

ThinkPad E590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions	WxDxH: 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	Display cover: Aluminum; Bottom: PC/ABS plastic	
i7-8565U	1.8 GHz			4.6 GHz	8MB						
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)								Smart card reader	None	
									Media reader	MicroSD card reader	
Chipset	Intel SoC (System on Chip) platform 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>								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>	
									Monitor cable	None	
Memory									Bundled Accy	None	
									Camera	HD720p camera, fixed focus	
Display	Size / Resolution		Surface	Type	Brightness	Aspect Ratio	Contrast Ratio	Viewing Angle	Audio support	HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio / dual array microphone, headphone / microphone combo jack	
	15.6" HD (1366x768)		Anti-glare	TN	220 nits	16:9	400:1	90°	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad	
	15.6" FHD (1920x1080)		Anti-glare	IPS	250 nits	16:9	600:1	170°			
	Multi-touch	None								Security	Power-on password, hard disk password, supervisor password, security keyhole
Storage	Up to two drives (one M.2 SSD and one HDD) • 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								Security chip	Integrated model: discrete TPM 2.0, TCG Certified Discrete model: firmware TPM 2.0 integrated in chipset	
									System Mgt	None	
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								Fingerprint reader	Optional: Touch style fingerprint reader on the palm rest	
									NFC	None	
Optical	None								Battery	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W USB Type-C AC adapter	
Ethernet	Gigabit Ethernet Connection, Realtek R8111GUS								Max battery life	MobileMark® 2014: 11 hr <i>* Battery life varies significantly with settings, usage, & other factors</i>	
									AC adapter	45W or 65W USB Type-C AC adapter	
WLAN + Bluetooth™	One of the following, configurable by model: • 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								Preload (optional)	Windows® 10 Home 64 or Windows 10 Pro 64	
WWAN SIM card	None								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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