ThinkPad E590 Platform Specifications

Processor 8th Generation Intel® Core™ i3 / i5 / i7 Processor								<i>WxDxH:</i> 14.53" x 9.94" x 0.78"; 369mm x 252.5mm x 19.9mm		
	# of hreads	Base Frequency	Max Turbo Frequency	Cache				Case color	Starting at 4.68 lb / 2.12 kg Black or silver Display cover: Aluminum;	
i3-8145U 2	4	2.1 GHz	3.9 GHz	4MB		Intel	LIHD Graphics		Bottom: PC/ABS plastic	
i5-8265U i7-8565U 4	8	1.6 GHz 1.8 GHz	3.9 GHz 4.6 GHz	6MB 8MB	DDR4-240	0 1110	620	Smart card reade	· '	
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)								Ports Monitor cable	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 None None	
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								Camera Audio support	HD720p camera, fixed focus HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio /	
Size / Resolution	Su	rface Type	Brightness				Multi-touch		dual array microphone, headphone / microphone combo jack	
			220 nits	16:9	400:1	90°	Non-touch	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad	
							Non-touch	Security Power-on password, hard disk password, supervisor password, security keyhole		
1 2 2 1 2								Security chip	Integrated model: discrete TPM 2.0, TCG Certified Discrete model: firmware TPM 2.0 integrated in chipset	
 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 							М	System Mgt None Fingerprint reader <i>Optional</i> : Touch style fingerprint reader on the palm rest		
M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 tane™ memory <i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 tical None							Battery Max battery life	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W USB Type-C AC adapter tery life MobileMark® 2014: 11 hr		
								,	* Battery life varies significantly with settings, usage, & other factors	
+ One of the following, configurable by model:								AC adapter	71 1	
• 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 WWAN None							_	Preload (optional) Windows® 10 Home 64 or Windows 10 Pro 64		
						.2 card	l	Limited warranty	1-year depot repair service	
								Mil-Spec test	MIL-STD-810G military testing	
INOITE								Environment	EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant	
	Processor # of Number Cores T i3-8145U 2 i5-8265U i7-8565U 4 Intel UHD Graphic: Intel UHD Graphic: AMD Radeon RX 5 supports external cupports dual inde Max resolution: 40 Intel SoC (System 32GB max / 2400N * Installed memory is Size / Resolution 15.6" HD (1366x768) 15.6" FHD (1920x10) None Up to two drives (one + HDD / SATA 6.00 M.2 2280 SSD / M.2 2280 SSD / M.2 2242 SSD / y Optional: Intel Opt None Gigabit Ethernet C One of the following, • Realtek® RTL882	Processor # of Number Cores Threads i3-8145U 2 4 i5-8265U 4 8 Intel UHD Graphics 620 in Intel UHD Graphics 620 in AMD Radeon RX 550X G supports external digital resupports dual independer Max resolution: 4096x230 Intel SoC (System on Chi 32GB max / 2400MHz DE* Installed memory is actually for Installed memory is actually Size / Resolution Supports Golden Supports 4000MHz DE* Installed memory is actually Size / Resolution Supports Golden Sup	Processor Number Cores Threads Frequency i3-8145U 2 4 2.1 GHz i5-8265U 4 8 1.6 GHz 1.8 GHz I7-8565U 5 1.	Processor # of # of Base Frequency Frequency i3-8145U 2 4 2.1 GHz 3.9 GHz i5-8265U 4 8 1.6 GHz 3.9 GHz i7-8565U 5 1.8 GHz 4.6 GHz INTELLED Graphics 620 in processor only or Intel UHD Graphics 620 in processor and AMD Radeon RX 550X Graphics, 2GB DDR5 in supports external digital monitor via HDMI or U supports dual independent display; Max resolution: 4096x2304@60Hz (USB Type-Intel SoC (System on Chip) platform 32GB max / 2400MHz DDR4, dual-channel cap * Installed memory is actually 2666MHz but run at 240 intelled memor	Processor # of Number Cores Threads Frequency Frequency Gache Frequency I3-8145U 2 4 2.1 GHz 3.9 GHz 4MB I5-8265U 4 8 1.6 GHz 3.9 GHz 6MB I7-8565U 4 8 1.6 GHz 3.9 GHz 8MB 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 Typ supports dual independent display; Max resolution: 4096x2304@60Hz (USB Type-C); 40 Intel SoC (System on Chip) platform 32GB max / 2400MHz DDR4, dual-channel capable, to * Installed memory is actually 2666MHz but run at 2400MHz of 15.6" HD (1366x768) Anti-glare TN 220 nits 16:9 None Up to two drives (one M.2 SSD and one HDD) * HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Pr M.2 2280 SSD / SATA 6.0Gb/s * M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 2 (27) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (27) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (27) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (27) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (29) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (20) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (28) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (29) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (29) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (29) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (20) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (20) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (20) Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 (20) Optional: Intel Optane Memory (20) Optional: Intel Optane Memory (20) Optional: Intel Optane Me	Processor # of Number Cores Threads Frequency Frequency Frequency Types i3-8145U 2 4 2.1 GHz 3.9 GHz 4MB i5-8265U 4 8 1.6 GHz 3.9 GHz 6MB DDR4-240 i7-8565U 4 8 1.6 GHz 3.9 GHz 6MB DDR4-240 i7-8565U 4 8 1.6 GHz 3.9 GHz 6MB DDR4-240 i7-8565U 4 8 1.6 GHz 3.9 GHz 6MB DDR4-240 i7-8565U 4 8 1.6 GHz 8MB DDR4-240 i7-8565U 4	Processor # of Number Frequency Frequency Cache Memory Types Intel Intel	Processor Number Cores Threads Frequency Frequency Frequency Frequency Types Graphics 3-8145U 2	Processor # of H of Base Max Turbo Cache Memory Types Graphics Case material	

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

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