

ThinkPad P1 (2nd Gen) Platform Specifications

Product Specifications Reference (PSREF)

Processor	9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor									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		
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics		Weight	<i>Non-touch model:</i> starting at 3.75 lb / 1.7 kg; <i>Multi-touch model:</i> starting at 4.0 lb / 1.81 kg		
	i5-9400H	4	8	2.5 GHz	4.3 GHz	8MB	DDR4-2666	Intel UHD Graphics 630		Case color	Black paint (FHD model) or black weave (UHD model)		
	i7-9750H	6	12	2.6 GHz	4.5 GHz	12MB		Intel UHD Graphics 630		Case material	<i>Display cover:</i> CFRP/GFRP hybrid; <i>Bottom:</i> Aluminum alloy		
	i7-9850H	6	12	2.6 GHz	4.6 GHz	12MB		Intel UHD Graphics 630		Smart card reader	<i>Optional:</i> Smart card reader		
	i9-9880H	8	16	2.3 GHz	4.8 GHz	16MB		Intel UHD Graphics P630		Media reader	SD Card reader (SD, SDHC, SDXC), supports UHS-II SD card		
Graphics	Intel UHD Graphics 630 in processor only or Intel UHD Graphics 630 or P630 in processor and NVIDIA® Quadro® T1000 or T2000, 4GB GDDR5 memory; supports external digital monitor via HDMI or Thunderbolt™; Up to 4 displays with 3 external monitors plus system LCD screen. Max resolution: 5K@60Hz (Thunderbolt); 4K@60Hz (HDMI)									Ports	Two USB 3.1 Gen 1 (one Always On), two USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of Power Delivery and DisplayPort), HDMI 2.0, Ethernet extension connector, headphone / microphone combo jack, optional smart card reader, SD card reader, security keyhole <i>* Power Delivery only supports power-out for charging peripherals</i> <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>		
Chipset	Mobile Intel CM246 Chipset									Monitor cable (optional)	<i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter <i>USB-C to VGA:</i> Lenovo USB-C to VGA Adapter <i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter		
Memory	64GB max / 2666MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, two DDR4 SO-DIMM sockets									Bundled Accy	<i>Optional:</i> ThinkPad Ethernet Extension Cable		
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Camera (optional)	<i>One of the following, configurable by model:</i> • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus		
	15.6"	FHD (1920x1080)	WVA	Anti-glare	300 nits	16:9	700:1	72% NTSC	170°	Audio support	HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / optional dual array far-field microphone, headphone / microphone combo jack, Dolby Atmos® sound system		
	15.6"	FHD (1920x1080) Dolby Vision™ HDR	WVA	Anti-glare	500 nits	16:9	1200:1	72% NTSC	170°	Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight UltraNav™ TrackPoint® pointing device and buttonless glass surface multi-touch touchpad		
	15.6"	UHD (3840x2160) Dolby Vision HDR	WVA	Anti-glare	500 nits	16:9	1200:1	100% Adobe	170°	Security	Power-on password, hard disk password, supervisor password, security keyhole		
	15.6"	UHD (3840x2160) Dolby Vision HDR, Multi-touch	OLED	Anti-reflection / Anti-smudge	SDR 400nit, HDR 500nit (peak)	16:9	100000:1	100% DCI-P3	170°	Security chip	Discrete TPM 2.0, TCG Certified		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (UHD OLED only), AR (anti-reflection) / AS (anti-smudge) coating									System Mgt (opt)	Intel vPro Technology		
Pen (optional)	Lenovo Pen Pro (special bid only)									Fingerprint reader	Touch style match on chip fingerprint reader on the keyboard bezel		
Storage	Up to two M.2 SSD, supports single sided M.2 2280 drives only M.2 2280 SSD / PCIe NVMe 3.0 x 4									Color calibration	<i>Optional:</i> X-Rite Pantone factory color calibration (UHD model only)		
RAID (optional)	RAID 0/1 support									NFC	None		
Optical	None									Battery	Integrated Li- Polymer 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr)		
Ethernet	Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via bundled or optional ThinkPad Ethernet Extension Cable									Max battery life	1hr <i>MobileMark® 2014:</i> 13.8 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, & other factors</i>		
WLAN (optional)	Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.1									AC adapter	135W slim tip AC adapter		
Bluetooth™ (opt)	Bluetooth 5.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter									Operating system	<i>One of the following, configurable by model:</i> • Windows® 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations		
WWAN	None									Limited warranty	<i>One of the following, configurable by model:</i> • 1-year depot repair service • 1-year depot with 2-year system board repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service		
SIM card	None									Mil-Spec test	MIL-STD-810G military testing		
										Environment	EPEAT™ Gold; ENERGY STAR® 8.0; RoHS-compliant		

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

Lenovo
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