

ThinkPad P53 [20QN000DGE](#)

ThinkPad P53 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
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)							
Chipset	Mobile Intel CM246 Chipset							
Memory	128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets							
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut
	15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72%
	15.6"	FHD (1920x1080) HDR 400, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	72%
	15.6"	UHD (3840x2160) HDR 400, Dolby Vision	IPS	Anti-glare	500 nits	16:9	1200:1	100%
	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
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (UHD only), anti-reflection (AR), anti-smudge (AS) coating							
Pen	Supports pen accessory, please see the accessory compatibility for details							
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							
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2							
RAID (optional)	RAID 0/1/5 support							
Optical	None							
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)							
WLAN (optional)	Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0							
Bluetooth™ (opt)	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							
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							
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card							
Dimensions		WxDxH (non-touch): 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm WxDxH (multi-touch): 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm						
Weight		Non-touch model: starting at 5.51 lb / 2.5 kg; Multi-touch model: starting at 6.4 lb / 2.9 kg						
Case color		Black						
Case material		Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum						
Smart card reader		Optional: Smart card reader						
ExpressCard		None						
Media reader		4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card						
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 * 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						
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		None						
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 / dual array far-field microphone, headphone / microphone combo jack, Dolby Atmos® sound system						
Keyboard UltraNav™		6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight 3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad						
Security		Power-on password, hard disk password, supervisor password, security keyhole						
Security chip		Discrete TPM 2.0, TCG Certified						
vPro (optional)		Intel vPro Technology						
Fingerprint reader		Touch style match on chip fingerprint reader on the palm rest						
Color calibration		Optional: X-Rite Pantone factory color calibration (UHD model only)						
NFC (optional)		Near Field Communication						
Battery		Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)						
Max battery life		Discrete mode: 8 hr; Hybrid mode: 13 hr (MobileMark® 2014) * Battery life varies significantly with settings, usage, & other factors						
AC adapter		170W or 230W 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 • 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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