

ThinkPad T590 20N4004YPB

Product

ThinkPad T590

Region

EET

Country/Region

Poland

Machine Type

20N4

TopSeller

TopSeller

Processor

Intel Core i7-8565U (4C / 8T, 1.8 / 4.6GHz, 8MB)

Graphics

Integrated Intel UHD Graphics

Chipset

Intel SoC Platform

Memory

8GB Soldered DDR4-2400

Storage

512GB SSD M.2 2280 PCIe NVMe Opal2

Display

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

Touchscreen

None

Media Reader

MicroSD Reader

Ethernet

100/1000M

Optical

None

WLAN + Bluetooth

Intel 9560 11ac, 2x2 + BT5.0

WWAN

None

SIM Card

None

Smart Card Reader

Smart Card Reader

Monitor Cable

None

Case Material

PPS / 50% GF (Top) + PA / 50% GF (Bottom)

Bundled Accessories

None

Camera

720p with ThinkShutter

Microphone

2x, Array

Color

Black

Keyboard

Backlit, English (EU)

Fingerprint Reader

Touch Style, Match-on-Chip

NFC

None

TPM

Discrete TPM 2.0

Battery

Integrated 57Wh

Power Adapter

65W USB-C

System Management

None

Operating System

Windows 10 Pro 64, Polish / English

Bundled Software

None

Base Warranty

3-year, Depot

Bundled Service

3Y Onsite upgrade from 3Y Depot/CCI (5WS0A23006)

EAN / UPC / JAN

0193638805106

End of Support

2025-10-15

Announce Date

2019-07-23

Recommended Services**Best**

5Y Onsite upgrade from 3Y Onsite (5WS0A22893)

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 T590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor									Dimensions Weight Case color Case material 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	WxDxH: 14.40" x 9.76" x 0.75"; 365.8mm x 248mm x 19.1mm FHD model: 3.99 lb / 1.81 kg; UHD model: 3.84 lb / 1.74 kg Black Display cover: PPS / 50% GF; Bottom: PA / 50% GF 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 (for special bid model, microphone is optional), 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 Firmware TPM 2.0 integrated in chipset or discrete TPM 2.0 TCG Certified (may be disabled in some region) Intel vPro Technology Optional: Touch style match on chip fingerprint reader on the palm rest Near Field Communication Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter MobileMark® 2014: 14.98 hr (9.5 hr for UHD model with discrete graphics) * Battery life varies significantly with hardware configurations, settings, usage, & other factors • 45W USB-C AC adapter • 65W USB-C AC adapter • 65W USB-C slim AC adapter Optional: Windows® 10 Home 64 or Windows 10 Pro 64 • 1-year depot repair service • 1-year depot with 2-year system board repair service • 1-year limited onsite service • 1-year + 2-year depot repair service • 1-year + 2-year limited onsite service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service MIL-STD-810G military testing EPEAT™ Gold; ENERGY STAR® 7.1; TCO Certified; RoHS-compliant
	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			
	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 in processor only or Intel UHD Graphics 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)										
Chipset Memory	Intel SoC (System on Chip) platform 40GB or 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)	WVA	Anti-glare	250 nits	16:9	700:1	45%	170°		
	15.6"	UHD (3840x2160) HDR, Dolby Vision™	WVA	Anti-glare	500 nits	16:9	1200:1	100% Adobe	170°		
Multi-touch (opt)	On-cell touch, supports 10-finger gesture (FHD only)										
Storage	• M.2 2280 SSD / SATA 6.0Gb/s • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4 • M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 • Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4										
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: • Wireless WAN upgradable (special bid only in EMEA) • Integrated Mobile Broadband 4G LTE, Fibocom L830-EB, M.2 card (EMEA only) • Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card * For non-WWAN model, it means the model is NOT WWAN upgradable										
SIM card (opt)	• Verizon LTE (US) SIM card • Gemalto eSIM										

Note: The specifications above may not be available in all regions and might change by regions.

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July 2020

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