

# ThinkPad P1 20MD0001++

**Product**  
ThinkPad P1

**Region**  
EMEA

**Machine Type**  
20MD

**TopSeller**  
TopSeller

**Processor**  
Core i7-8750H (6C, 2.2 / 4.1GHz, 9MB)

**vPro**  
No

**Graphics**  
NVIDIA Quadro P1000 4GB

**Chipset**  
Intel CM246

**Memory**  
8GBx2 non-ECC

**Display**  
15.6" FHD (1920x1080) IPS

**Multi-touch**  
None

**Pen**  
None

**Storage**  
256GB SSD M.2 PCIe NVMe Opal2

**RAID**  
No

**Optical**  
None

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

**WWAN**  
None

**SIM Card**  
None

**Smart Card Reader**  
Smart Card Reader

**Monitor Cable**  
None

**Adapter**  
ThinkPad Ethernet Extension Cable

**Camera**  
720p

**Keyboard**  
Backlit

**Fingerprint Reader**  
Fingerprint Reader

**NFC**  
None

**TPM**  
dTPM 2.0

**Battery**  
80Wh

**Power Adapter**  
135W Slim Tip

**Operating System**  
Windows 10 Pro 64

**Warranty**  
3-year, Onsite

**End of Support**  
Sep 28, 2024

**Ann Date (mm/yy)**  
08/18

#### 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.  
<https://www.lenovo.com/hk/en/battery-info>



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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	<i>Optional:</i> 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, HDMI 2.0, Ethernet extension connector, headphone / microphone combo jack, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), security keyhole * 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				
	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)								Monitor cable <i>(optional)</i>	HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter USB-C to DP: Lenovo USB-C to DisplayPort Adapter
Chipset	Mobile Intel CM246 Chipset								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
Memory	64GB non-ECC or 32GB ECC max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, two DDR4 SO-DIMM sockets								Audio support	HD Audio, Realtek® ALC3286 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / dual array microphone, headphone / microphone combo jack, Dolby Atmos® headphone
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)								Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight
Multi-touch <i>(opt)</i>	Capacitive-type multi-touch, supports 10-finger gesture (4K only)								UltraNav™	TrackPoint® pointing device and buttonless glass surface multi-touch touchpad
Pen	Supports pen accessory, please see the accessory compatibility for details								Security chip	Power-on password, hard disk password, supervisor password, security keyhole
Storage	Up to 2 drives <i>(two M.2 SSD)</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s								vPro <i>(optional)</i>	Discrete TPM 2.0, TCG Certified
RAID <i>(optional)</i>	RAID 0/1 support								Fingerprint reader	Touch style match on chip fingerprint reader on the keyboard bezel
Optical	None								Color calibration	None
Ethernet	Native Intel Ethernet Connection I219-V <i>(Non-vPro)</i> or I219-LM <i>(vPro)</i> via optional ThinkPad Ethernet Extension Cable								NFC	None
WLAN	Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card								Battery	Integrated Li-ion 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
Bluetooth™	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								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
WWAN	None								AC adapter	135W slim tip AC adapter
SIM card	None								Preload	One of the following, configurable by model: • Windows® 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations
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-touch):</i> 14.24" x 9.67" x 0.74"; 361.8mm x 245.7mm x 18.7mm								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
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)								Mil-Spec test	MIL-STD-810G military certification
Case color	Black								Environment	EPPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant
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.

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# ThinkPad P1

