2.2 GHz	4.1 GHz	9MB		Intel UHD Graphics P630		
	i7-8850H			2.6 GHz	4.3 GHz	9MB				
E-2176M			2.7 GHz	4.4 GHz	12MB					
Graphics	Intel UHD Graphics 630 or P630 in processor and NVIDIA® Quadro® P1000 or P2000 Max-Q, 4GB GDDR5 memory; supports external digital monitor via HDMI or Thunderbolt™; supports four independent displays; Max resolution: 5120X2880@30Hz (Thunderbolt); 4096x2160@60Hz (HDMI)								Monitor cable (optional)	One of the following, configurable by model: HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter USB-C to DP: Lenovo USB-C to DisplayPort Adapter
Chipset	Mobile Intel CM246 Chipset								Audio support	Optional: ThinkPad Ethernet Extension Cable
Memory	64GB max / 2666MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, two DDR4 SO-DIMM sockets									
Display	Some: 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 Some: 15.6" (396mm) UHD (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)								Camera (optional)	One of the following, configurable by model: • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera, fixed focus
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (4K only)								Keyboard	HD Audio, Realtek® ALC3286 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / dual array microphone, headphone / microphone combo jack, Dolby Atmos® headphone
Pen	Supports pen accessory, please see the accessory compatibility for details									
Storage	Up to 2 drives (two M.2 SSD) M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s								UltraNav™	6-row, spill-resistant, multimedia Fn keys, LED backlight TrackPoint® pointing device and buttonless glass surface multi-touch touchpad
Optane™ memory	None								Security	Power-on password, hard disk password, supervisor password, security keyhole
RAID (optional)	RAID 0/1 support								Security chip vPro (optional)	Discrete TPM 2.0, TCG Certified Intel vPro Technology
Optical	None								Fingerprint reader	Touch style match on chip fingerprint reader on the keyboard bezel
Ethernet	Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via bundled or optional ThinkPad Ethernet Extension Cable								Color calibration	None
WLAN	Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card								NFC	None
Bluetooth™	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Battery	Integrated Li-ion 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
WWAN	None								Max battery life (MobileMark 2014)	Discrete mode: 7.36 hr; Hybrid mode: 13.87 hr * Battery life varies significantly with settings, usage, & other factors
SIM card	None								AC adapter	135W slim tip AC adapter
Dimensions	WxDxH (non-touch): 14.24" x 9.67" x 0.72"; 361.8mm x 245.7mm x 18.4mm WxDxH (multi-touch): 14.24" x 9.67" x 0.74"; 361.8mm x 245.7mm x 18.7mm Non-touch model: starting at 3.76 lb (1.7 kg); Multi-touch model: starting at 4.06 lb (1.8 kg)								Preload	One of the following, configurable by model: • Windows® 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations
Weight									Limited warranty	One of the following, configurable by model: • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service
Case color	Black								Mil-Spec test	MIL-STD-810G military testing
Case material	Display cover: CFRP/GFRP hybrid; Bottom: Aluminum alloy								Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

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

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