

ThinkPad E590 20NB0017PB

Product
ThinkPad E590

Region
EET

Country
Poland

Machine Type
20NB

TopSeller
TopSeller

Processor
Core i5-8265U (4C / 8T, 1.6 / 3.9GHz, 6MB)

Graphics
AMD Radeon RX 550X 2GB GDDR5

Chipset
Intel SoC Platform

Memory
1x 8GB DIMM DDR4-2400

Display
15.6" FHD (1920x1080) IPS 250nits Anti-glare

Multi-touch
None

Storage
256GB SSD M.2 2242 PCIe NVMe + 1TB HDD 5400rpm 2.5"

Optane Memory
None

Optical
None

WLAN + Bluetooth
Intel 9260 11ac, 2x2 + BT5.0

WWAN
None

SIM Card
None

Smart Card Reader
None

Monitor Cable
None

Bundled Accessories
None

Color
Black

Case Material
Aluminum

Camera
720p

Keyboard
Non-backlit

Fingerprint Reader
Fingerprint Reader

NFC
None

TPM
FW TPM 2.0

Battery
Integrated 45Wh

Power Adapter
65W USB-C

System Management
None

Operating System
Windows 10 Pro 64

Bundled Software
None

Base Warranty
1-year, Depot

Upsell Service Bundles
None

End of Support
2025-01-25

Announce Date
2018-12-25

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.



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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 / 2.12 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																									
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>								Media reader	MicroSD card reader																									
Memory									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>																									
Display	<table><tr><td>Size / Resolution</td><td>Surface</td><td>Type</td><td>Brightness</td><td>Aspect Ratio</td><td>Contrast Ratio</td><td>Viewing Angle</td><td>Multi-touch</td></tr><tr><td>15.6" HD (1366x768)</td><td>Anti-glare</td><td>TN</td><td>220 nits</td><td>16:9</td><td>400:1</td><td>90°</td><td>Non-touch</td></tr><tr><td>15.6" FHD (1920x1080)</td><td>Anti-glare</td><td>IPS</td><td>250 nits</td><td>16:9</td><td>600:1</td><td>170°</td><td>Non-touch</td></tr></table>								Size / Resolution	Surface	Type	Brightness	Aspect Ratio	Contrast Ratio	Viewing Angle	Multi-touch	15.6" HD (1366x768)	Anti-glare	TN	220 nits	16:9	400:1	90°	Non-touch	15.6" FHD (1920x1080)	Anti-glare	IPS	250 nits	16:9	600:1	170°	Non-touch	Monitor cable	None	
									Size / Resolution	Surface	Type	Brightness	Aspect Ratio	Contrast Ratio	Viewing Angle	Multi-touch																			
									15.6" HD (1366x768)	Anti-glare	TN	220 nits	16:9	400:1	90°	Non-touch																			
	15.6" FHD (1920x1080)	Anti-glare	IPS	250 nits	16:9	600:1	170°	Non-touch																											
Bundled Accy	None																																		
Multi-touch	None								Camera	HD720p camera, fixed focus																									
									Audio support	HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2, Dolby® Advanced Audio / dual array microphone, headphone / microphone combo jack																									
									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) • 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 <i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad																								
Security										Power-on password, hard disk password, supervisor password, security keyhole																									
Security chip										<i>Integrated model:</i> discrete TPM 2.0, TCG Certified <i>Discrete model:</i> firmware TPM 2.0 integrated in chipset																									
Optane™ memory		Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								System Mgt	None																								
	Fingerprint reader									<i>Optional:</i> 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																								
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																									
Ethernet		Gigabit Ethernet Connection, Realtek R8111GUS								Preload (optional)	Windows® 10 Home 64 or Windows 10 Pro 64																								
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								Limited warranty	1-year depot repair service																									
WWAN	None								Mil-Spec test	MIL-STD-810G military testing																									
SIM card									Environment	EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant																									

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

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