

# ThinkPad L590 20Q700ALPG

**Product**

ThinkPad L590

**Region**

WE

**Country/Region**

Portugal

**Machine Type**

20Q7

**TopSeller**

TopSeller

**Processor**

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

**Graphics**

Integrated Intel UHD Graphics 620

**Chipset**

Intel SoC Platform

**Memory**

1x 16GB DIMM DDR4-2666

**Storage**

512GB SSD M.2 2280 PCIe NVMe Opal2

**Optane Memory**

None

**Display**

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

**Multi-touch**

None

**Media Reader**

MicroSD Reader

**Ethernet**

100/1000M

**Optical**

None

**WLAN + Bluetooth**

Intel 9260 11ac, 2x2 + BT5.0

**WWAN**

None

**SIM Card**

None

**Smart Card Reader**

Smart Card Reader

**Monitor Cable**

None

**Case Material**

PC / ABS

**Bundled Accessories**

None

**Camera**

720p with ThinkShutter

**Microphone**

2x, Array

**Color**

Black

**Keyboard**

Backlit, Portuguese

**Fingerprint Reader**

Touch Style

**NFC**

None

**TPM**

Discrete TPM 2.0

**Battery**

Integrated 45Wh

**Power Adapter**

65W USB-C

**System Management**

None

**Operating System**

Windows 10 Pro 64, Portuguese / English

**Bundled Software**

None

**Base Warranty**

1-year, Depot

**Bundled Service**

None

**End of Support**

2025-08-09

**Announce Date**

2019-07-09

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**Recommended Services****Best**

5Y Premier Support Upgrade from 1Y Depot/CCI (5WS0T36170)

**Better**

4Y Premier Support Upgrade from 1Y Depot/CCI (5WS0T36177)

**Good**

3Y Premier Support Upgrade from 1Y Depot/CCI (5WS0T36154)

**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 L590 Platform Specifications

Product Specifications Reference (PSREF)

Processor	Intel® Celeron® Processor or 8th Generation Intel Core™ i3 / i5 / i7 Processor									Dimensions	WxDxH: 14.82" x 10.02" x 0.90"; 376.5mm x 254.5mm x 22.95mm
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Weight	Starting at 4.48 lb / 2.0 kg	
	Cel 4305U	2	2	2.2 GHz	-	2MB	DDR4-2133	Intel UHD Graphics 610	Case color	Black	
	i3-8145U	2	4	2.1 GHz	3.9 GHz	4MB	DDR4-2400	Intel UHD Graphics 620	Case material	PC/ABS plastic	
	i5-8265U	4	8	1.6 GHz	3.9 GHz	6MB			Smart card reader	Optional: Smart card reader	
	i5-8365U	4	8	1.6 GHz	4.1 GHz	6MB			Media reader	MicroSD card reader	
i7-8565U	4	8	1.8 GHz	4.6 GHz	8MB	Ports			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 (with the function of Power Delivery and DisplayPort), 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		
i7-8665U	4	8	1.9 GHz	4.8 GHz	8MB				* Depending on many factors, actual data transfer speed may be lower than theoretical speed		
Graphics	Intel UHD Graphics 610 or 620 in processor only or Intel UHD Graphics 620 in processor and AMD Radeon 535, 2GB GDDR5 memory (discrete models are NOT available in EMEA); supports external digital monitor via HDMI or USB Type-C; supports three independent displays; Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@24Hz (HDMI)									Monitor cable (optional)	HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter USB-C to VGA: Lenovo USB-C to VGA Adapter USB-C to DP: Lenovo USB-C to DisplayPort Adapter
										Bundled Accy	None
Chipset	Intel SoC (System on Chip) platform									Camera (optional)	One of the following, configurable by model:
Memory	64GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets * Installed memory is actually 2666MHz but run at 2133MHz or 2400MHz due to Intel limitation									Audio support	• 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® Advanced Audio / dual array microphone, headphone / microphone combo jack
Display	Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight
	15.6"	HD (1366x768)	TN	Anti-glare	220 nits	16:9	500:1	45%	90°	UltraNav™	TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad
	15.6"	FHD (1920x1080)	IPS	Anti-glare	250 nits	16:9	800:1	45%	170°		
Multi-touch	None									Security	Power-on password, hard disk password, supervisor password, security keyhole
Storage	• HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ • SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4 • M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 * Installed M.2 2280 SSD is PCIe 3x4 but run at PCIe 3x2 due to M.2 SSD adapter limitation									Security chip	Discrete TPM 2.0, TCG Certified
										System Mgt (opt)	Intel vPro Technology
										Fingerprint reader	Optional: Touch style fingerprint reader on the palm rest
Optane™ memory	Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2									NFC (optional)	Near Field Communication
Optical	None									Battery	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)									Max battery life	MobileMark® 2014: 12 hr
	vPro model: Intel Ethernet Connection I219-LM (Jacksonville)										* Battery life varies significantly with settings, usage, & other factors
WLAN + Bluetooth™ (optional)	One of the following, configurable by model:									AC adapter	45W, 65W, or 65W slim USB-C AC adapter
	• Realtek® RTL8822BE, Wi-Fi 2x2 802.11ac + Bluetooth 4.2, M.2 card (NOT available in EMEA)									Operating system	Optional: Windows® 10 Home 64 or Windows 10 Pro 64
	• Intel Wireless-AC 9260, Wi-Fi 2x2 802.11ac + Bluetooth 5.0									Limited warranty	One of the following, configurable by model: • 1-year depot repair service • 3-year/1-yr battery depot repair service
WWAN (optional)	• Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0										
	One of the following, configurable by model:									Mil-Spec test	MIL-STD-810G military testing
	• 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									Environment	EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant
SIM card	None										

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

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