

## ThinkPad E590 Platform Specifications

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*Product Specifications Reference (PSREF)*

Processor	8th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions Weight Case color Case material	WxDxH: 14.53" x 9.94" x 0.78"; 369mm x 252.5mm x 19.9mm Starting at 4.68 lb / 2.12 kg Black or silver Display cover: Aluminum; Bottom: PC/ABS plastic			
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics					
	i3-8145U	2	4	2.1 GHz	3.9 GHz	4MB	DDR4-2400	Intel UHD Graphics 620					
	i5-8265U	4	8	1.6 GHz	3.9 GHz	6MB							
Graphics	i7-8565U								Smart card reader Media reader Ports	1.8 GHz 4.6 GHz 8MB			
	Intel UHD Graphics 620 in processor only or Intel UHD Graphics 620 in processor and AMD Radeon RX 550X Graphics, 2GB GDDR5 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)									MicroSD card reader 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 * Depending on many factors, actual data transfer speed may be lower than theoretical speed			
Chipset	Memory								Monitor cable Bundled Accy	Intel SoC (System on Chip) platform 32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets * Installed memory is actually 2666MHz but run at 2400MHz due to Intel limitation			
Display										None None			
Multi-touch	None								Camera Audio support	HD720p camera, fixed focus HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio / dual array microphone, headphone / microphone combo jack			
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 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4 * Installed M.2 2280 SSD is PCIe 3x4 but run at PCIe 3x2 due to M.2 SSD adapter limitation									6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad			
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Firmware TPM 2.0 integrated in chipset or discrete TPM 2.0 TCG Certified (may be disabled in some region)			
Optical	None									None			
Ethernet	Gigabit Ethernet Connection, Realtek R8111GUS								Fingerprint reader NFC	Optional: Touch style fingerprint reader on the palm rest None			
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									Optional: Windows® 10 Home 64 or Windows 10 Pro 64			
WWAN SIM card	None None								Limited warranty	One of the following, configurable by model: • 1-year mail-in repair service • 1-year depot repair service • 1-year 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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