ThinkPad E590 20NB002BGE

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
8GBx1

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
Jan 25, 2025

Ann Date (mm/yy)
12/18

Note:

* Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "**" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries

WWW.LENOVO.COM

This publication was developed for products and services oered in the United States and E.M.E.A countries. Lenovo may not oer the products, services or features discussed in this document in other countries. Lenovo may withdraw an oering at any time. Information is subject to change without notice. Consult your local representative for information on oerings available in your area.

Lenovo reserves the right to change specifcations or other product information without notice. Lenovo is not responsible for photographic or typographical errors.

Lenovo provides this publication “as is” without warranty of any kind, either express or implied, including the implied warranties of merchantability or ftness for a particular purpose.

http://psref.lenovo.com

Visit psref website for the latest version of Product Specifcations Reference.

© Lenovo, 2017. All rights reserved.

ThinkPad E590 Platform Specifications

Product Specifications Reference (PSREF)

Processor

8th Generation Intel® Core™ i3 / i5 / i7 Processor

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		
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)

Chipset

Intel SoC (System on Chip) platform

Memory

32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets

Display

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

Multi-touch

None

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

Optical

None

Ethernet

Gigabit Ethernet Connection, Realtek R8111GUS

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

WWAN

None

Dimensions

WxDxH: 14.53" x 9.94" x 0.78"; 369mm x 252.5mm x 19.9mm

Weight

Starting at 4.68 lb / 2.12g

Case color

Black or silver

Case material

Display cover: Aluminum;
Bottom: PC/ABS plastic

Smart card reader

None

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

Camera

HD720p camera, fixed focus

Audio support

HD Audio, Conexant® 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

UltraNav™

TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad

Security

Power-on password, hard disk password, supervisor password, security keyhole

Security chip

Integrated model: discrete TPM 2.0, TCG Certified
Discrete model: firmware TPM 2.0 integrated in chipset

vPro

None

Fingerprint reader

Optional: Touch style fingerprint reader on the palm rest

NFC

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

MobileMark® 2014: 11 hr
* Battery life varies significantly with settings, usage, & other factors

AC adapter

45W or 65W USB Type-C AC adapter

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.

ThinkPad E590











