

ThinkPad P15 Gen 1 Platform Specifications

Product Specifications Reference (PSREF)

Processor	Supports one 10th Xeon W, Core i9, i7, or i5 processor as following:									
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics		
	Xeon W-10885M	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics		
	Xeon W-10855M	6	12	2.8GHz	5.1GHz	12MB	DDR4-2933	Intel UHD Graphics		
	Core i9-10980HK	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics		
	Core i9-10885H	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics		
	Core i7-10875H	8	16	2.3GHz	5.1GHz	16MB	DDR4-2933	Intel UHD Graphics		
	Core i7-10850H	6	12	2.7GHz	5.1GHz	12MB	DDR4-2933	Intel UHD Graphics		
	Core i7-10750H	6	12	2.6GHz	5.0GHz	12MB	DDR4-2933	Intel UHD Graphics		
Core i5-10400H	4	8	2.6GHz	4.6GHz	8MB	DDR4-2933	Intel UHD Graphics			
Chipset	Intel WM490 Chipset									
Memory Type	SO-DIMM, DDR4-3200 for non-ECC, DDR4-2933 for ECC. Operates at DDR4-2933. 8GB/16GB/32GB available for both ECC and non-ECC									
Memory Sockets	4 DIMM sockets									
Memory Protection	ECC on models with ECC DIMMs and Xeon processor									
Max Memory	128GB									
Graphics	Support one of the following discrete graphics:									
	<ul style="list-style-type: none"> NVIDIA Quadro T1000, 4GB GDDR6 memory NVIDIA Quadro T2000, 4GB GDDR6 memory NVIDIA Quadro RTX 3000, 6GB GDDR6 memory NVIDIA Quadro RTX 4000 with Max-Q Design, 8GB GDDR6 memory NVIDIA Quadro RTX 5000 with Max-Q Design, 16GB GDDR6 memory 									
Display	Size	Resolution	Type	Surface	Touch	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle
	15.6"	FHD (1920x1080)	WVA	Anti-glare	-	300 nits	16:9	700:1	72% NTSC	160°
	15.6"	FHD (1920x1080) Dolby Vision, HDR 400	WVA	Anti-glare	-	500 nits	16:9	1200:1	72% NTSC	160°
	15.6"	UHD (3840x2160) Dolby Vision, HDR 400	WVA	Anti-glare	-	600 nits	16:9	1400:1	100% Adobe	178°
	15.6"	UHD (3840x2160) Dolby Vision, HDR 400	OLED	Anti-reflection / Anti-smudge	multi-touch	SDR 400nit, HDR 500nit (peak)	16:9	100000:1	100% DCI-P3	170°
Color Calibration	Factory Color Calibration on UHD panels									
Touchscreen	Touch enable on selected UHD OLED models, supports 10-finger gesture									
Pen	Optional Lenovo Pen Pro									
Storage	Up to two M.2 2280 SSD, PCIe NVMe, 256GB / 512GB / 1TB / 2TB each									
RAID	RAID 0 / 1 support									
Optical	None									
Ethernet	One onboard GbE port via integrated gigabit ethernet, Intel i219LM for vPro models or i219V for non-vPro models									
NFC	None									
WLAN + Bluetooth	Optional Intel Wi-Fi 6 AX201 on most models, Wi-Fi 2x2 802.11ax + Bluetooth 5.1. Bluetooth 5.1 requires the latest version of Windows 10 (version 2004 or above)									
WWAN	One of the following, configurable by model:									
	<ul style="list-style-type: none"> No WWAN card and non upgradable Integrated Mobile Broadband Upgradable, No WWAN Card, WWAN Antenna Only Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 4x4, M.2 card 									
Note: WWAN cannot be supported on UHD WVA models										
SIM card	Optional Nano-SIM card slot									
Dimensions	Width: 375.4 mm (14.78 in). Depth: 252.3 mm (9.93 in). Thickness for non-touch models: 24.5 ~ 31.45 mm (0.96 ~ 1.24 in) Thickness for touch models: 25.25 ~ 32.2mm (0.99 ~ 1.27 in)									
Weight	Starting at 2.74 kg (6.05 lb, FHD)									
Case color	Black									
Case material	Display cover: GFRP 50% (PPS695 + GF 50%). Bottom: PPS + GF									
Media reader	SD card reader									
Standard Ports	1x USB-C (USB 3.2 Gen 1, PD, DP), 2x Thunderbolt (USB-C form, Thunderbolt 3, USB 3.2 Gen 2, PD, DP), 2x USB-A 3.2 Gen 1 (one Always-on), 1x HDMI 2.0, 1x headphone / microphone combo jack, 1x SD card reader, 1x security keyhole, 1x RJ-45									
Optional Ports	One optional smart card reader on right, one optional Nano-SIM card slot on left									
Monitor support	Up to 5 displays with 4 external monitors plus system LCD screen. External monitors supported via 1x USB-C, 2x Thunderbolt, and 1x HDMI. USB-C and HDMI support up to 4K@60Hz. With Thunderbolt, one supports up to 5K@60Hz and one supports up to 4K@60Hz									
Monitor cable	Optional HDMI to VGA, USB-C to DP, or USB-C to VGA adapters									
Bundled Accy	None									
Camera	Supports one optional camera as following: <ul style="list-style-type: none"> HD720p camera with ThinkShutter camera privacy, fixed focus Hybrid IR camera with ThinkShutter camera privacy, fixed focus 									
Audio chip	Realtek ALC3286 codec									
Speaker	Stereo speakers, Dolby Atmos sound system									
Microphone	Optional dual array far-field microphone									
Keyboard	6-row, spill-resistant, LED backlight, numeric keypad, multimedia Fn keys with Unified Communications controls.									
UltraNav	3-button TrackPoint pointing device and 2-button Mylar surface multi-touch touchpad									
Password	Power-on password, hard disk password, supervisor password									
Security chip	Discrete TPM 2.0, TCG Certified, may be disabled in some regions									
System mgmt	Optional Intel vPro Technology supported on vPro enable models									
Security locks	Security keyhole for optional Kensington lock									
Smart card reader	Optional									
Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest									
Battery	Integrated Li-Polymer 94Wh battery. Supports Rapid Charge (charge up to 80% in 1hr) with 230W AC adapter									
Max battery life	MobileMark 2014: 16.4 hr. MobileMark 2018: 10.3 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, & other factors</i>									
Power Adapter	One of the following: <ul style="list-style-type: none"> 230W slim AC adapter 170W slim AC adapter 									
Operating system	Supports one optional preloaded operating system as following:									
	<ul style="list-style-type: none"> Windows 10 Home 64 Windows 10 Pro 64 Windows 10 Pro 64 for Workstations Ubuntu Linux LTS Fedora Linux 									
Base Warranty	Optional warranty plans as following:									
	<ul style="list-style-type: none"> 1-year depot repair service 3-year depot repair service 1-year + 2-year depot repair service 1-year limited onsite service 3-year limited onsite service 1-year + 2-year limited onsite service 1-year depot with 2-year system board repair service 									
Mil-Spec test	MIL-STD-810G military testing									
Environment	EPEAT Gold. ENERGY STAR 8.0. RoHS-compliant									
ISV certifications	Please visit www.thinkworkstations.com/tsv-certifications/									