# ThinkPad L390 Platform Specifications

*Product Specifications Reference (PSREF)*

**Processor**

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

| Processor Number | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache | Memory Types | Processor Graphics |
|---|---|---|---|---|---|---|---|
| Cel 4305U | 2 | 2 | 2.2 GHz | - | 2MB | DDR4-2133 | Intel UHD Graphics 610 |
| 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 | | |
| i5-8365U | 4 | 8 | 1.6 GHz | 4.1 GHz | 6MB | | |
| i7-8565U | 4 | 8 | 1.8 GHz | 4.6 GHz | 8MB | | |

**Graphics**

Intel UHD Graphics 610 or 620 in processor;
supports external digital monitor via HDMI or USB Type-C;
supports three independent displays;
Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)

**Chipset**

Intel SoC (System on Chip) platform

**Memory**

32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets
** Installed memory is actually 2666MHz but run at 2400MHz due to Intel limitation*

**Display**

| Size | Resolution | Surface | Type | Brightness | Aspect Ratio | Contrast Ratio | Viewing Angle |
|---|---|---|---|---|---|---|---|
| 13.3" | HD (1366x768) | Anti-glare | TN | 250 nits | 16:9 | 500:1 | 90° |
| 13.3" | FHD (1920x1080) | Anti-glare | IPS | 250 nits | 16:9 | 700:1 (non-touch)<br>800:1 (multi-touch) | 170° |

**Multi-touch *(opt)***

On-cell touch, supports 10-finger gesture (FHD only)

**Storage**

*One of the following, configurable by model:*
- M.2 2280 SSD / SATA 6.0Gb/s
- M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2
- M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4
- Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4

**Optical**

None

**Ethernet**

Native Intel Ethernet Connection I219-V (*Non-vPro*) or I219-LM (*vPro*)
via optional ThinkPad Ethernet Extension Cable or
Lenovo USB-C to Ethernet Adapter

**WLAN**
**Bluetooth™**

Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card
Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

**WWAN**

None

**SIM card**

None

**Dimensions**

*WxDxH:* 12.67" x 8.83" x 0.74"; 321.8mm x 224.2mm x 18.8mm

**Weight**

Starting at 3.22 lb / 1.46 kg

**Case color**

Black or Silver

**Case material**

*Display cover:* Aluminum
*Bottom:* GFRP

**Smart card reader**

None

**Media reader**

MicroSD card reader

**Ports**

Two USB 3.1 Gen 1 (one Always On),
two USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort),
HDMI 1.4b, Ethernet extension connector, headphone / microphone combo jack,
microSD card reader, security keyhole
** Depending on many factors, actual data transfer speed may be lower than theoretical speed*

**Monitor cable *(optional)***

*USB-C to VGA Adapter:* Lenovo USB-C to VGA Adapter
*USB-C to VGA (plus Power) Adapter:* Lenovo USB-C to VGA plus Power Adapter
*USB-C to HDMI Adapter:* Lenovo USB-C to HDMI Adapter
*USB-C to HDMI (plus Power) Adapter:* Lenovo USB-C to HDMI plus Power Adapter
*USB-C to DisplayPort Adapter:* Lenovo USB-C to DisplayPort Adapter

**Bundled Accessories *(optional)***

*USB-C to Ethernet Adapter:* Lenovo USB-C to Ethernet Adapter
*USB-C to USB-A Adapter:* Lenovo USB-C to USB-A Adapter
*USB-C to USB-C Cable 2m:* Lenovo USB-C to USB-C Cable 2m

**Camera**

HD720p camera, fixed focus

**Audio support**

HD Audio, Realtek ALC3287 codec /
stereo speakers, 2W x 2, Dolby® Audio™ Premium /
dual array microphone, headphone / microphone combo jack

**Keyboard**

6-row, spill-resistant, multimedia Fn keys, optional LED backlight

**UltraNav™**

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

**Security**

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

**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

**NFC *(optional)***

Near Field Communication

**Battery**

Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Max battery life**

*MobileMark® 2014:* 14.61 hr
** Battery life varies significantly with settings, usage, & other factors*

**AC adapter**

45W or 65W USB Type-C AC adapter

**Operating system**

*Optional:* Windows® 10 Home 64 or Windows 10 Pro 64

**Limited warranty**

*One of the following, configurable by model:*
- 1-year depot repair service
- 1-year depot with 2-year system board repair service
- 1-year limited onsite service
- 3-year/1-yr battery depot repair service
- 3-year/1-yr battery limited onsite service

**Mil-Spec test**

MIL-STD-810G military testing

**Environment**

EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant

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

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