ThinkPad P1 (2nd Gen) 20QT005SUS

Product
ThinkPad P1 (2nd Gen)

Region
NA

Country/Region
USA

Machine Type
20QT

TopSeller
TopSeller

Processor
Intel Core i7-9850H (6C / 12T, 2.6 / 4.6GHz, 12MB)

Graphics
NVIDIA Quadro T2000 4GB GDDR5

Chipset
Intel CM246

Memory
1x 32GB SO-DIMM DDR4-2666 non-ECC

Storage
512GB SSD M.2 2280 PCIe NVMe Opal2

RAID
No

Display
15.6" UHD (3840x2160) OLED 400nits AR (anti-reflection) / AS (anti-smudge), 100% DCI-P3 Gamut, Dolby Vision HDR

Touchscreen
10-point Multi-touch

Pen
None

Media Reader
SD Card Reader

Ethernet
100/1000M via Optional Adapter

Optical
None

WLAN + Bluetooth
Intel AX200 11ax, 2x2 + BT5.1

WWAN
None

SIM Card
None

Smart Card Reader
None

Monitor Cable
None

Case Material
CFRP/GFRP (Top), Aluminum (Bottom)

Bundled Accessories
None

Camera
720p + IR with ThinkShutter

Microphone
2x, Array

Color
Black, Weave

Keyboard
Backlit, English

Fingerprint Reader
Touch Style, Match-on-Chip

NFC
None

Color Calibrator
None

TPM
Discrete TPM 2.0

Battery
Integrated 80Wh

Power Adapter
135W Slim Tip

System Management
Intel vPro

Operating System
Windows 10 Pro 64, English

Bundled Software
None

Base Warranty
3-year, Depot

Bundled Service
None

EAN / UPC / JAN
194552377878

End of Support
2025-10-17

Announce Date
2019-09-17

Recommended Services

Best
3Y Lenovo Protect (Premier Support + Keep Your Drive + Accidental Damage Protection + Sealed Battery) (5PS0N73216)

Better
3Y Lenovo Support (Premier Support + Keep Your Drive + Sealed Battery) (5PS0N73159)

Good
3Y Premier Support Upgrade from 3Y Depot/CCI (5WS0V07092)

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.

California Electronic Waste Recycling Fee
In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product. For more information, go to: **https://www.calrecycle.ca.gov/Electronics/Consumer**

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ThinkPad P1 (2nd Gen) Platform Specifications

Product Specifications Reference (PSREF)

Processor

9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i5-9400H	4	8	2.5 GHz	4.3 GHz	8MB	DDR4-2666	Intel UHD Graphics 630
i7-9750H	6	12	2.6 GHz	4.5 GHz	12MB		
i7-9850H	6	12	2.6 GHz	4.6 GHz	12MB		
i9-9880H	8	16	2.3 GHz	4.8 GHz	16MB		
E-2276M	6	12	2.8 GHz	4.7 GHz	12MB		Intel UHD Graphics P630

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™;
supports four independent displays;
Max resolution: 5K@60Hz (Thunderbolt); 4K@60Hz (HDMI)

Chipset

Mobile Intel CM246 Chipset

Memory

64GB max / 2666MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, two DDR4 SO-DIMM sockets

Display

Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle
15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72% NTSC	170°
15.6"	FHD (1920x1080) Dolby Vision™ HDR	IPS	Anti-glare	500 nits	16:9	1200:1	72% NTSC	170°
15.6"	UHD (3840x2160) Dolby Vision HDR	IPS	Anti-glare	500 nits	16:9	1200:1	100% Adobe	170°
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°

Multi-touch *(opt)*

Capacitive-type multi-touch, supports 10-finger gesture (UHD OLED only), AR (anti-reflection) / AS (anti-smudge) coating

Pen *(optional)*

Lenovo Pen Pro (special bid only)

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

RAID *(optional)*

RAID 0/1 support

Optical

None

Ethernet

Native Intel Ethernet Connection I219-V (*Non-vPro*) or I219-LM (*vPro*))
via bundled or optional ThinkPad Ethernet Extension Cable

WLAN *(optional)*

Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.1

Bluetooth™ *(opt)*

Bluetooth 5.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter

WWAN

None

SIM card

None

Dimensions

WxDxH (non-touch): 14.24" x 9.67" x 0.72"; 361.8mm x 245.7mm x 18.4mm
WxDxH (multi-touch): 14.24" x 9.67" x 0.74"; 361.8mm x 245.7mm x 18.7mm

Weight

Non-touch model: starting at 3.75 lb / 1.7 kg;
Multi-touch model: starting at 4.0 lb / 1.81 kg

Case color

Black paint (FHD model) or black weave (UHD model)

Case material

Display cover: CFRP/GFRP hybrid;
Bottom: Aluminum alloy

Smart card reader

Optional: Smart card reader

Media reader

SD Card reader (SD, SDHC, SDXC), supports UHS-II SD card

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
** Power Delivery only supports power-out for charging peripherals*
** Depending on many factors, actual data transfer speed may be lower than theoretical speed*

Monitor cable *(optional)*

HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter
USB-C to VGA: Lenovo USB-C to VGA Adapter
USB-C to DP: Lenovo USB-C to DisplayPort Adapter

Bundled Accy

Optional: ThinkPad Ethernet Extension Cable

Camera *(optional)*

One of the following, configurable by model:

- HD720p camera with ThinkShutter camera privacy, fixed focus
- IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus

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

Keyboard

6-row, spill-resistant, multimedia Fn keys, LED backlight

UltraNav™

TrackPoint® pointing device and buttonless glass surface multi-touch touchpad

Security

Power-on password, hard disk password, supervisor password, security keyhole

Security chip

Discrete TPM 2.0, TCG Certified

System Mgt *(opt)*

Intel vPro Technology

Fingerprint reader

Touch style match on chip fingerprint reader on the keyboard bezel

Color calibration

Optional: X-Rite Pantone factory color calibration (UHD model only)

NFC

None

Battery

Integrated Li-ion 80Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Max battery life

MobileMark® 2014: 13.8 hr
** Battery life varies significantly with settings, usage, & other factors*

AC adapter

135W slim tip AC adapter

Operating system

One of the following, configurable by model:

- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 Pro 64 for Workstations

Limited warranty

One of the following, configurable by model:

- 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

Mil-Spec test

MIL-STD-810G military testing

Environment

EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant

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

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