

# ThinkPad E590 [20NB005HGE](#)

**Product**  
ThinkPad E590

**Region**  
EMEA

**Country**  
Germany

**Machine Type**  
20NB

**TopSeller**  
TopSeller

**Processor**  
Core i5-8265U (4C, 1.6 / 3.9GHz, 6MB)

**vPro**  
No

**Graphics**  
Integrated Intel UHD Graphics 620

**Memory**  
16GBx1

**Display**  
15.6" FHD (1920x1080) IPS

**Multi-touch**  
None

**Storage**  
512GB SSD M.2 PCIe NVMe

**Optical**  
None

**WLAN + Bluetooth**  
Intel 9260 ac, 2x2 + BT5.0

**WWAN**  
None

**Color**  
Black

**Camera**  
720p

**Keyboard**  
Non-backlit

**Fingerprint Reader**  
Fingerprint Reader

**NFC**  
None

**TPM**  
dTPM 2.0

**Battery**  
45Wh

**Power Adapter**  
65W USB-C

**Operating System**  
Windows 10 Pro 64

**Warranty**  
1-year, Depot

**End of Support**  
Mar 5, 2025

**Ann Date (mm/yy)**  
02/19

## Notes:

Battery life is an estimated maximum. Actual battery life may vary based on many factors, including screen brightness, active applications, features, power management settings, battery age and conditioning, and other customer preferences.  
<https://www.lenovo.com/hk/en/battery-info>



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# 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 / 2.12g	
	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			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	
									Ports	Two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 2, one USB 2.0, 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>	
Chipset	Intel SoC (System on Chip) platform								Camera	HD720p camera, fixed focus	
Memory	32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets								Audio support	HD Audio, Conexant® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio / dual array microphone, headphone / microphone combo jack	
Display	Size / Resolution		Surface	Type	Brightness	Aspect Ratio	Contrast Ratio	Viewing Angle	Multi-touch	Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad
	15.6" HD (1366x768)		Anti-glare	TN	220 nits	16:9	400:1	90°	Non-touch	Security	
	15.6" FHD (1920x1080)		Anti-glare	IPS	250 nits	16:9	600:1	170°	Non-touch	Security chip	
Multi-touch	None									Power-on password, hard disk password, supervisor password, security keyhole <i>Integrated model:</i> discrete TPM 2.0, TCG Certified <i>Discrete model:</i> firmware TPM 2.0 integrated in chipset	
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 SSD / SATA 6.0Gb/s • M.2 SSD / PCIe NVMe, PCIe 3.0 x 2 • 16GB Intel Optane™ memory, PCIe NVMe, PCIe 3.0 x 2								vPro	None	
									Fingerprint reader	<i>Optional:</i> Touch style fingerprint reader on the palm rest	
Optical	None								NFC	None	
Ethernet	Gigabit Ethernet Connection, Realtek R8111GUS								Battery	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 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								Max battery life	MobileMark® 2014: 11 hr <i>* Battery life varies significantly with settings, usage, &amp; other factors</i>	
									AC adapter	45W or 65W USB Type-C AC adapter	
WWAN	None								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 certification	
									Environment	ENERGY STAR® 7.0; RoHS-compliant	

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

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