

ThinkPad P53 20QN001YUS

Product

ThinkPad P53

Region

NA

Country/Region

USA

Machine Type

20QN

TopSeller

TopSeller

Processor

Core i7-9750H (6C / 12T, 2.6 / 4.5GHz, 12MB)

Graphics

NVIDIA Quadro T1000 4GB GDDR5

Chipset

Intel CM246

Memory

1x 16GB DIMM DDR4-2666 non-ECC

Display

15.6" HDR 400 FHD (1920x1080) IPS 500nits Anti-glare

Multi-touch

None

Storage

512GB SSD M.2 2280 PCIe NVMe Opal2

Optane Memory

None

RAID

No

Optical

None

WLAN + Bluetooth

Intel AX200 11ax, 2x2 + BT5.0

WWAN

None

SIM Card

None

Smart Card Reader

None

Monitor Cable

None

Bundled Accessories

None

Color

Black

Camera

720p + IR

Keyboard

Backlit

Pen

None

Fingerprint Reader

Fingerprint Reader

NFC

None

Color Calibrator

None

TPM

Discrete TPM 2.0

Battery

Integrated 90Wh

Power Adapter

170W Slim Tip

System Management

None

Operating System

Windows 10 Pro 64

Bundled Software

None

Base Warranty

3-year, Depot

Upsell Service Bundles

None

End of Support

2025-08-23

Announce Date

2019-07-23

Recommended Services**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 P53 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> 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm <i>WxDxH (multi-touch):</i> 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm								
	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 or P630 in processor and NVIDIA® Quadro® T1000 (4GB GDDR5), T2000 (4GB GDDR5), RTX 3000 (6GB GDDR6, VR ready), RTX 4000 (8GB GDDR6, VR ready), or RTX 5000 (16GB GDDR6, VR ready); supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™; supports five independent displays; Max resolution: 5K@60Hz (Thunderbolt); 4K@60Hz (USB-C or HDMI)									Weight	<i>Non-touch model:</i> starting at 5.51 lb / 2.5 kg; <i>Multi-touch model:</i> starting at 6.4 lb / 2.9 kg								
Chipset	Mobile Intel CM246 Chipset									Case color	Black								
Memory	128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets									Case material	<i>Display cover:</i> Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum								
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Smart card reader	<i>Optional:</i> Smart card reader								
	15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72%	160°	ExpressCard	None								
	15.6"	FHD (1920x1080) HDR 400, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	72%	160°	Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card								
	15.6"	UHD (3840x2160) HDR 400, Dolby Vision	IPS	Anti-glare	500 nits	16:9	1200:1	100%	170°	Ports	Two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort), two USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP), HDMI 2.0, Ethernet (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), security keyhole <i>* Power Delivery only supports power-out for charging peripherals</i> <i>* USB-C Dock is not supported in right-side USB-C port</i> <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>								
	15.6"	UHD (3840x2160) HDR 500 True Black, Dolby Vision, Multi-touch	OLED	AR, AS	350 nits (peak 400 nits)	16:9	100000:1	100% DCI-P3	170°	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								
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (UHD only), anti-reflection (AR), anti-smudge (AS) coating									Bundled Accy	None								
Pen	Supports pen accessory, please see the accessory compatibility for details									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								
Storage	<i>Up to 3 drives</i> • HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4									Audio support	HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2 / dual array far-field microphone, headphone / microphone combo jack, Dolby Atmos® sound system								
Optane™ memory	<i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2									Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight								
RAID (optional)	RAID 0/1/5 support									UltraNav™	3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad								
Optical	None									Security	Power-on password, hard disk password, supervisor password, security keyhole								
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)									Security chip	Discrete TPM 2.0, TCG Certified								
WLAN (optional)	Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0									vPro (optional)	Intel vPro Technology								
Bluetooth™ (opt)	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest								
WWAN (optional)	<i>One of the following, configurable by model:</i> • Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card <i>* For non-WWAN model, it means the model is NOT WWAN upgradable</i>									Color calibration	<i>Optional:</i> X-Rite Pantone factory color calibration (UHD model only)								
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card									NFC (optional)	Near Field Communication								
										Battery	Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)								
										Max battery life	<i>Discrete mode:</i> 8 hr; <i>Hybrid mode:</i> 13 hr <i>(MobileMark® 2014) * Battery life varies significantly with settings, usage, & other factors</i>								
										AC adapter	170W or 230W slim tip AC 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								
										Limited warranty	<i>One of the following, configurable by model:</i> • 1-year depot 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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