

# ThinkPad T590 20N4000GBM

**Product**

ThinkPad T590

**Region**

EET

**Country/Region**

Bulgaria

**Machine Type**

20N4

**TopSeller**

TopSeller

**Processor**

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

**Graphics**

NVIDIA GeForce MX250 2GB GDDR5

**Chipset**

Intel SoC Platform

**Memory**

8GB Soldered DDR4-2400

**Display**

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

**Multi-touch**

None

**Storage**

512GB SSD M.2 2280 PCIe NVMe Opal2

**Optical**

None

**WLAN + Bluetooth**

Intel 9560 11ac, 2x2 + BT5.0

**WWAN**

Fibocom L830-EB

**SIM Card**

None

**Smart Card Reader**

Smart Card Reader

**Monitor Cable**

None

**Bundled Accessories**

None

**Color**

Black

**Camera**

720p

**Keyboard**

Backlit, Bulgarian

**Fingerprint Reader**

Fingerprint Reader

**NFC**

None

**TPM**

Discrete TPM 2.0

**Battery**

Integrated 57Wh

**Power Adapter**

65W USB-C

**System Management**

None

**Operating System**

Windows 10 Pro 64, English

**Bundled Software**

None

**Base Warranty**

3-year, Depot

**Bundled Service**

None

**End of Support**

2025-04-19

**Announce Date**

2019-03-19

**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.

**L** [WWW.LENOVO.COM](http://WWW.LENOVO.COM)

Lenovo may not offer the products, services or features discussed in this document in other countries. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area.

Lenovo reserves the right to change specifications 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 fitness for a particular purpose.



<https://psref.lenovo.com>

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

© Lenovo, 2019. All rights reserved.



Lenovo™

# ThinkPad T590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor									Dimensions Weight Case color Case material	WxDxH: 14.40" x 9.76" x 0.75"; 365.8mm x 248mm x 19.1mm FHD model: 3.87 lb / 1.75 kg; UHD model: 3.86 lb / 1.75 kg Display cover: PPS / 50% GF; Bottom: PA / 50% GF
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics			
	i5-8265U	4	8	1.6 GHz	3.9 GHz	6MB	DDR4-2400	Intel UHD Graphics 620			
	i5-8365U			1.6 GHz	4.1 GHz	6MB					
	i7-8565U			1.8 GHz	4.6 GHz	8MB					
i7-8665U	1.9 GHz			4.8 GHz	8MB						
Graphics	Intel UHD Graphics 620 in processor only or Intel UHD Graphics 620 in processor and NVIDIA® GeForce® MX250, 2GB GDDR5 memory; supports external digital monitor via HDMI or Thunderbolt; supports three independent displays; Max resolution: 4096x2304@60Hz (Thunderbolt); 4096x2160@24Hz (HDMI)									Smart card reader Media reader Ports  Monitor cable (optional)  Bundled Accy  Camera (optional)  Audio support  Keyboard UltraNav™  Security Security chip System Mgt (opt) Fingerprint reader NFC (optional)  Battery  Max battery life  AC adapter  Operating system  Limited warranty  Mil-Spec test  Environment	Optional: Smart card reader MicroSD card reader Two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort), one USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP), HDMI 1.4b, Ethernet (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack, optional smart card reader, microSD card reader, side docking connector, security keyhole * Depending on many factors, actual data transfer speed may be lower than theoretical speed HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter USB-C to VGA: Lenovo USB-C to VGA Adapter (NOT available in EMEA) USB-C to DP: Lenovo USB-C to DisplayPort Adapter (NOT available in EMEA) None One of the following, configurable by model: • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus HD Audio, Realtek® ALC3287 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / dual array far-field microphone, headphone / microphone combo jack 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad Power-on password, hard disk password, supervisor password, security keyhole Discrete TPM 2.0, TCG Certified Intel vPro Technology Optional: Touch style match on chip fingerprint reader on the palm rest Near Field Communication Integrated Li-ion 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W USB Type-C AC adapter MobileMark® 2014: 14.98 hr (9.5 hr for UHD model with discrete graphics) * Battery life varies significantly with settings, usage, & other factors 45W or 65W USB Type-C AC adapter Optional: Windows® 10 Home 64 or Windows 10 Pro 64 One of the following, configurable by model: • 1-year depot repair service • 1-year depot with 2-year planar repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service MIL-STD-810G military testing EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant
Chipset	Intel SoC (System on Chip) platform										
Memory	48GB max / 2400MHz DDR4, dual-channel capable, 8GB or 16GB memory soldered to systemboard, one DDR4 SO-DIMM socket * Installed memory is actually 2666MHz but run at 2400MHz due to Intel limitation										
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle		
	15.6"	FHD (1920x1080)	IPS	Anti-glare	250 nits	16:9	700:1	45%	170°		
	15.6"	UHD (3840x2160) HDR, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	100% Adobe	170°		
Multi-touch (opt)	On-cell touch, supports 10-finger gesture (FHD only)										
Storage	<ul style="list-style-type: none"><li>• M.2 2280 SSD / SATA 6.0Gb/s</li><li>• M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4</li><li>• M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2</li><li>• Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4</li></ul>										
Optical	None										
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)										
WLAN (optional) Bluetooth™	Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0 Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
WWAN (optional)	One of the following, configurable by model: <ul style="list-style-type: none"><li>• Wireless WAN upgradable</li><li>• Integrated Mobile Broadband 4G LTE, Fibocom L830-EB, M.2 card (EMEA only)</li><li>• Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card</li></ul> * For non-WWAN model, it means the model is NOT WWAN upgradable										
SIM card	Nano-SIM card slot, optional Verizon LTE (US) SIM card										

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

Lenovo  
August 2019

Lenovo

ThinkPad T590

