

# 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 WxDxH (multi-touch): 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			Weight	Non-touch model: starting at 5.51 lb / 2.5 kg; Multi-touch model: starting at 6.4 lb / 2.9 kg	
	i5-9400H	4	8	2.5 GHz	4.3 GHz	8MB	DDR4-2666	Intel UHD Graphics 630				Case color Black Case material Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum	
	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)										Smart card reader	Optional: Smart card reader	
Chipset	Mobile Intel CM246 Chipset										ExpressCard	None	
Memory	128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets										Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	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		
	15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72%	160°	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		
	15.6"	FHD (1920x1080) HDR 400, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	72%	160°	Bundled Accy	None		
	15.6"	UHD (3840x2160) HDR 400, Dolby Vision	IPS	Anti-glare	500 nits	16:9	1200:1	100%	170°	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		
	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	6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight	
Pen	Supports pen accessory, please see the accessory compatibility for details										UltraNav™	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 Intel vPro Technology	
RAID (optional)	RAID 0/1/5 support										Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest	
Optical	None										Color calibration	Optional: X-Rite Pantone factory color calibration (UHD model only)	
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)										NFC (optional)	Near Field Communication	
WLAN (optional)	Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0										Battery	Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)	
Bluetooth™ (opt)	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										Max battery life (MobileMark® 2014)	Discrete mode: 8 hr; Hybrid mode: 13 hr * Battery life varies significantly with settings, usage, & other factors	
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										AC adapter	170W or 230W slim tip AC adapter	
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card										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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