

ThinkPad P53 20QN0007GE

Product
ThinkPad P53

Region
WE

Country/Region
Germany

Machine Type
20QN

TopSeller
TopSeller

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

Graphics
NVIDIA Quadro RTX 4000 Max-Q 8GB GDDR6

Chipset
Intel CM246

Memory
2x 16GB DIMM DDR4-2666 non-ECC

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

Multi-touch
None

Storage
1TB 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
Smart Card Reader

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
230W Slim Tip

System Management
Intel vPro

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

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.



WWW.LENOVO.COM

This publication was developed for products and services offered in the United States and E.M.E.A countries. Lenovo may not offer the products, services or features discussed in this document in other countries. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area.

Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors.

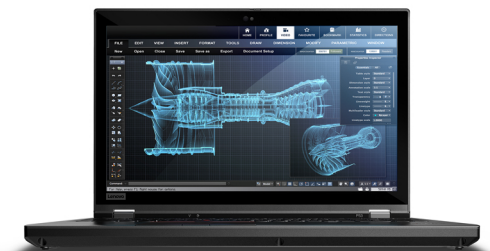
Lenovo provides this publication "as is" without warranty of any kind, either express or implied, including the implied warranties of merchantability or fitness for a particular purpose.



<https://psref.lenovo.com>

Visit psref website for the latest version of Product Specifications Reference.

© Lenovo, 2019. All rights reserved.



Lenovo™

ThinkPad P53 Platform Specifications

Product Specifications Reference (PSREF)

Processor	9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor										Dimensions	WxDxH (non-touch): 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	WxDxH (multi-touch): 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm				
	i5-9400H	4	8	2.5 GHz	4.3 GHz	8MB	DDR4-2666	Intel UHD Graphics 630	Weight				
	i7-9750H	6	12	2.6 GHz	4.5 GHz	12MB			Non-touch model: starting at 5.51 lb / 2.5 kg; Multi-touch model: starting at 6.4 lb / 2.9 kg				
	i7-9850H	6	12	2.6 GHz	4.6 GHz	12MB			Case color				
	i9-9880H	8	16	2.3 GHz	4.8 GHz	16MB			Black				
E-2276M	6	12	2.8 GHz	4.7 GHz	12MB		Intel UHD Graphics P630	Case material					
										Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum			
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 Max-Q (8GB GDDR6, VR ready), or RTX 5000 Max-Q (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)										Smart card reader	Optional: Smart card reader	
												ExpressCard	
Chipset	Mobile Intel CM246 Chipset										Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
Memory	128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets											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 * Power Delivery only supports power-out for charging peripherals * USB-C Dock is not supported in right-side USB-C port * Depending on many factors, actual data transfer speed may be lower than theoretical speed	
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Monitor cable (optional)	USB-C to DP: Lenovo USB-C to DisplayPort Adapter		
	15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72%	160°		Bundled Accy		
	15.6"	FHD (1920x1080) HDR 400, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	72%	160°		Camera (optional)		
	15.6"	UHD (3840x2160) HDR 400, Dolby Vision	IPS	Anti-glare	500 nits	16:9	1200:1	100%	170°		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		
	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°		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			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (UHD only), anti-reflection (AR), anti-smudge (AS) coating										Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight	
Pen	Supports pen accessory, please see the accessory compatibility for details											3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad	
Storage	Up to 3 drives • HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4										Security	Power-on password, hard disk password, supervisor password, security keyhole	
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2											Security chip vPro (optional)	Discrete TPM 2.0, TCG Certified
RAID (optional)	RAID 0/1/5 support										Intel vPro Technology		
Optical	None										Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest	
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)											Color calibration	Optional: X-Rite Pantone factory color calibration (UHD model only)
WLAN (optional)	Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0										NFC (optional)		Near Field Communication
Bluetooth™ (opt)	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter											Battery	Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
WWAN (optional)	One of the following, configurable by model: • Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card * For non-WWAN model, it means the model is NOT WWAN upgradable										Max battery life (MobileMark® 2014)		Discrete mode: 8 hr; Hybrid mode: 13 hr * Battery life varies significantly with settings, usage, & other factors
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card											AC adapter	170W or 230W slim tip AC adapter
											Preload		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 • 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.

Lenovo
July 2019

Lenovo

ThinkPad P53

