

# ThinkPad P1 Gen 3 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-10855M	6	12	2.8GHz	5.1GHz	12MB	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			
Chipset	Intel WM490 Chipset									
Memory Type	SO-DIMM, DDR4-3200 for non-ECC, DDR4-2933 for ECC. Both ECC and non-ECC memory operate at DDR4-2933. 8GB/16GB/32GB available for both ECC and non-ECC									
Memory Sockets	2 DIMM socket									
Memory Protection	ECC on models with ECC DIMMs and Xeon processor									
Max Memory	64GB									
Graphics	Intel UHD Graphics in processor plus one of the following discrete graphics: <ul style="list-style-type: none"> <li>• NVIDIA Quadro T1000 with Max-Q Design, 4GB GDDR6 memory</li> <li>• NVIDIA Quadro T2000 with Max-Q Design, 4GB GDDR6 memory</li> </ul>									
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	170°
	15.6"	FHD (1920x1080) Dolby Vision HDR	WVA	Anti-glare	-	500 nits	16:9	800:1	72% NTSC	170°
	15.6"	UHD (3840x2160) Dolby Vision HDR	WVA	Anti-glare	-	600 nits	16:9	1400:1	100% Adobe	178°
	15.6"	UHD (3840x2160) Dolby Vision, HDR 500 True Black	OLED	Anti-reflection / Anti-smudge	multi-touch	400 nits, 540 nits (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	Lenovo USB-C to Ethernet Adapter									
NFC	None									
WLAN + Bluetooth	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"> <li>• No WWAN card and non upgradable</li> <li>• Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 2x2, M.2 card</li> </ul>									
SIM card	Optional Nano-SIM card slot									
Dimensions	Width: 361.8 mm (14.24 in). Depth: 245.7 mm (9.67 in). Thickness for non-touch models: 18.4 mm (0.72 in) Thickness for touch models: 18.7 mm (0.74 in)									
Weight	Starting at 1.7 kg (3.75 lb, FHD non-touch) / 1.8 kg (3.97 lb, OLED touch)									
Case color	Woven Carbon Fiber Finish (standard on OLED models, optional on UHD WVA models) or black									
Case material	<i>Display cover:</i> Carbon Fiber (Black or woven pattern) + PC + PPS Hybrid <i>Bottom:</i> Aluminum + PC / ABS									
Media reader	SD card reader									
Standard Ports	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									
Optional Ports	One optional Nano-SIM card slot on right									
Monitor support	Up to 4 displays with 3 external monitors plus system LCD screen. External monitors supported via 2x Thunderbolt and 1x HDMI. HDMI supports up to 4K@60Hz. Two Thunderbolt support up to 5K@60Hz each									
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"> <li>• HD720p camera with ThinkShutter camera privacy, fixed focus</li> <li>• Hybrid IR camera with ThinkShutter camera privacy, fixed focus</li> </ul>									
Audio chip	Realtek ALC3286 codec									
Speaker	Stereo speakers, Dolby ATMOS Speaker System									
Microphone	Optional dual far-field microphone									
Keyboard	6-row, spill-resistant, LED backlight, multimedia Fn keys with Unified Communications controls.									
UltraNav	3-button TrackPoint pointing device and 2-button glass 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	None									
Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest									
Battery	Integrated Li-Polymer 80Wh battery. Supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter									
Max battery life	MobileMark 2014: 15.9 hr. MobileMark 2018: 12 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, &amp; other factors</i>									
Power Adapter	One of the following: <ul style="list-style-type: none"> <li>• 135W slim AC adapter</li> <li>• 170W slim AC adapter</li> </ul>									
Operating system	Supports one optional preloaded operating system as following: <ul style="list-style-type: none"> <li>• Windows 10 Home 64</li> <li>• Windows 10 Pro 64</li> <li>• Windows 10 Pro 64 for Workstations</li> <li>• Windows 10 Government Edition 64</li> <li>• Ubuntu Linux LTS (available later)</li> <li>• Fedora Linux (available later)</li> </ul>									
Base Warranty	Optional warranty plans as following: <ul style="list-style-type: none"> <li>• Non-warranty (special bids only)</li> <li>• 1-year depot repair service</li> <li>• 3-year depot repair service</li> <li>• 1-year + 2-year depot repair service</li> <li>• 1-year limited onsite service</li> <li>• 3-year limited onsite service</li> <li>• 1-year + 2-year limited onsite service</li> <li>• 1-year depot with 2-year system board repair service</li> </ul>									
Mil-Spec test	MIL-STD-810G military testing									
Environment	EPEAT Gold. ENERGY STAR 8.0. RoHS-compliant									
ISV certifications	Please visit <a href="http://www.thinkworkstations.com/isv-certifications/">www.thinkworkstations.com/isv-certifications/</a>									