

ThinkPad E590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions	<i>WxDxH:</i> 14.53" x 9.94" x 0.78"; 369mm x 252.5mm x 19.9mm
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Weight	Starting at 4.68 lb / 2.12 kg
	i3-8145U	2	4	2.1 GHz	3.9 GHz	4MB	DDR4-2400	Intel UHD Graphics 620	Case color	Black or silver
	i5-8265U	4	8	1.6 GHz	3.9 GHz	6MB			Case material	<i>Display cover:</i> Aluminum; <i>Bottom:</i> PC/ABS plastic
i7-8565U	1.8 GHz			4.6 GHz	8MB	Smart card reader			None	
Graphics	Intel UHD Graphics 620 in processor only or Intel UHD Graphics 620 in processor and AMD Radeon RX 550X Graphics, 2GB DDR5 memory; supports external digital monitor via HDMI or USB Type-C; supports dual independent display; Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@24Hz (HDMI)								Media reader	MicroSD card reader
Chipset	Intel SoC (System on Chip) platform								Ports	One USB 2.0, two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 2 (with the function of Power Delivery and DisplayPort), HDMI 1.4b, Ethernet (RJ-45), headphone / microphone combo jack, microSD card reader, security keyhole <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>
Memory	32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets <i>* Installed memory is actually 2666MHz but run at 2400MHz due to Intel limitation</i>								Monitor cable	None
Display	Size / Resolution	Surface	Type	Brightness	Aspect Ratio	Contrast Ratio	Viewing Angle	Multi-touch	Bundled Accy	None
	15.6" HD (1366x768)	Anti-glare	TN	220 nits	16:9	400:1	90°	Non-touch	Camera	HD720p camera, fixed focus
	15.6" FHD (1920x1080)	Anti-glare	IPS	250 nits	16:9	600:1	170°	Non-touch	Audio support	HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio / dual array microphone, headphone / microphone combo jack
Multi-touch	None								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight
Storage	Up to two drives (one M.2 SSD and one HDD) <ul style="list-style-type: none"> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ M.2 2280 SSD / SATA 6.0Gb/s M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 2 M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								Security	Power-on password, hard disk password, supervisor password, security keyhole
Optical	None								Security chip	<i>Integrated model:</i> discrete TPM 2.0, TCG Certified <i>Discrete model:</i> firmware TPM 2.0 integrated in chipset
Ethernet	Gigabit Ethernet Connection, Realtek R8111GUS								System Mgt	None
WLAN + Bluetooth™	One of the following, configurable by model: <ul style="list-style-type: none"> Realtek® RTL8822BE, Wi-Fi 2x2 802.11ac + Bluetooth 4.2, M.2 card Intel Wireless-AC 9260, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card 								Fingerprint reader	<i>Optional:</i> Touch style fingerprint reader on the palm rest
WWAN	None								NFC	None
SIM card	None								Battery	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W USB Type-C AC adapter
									Max battery life	<i>MobileMark® 2014:</i> 11 hr <i>* Battery life varies significantly with settings, usage, & other factors</i>
									AC adapter	45W or 65W USB Type-C AC adapter
									Preload (optional)	Windows® 10 Home 64 or Windows 10 Pro 64
									Limited warranty	1-year depot repair 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
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