

ThinkPad T590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor								Dimensions	<i>WxDxH:</i> 14.40" x 9.76" x 0.79"; 365.8mm x 248.0mm x 19.95mm	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Weight	<i>FHD model:</i> 3.87 lb / 1.75 kg; <i>UHD model:</i> 3.86 lb / 1.75 kg	
	i5-8265U i7-8565U	4	8	1.6 GHz 1.8 GHz	3.9 GHz 4.6 GHz	6MB 8MB	DDR4-2400	Intel UHD Graphics 620	Case color	Black	
								Case material	<i>Display cover:</i> PPS / 50% GF; <i>Bottom:</i> PA / 50% GF		
Graphics	Intel UHD Graphics 620 in processor only or Intel UHD Graphics 620 in processor and NVIDIA® GeForce® MX250, 2GB GDDR5 memory; supports external digital monitor via HDMI or Thunderbolt; supports three independent displays; Max resolution: 4096x2304@60Hz (Thunderbolt); 4096x2160@24Hz (HDMI)								Smart card reader	<i>Optional:</i> Smart card reader	
Chipset	Intel SoC (System on Chip) platform								Media reader	MicroSD card reader	
Memory	48GB max / 2400MHz DDR4, dual-channel capable, 8GB or 16GB memory soldered to systemboard, one DDR4 SO-DIMM socket								Ports	Two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 1, one USB 3.1 Type-C Gen 2 / Thunderbolt 3, HDMI 1.4b, Ethernet (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack, optional smart card reader, microSD card reader, side docking connector, security keyhole <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>	
Display	Intel SoC (System on Chip) platform									Monitor cable	<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
	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	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
	15.6"	FHD (1920x1080)	IPS	Anti-glare	250 nits	16:9	700:1	45%	170°	Audio support	HD Audio, Realtek® ALC3287 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / dual array far-field microphone, headphone / microphone combo jack
	15.6"	UHD (3840x2160) Dolby Vision™ HDR	IPS	Anti-glare	500 nits	16:9	1200:1	100% Adobe	170°		
Multi-touch (opt)	On-cell touch, supports 10-finger gesture (FHD only)								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight	
Storage	<ul style="list-style-type: none"> M.2 2280 SSD / SATA 6.0Gb/s M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4 M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 Intel Optane™ memory, PCIe NVMe, PCIe 3.0 x 2 								UltraNav™	TrackPoint® pointing device and buttonless 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 Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0								vPro (optional)	Intel vPro Technology	
Bluetooth™	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Fingerprint reader	<i>Optional:</i> 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, Fibocom L830-EB, M.2 card (EMEA only) • 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>								NFC (optional)	Near Field Communication	
									Battery	Integrated Li-ion 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)	
									Max battery life	<i>MobileMark® 2014:</i> 14.98 hr (9.5 hr for UHD model with discrete graphics) <i>* Battery life varies significantly with settings, usage, & other factors</i>	
									AC adapter	45W or 65W USB Type-C AC adapter	
									Preload	Windows® 10 Home 64 or Windows 10 Pro 64	
									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 certification	
									Environment	EPEAT™ Bronze; ENERGY STAR® 7.0; RoHS-compliant	

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

Lenovo
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