

ThinkPad P15 Gen 1 20ST001HGE

Product

ThinkPad P15 Gen 1

Region

WE

Country/Region

Germany

Machine Type

20ST

TopSeller

TopSeller

Processor

Intel Core i9-10885H (8C / 16T, 2.4 / 5.3GHz, 16MB)

Graphics

NVIDIA Quadro RTX 5000 with Max-Q Design, 16GB GDDR6

Chipset

Intel WM490

Memory

2x 16GB SO-DIMM DDR4-3200 Non-ECC

Storage

1TB SSD M.2 2280 PCIe NVMe Opal2

Display

15.6" FHD (1920x1080) IPS 500nits Anti-glare, 72% Gamut, Dolby Vision, HDR

Touchscreen

None

Media Reader

SD Reader

Ethernet

100/1000M

Optical

None

WLAN + Bluetooth

Intel AX201 11ax, 2x2 + BT5.1

WWAN

WWAN Upgradable

SIM Card

None

Smart Card Reader

Smart Card Reader

Monitor Cable

None

Case Material

Top: GFRP 50% (PPS695 + GF 50%) Bottom: PPS + GF

Bundled Accessories

None

Camera

720p + IR with ThinkShutter

Microphone

2x, Array

Color

Black

Keyboard

Backlit, German

Fingerprint Reader

Touch Style, Match-on-Chip

NFC

None

TPM

Discrete TPM 2.0

Battery

Integrated 94Wh

Power Adapter

230W Slim Tip

System Management

Intel vPro

Operating System

Windows 10 Pro 64, German

Bundled Software

None

Base Warranty

3-year, Depot

Bundled Service

None

EAN / UPC / JAN

0195042848854

End of Support

2027-02-21

Announce Date

2020-07-21

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 P15 Gen 1 Platform Specifications

Product Specifications Reference (PSREF)

Processor	Supports one 10th Xeon W, Core i9, i7, or i5 processor as following:										SIM card	Optional Nano-SIM card slot
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	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)		
	Xeon W-10885M	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics	Weight	Starting at 2.74 kg (6.05 lb, FHD)		
	Xeon W-10855M	6	12	2.8GHz	5.1GHz	12MB	DDR4-2933	Intel UHD Graphics	Case color	Black		
	Core i9-10980HK	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics	Case material	Display cover: GFRP 50% (PPS695 + GF 50%). Bottom: PPS + GF		
	Core i9-10885H	8	16	2.4GHz	5.3GHz	16MB	DDR4-2933	Intel UHD Graphics	Media reader	SD card reader		
	Core i7-10875H	8	16	2.3GHz	5.1GHz	16MB	DDR4-2933	Intel UHD Graphics	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		
	Core i7-10850H	6	12	2.7GHz	5.1GHz	12MB	DDR4-2933	Intel UHD Graphics	Optional Ports	One optional smart card reader on right, one optional Nano-SIM card slot on left		
	Core i7-10750H	6	12	2.6GHz	5.0GHz	12MB	DDR4-2933	Intel UHD Graphics	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		
	Core i5-10400H	4	8	2.6GHz	4.6GHz	8MB	DDR4-2933	Intel UHD Graphics	Monitor cable	Optional HDMI to VGA, USB-C to DP, or USB-C to VGA adapters		
Chipset	Intel WM490 Chipset										Bundled Accy	None
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										Camera	Supports one optional camera as following: • HD720p camera with ThinkShutter camera privacy, fixed focus • Hybrid IR camera with ThinkShutter camera privacy, fixed focus
Memory Sockets	4 DIMM sockets										Audio chip	Realtek ALC3286 codec
Memory Protection	ECC on models with ECC DIMMs and Xeon processor										Speaker	Stereo speakers, Dolby Atmos sound system
Max Memory	128GB										Microphone	Optional dual array far-field microphone
Graphics	Support one of the following discrete graphics: • 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										Keyboard	6-row, spill-resistant, LED backlight, numeric keypad, multimedia Fn keys with Unified Communications controls.
Display	Size	Resolution	Type	Surface	Touch	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	UltraNav	3-button TrackPoint pointing device and 2-button Mylar surface multi-touch touchpad
	15.6"	FHD (1920x1080)	WVA	Anti-glare	-	300 nits	16:9	700:1	72% NTSC	160°	Password	Power-on password, hard disk password, supervisor password
	15.6"	FHD (1920x1080) Dolby Vision, HDR 400	WVA	Anti-glare	-	500 nits	16:9	1200:1	72% NTSC	160°	Security chip	Discrete TPM 2.0, TCG Certified, may be disabled in some regions
	15.6"	UHD (3840x2160) Dolby Vision, HDR 400	WVA	Anti-glare	-	600 nits	16:9	1400:1	100% Adobe	178°	System mgmt	Optional Intel vPro Technology supported on vPro enable models
	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°	Security locks	Security keyhole for optional Kensington lock
Color Calibration	Factory Color Calibration on UHD panels										Smart card reader	Optional
Touchscreen	Touch enable on selected UHD OLED models, supports 10-finger gesture										Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest
Pen	Optional Lenovo Pen Pro										Battery	Integrated Li-Polymer 94Wh battery. Supports Rapid Charge (charge up to 80% in 1hr) with 230W AC adapter
Storage	Up to two M.2 2280 SSD, PCIe NVMe, 256GB / 512GB / 1TB / 2TB each										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>
RAID	RAID 0 / 1 support										Power Adapter	One of the following: • 230W slim AC adapter • 170W slim AC adapter
Optical	None										Operating system	Supports one optional preloaded operating system as following: • Windows 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations • Ubuntu Linux LTS • Fedora Linux
Ethernet	One onboard GbE port via integrated gigabit ethernet, Intel i219LM for vPro models or i219V for non-vPro models											Base Warranty
NFC	None										Mil-Spec test	
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)										Environment	EPEAT Gold. ENERGY STAR 8.0. RoHS-compliant
WWAN	One of the following, configurable by model: • 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 <i>Note: WWAN cannot be supported on UHD WVA models</i>										ISV certifications	Please visit www.thinkworkstations.com/isv-certifications/

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