

PERFORMANCE

Processor

Processor Family

8th / 10th Generation Intel® Core™ i5 / i7 Processor

Processor<sup>[1]</sup>

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-8265U	4	8	1.6GHz	3.9GHz	6MB	DDR4-2400	Intel UHD Graphics
Core i5-8365U	4	8	1.6GHz	4.1GHz	6MB	DDR4-2400	Intel UHD Graphics
Core i5-10210U	4	8	1.6GHz	4.2GHz	6MB	DDR4-2666	Intel UHD Graphics
Core i7-8565U	4	8	1.8GHz	4.6GHz	8MB	DDR4-2400	Intel UHD Graphics
Core i7-8665U	4	8	1.9GHz	4.8GHz	8MB	DDR4-2400	Intel UHD Graphics
Core i7-10510U	4	8	1.8GHz	4.9GHz	8MB	DDR4-2666	Intel UHD Graphics
Core i7-10710U	6	12	1.1GHz	4.7GHz	12MB	DDR4-2666	Intel UHD Graphics

Notes:

1. 10th Generation Intel Core Processors are NOT available in EMEA

Operating System

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 Pro in S mode
- Linux
- Ubuntu Linux
- No operating system

Graphics

Graphics

Graphics	Type	Memory	Key Features
Intel UHD Graphics	Integrated	Shared	DirectX® 12
NVIDIA® GeForce® MX250	Discrete	2GB GDDR5	DirectX 12

Monitor Support

Monitor Support

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via HDMI® (up to 4096x2160@24Hz), Thunderbolt™ (up to 4096x2304@60Hz)

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Memory Type<sup>[1]</sup>

DDR4-2400

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Max Memory<sup>[2]</sup>

- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-2400
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-2400

Notes:

1. Installed memory is actually 2666MHz but run at 2400MHz due to processor limitation

2. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

Storage

Storage Support

- One drive, 1x M.2 2280 SSD or 1x M.2 2242 SSD
- M.2 2280 SSD up to 1TB
  - M.2 2242 SSD up to 256GB
  - Optional Intel Optane™ Memory integrated with SSD, M.2

Storage Type<sup>[1]</sup>

Disk Type	Interface	RPM	Security
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x2	-	-
M.2 2280 SSD	SATA 6Gb/s	-	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal2
Intel Optane Memory with Solid State Storage, M.2 2280	PCIe NVMe, PCIe 3.0 x4	-	-

Notes:

1. M.2 2280 SATA SSD is NOT available in EMEA

Removable Storage

Optical

None

Card Reader

MicroSD card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby® Audio™ Premium

Microphone<sup>[1]</sup>

- Dual array microphone, far-field
- No microphone

Camera

- 720p, with ThinkShutter, fixed focus
- IR & 720p, with ThinkShutter, fixed focus
- No camera

Notes:

1. Microphone not configured is for speical bid only

Battery

Battery

Integrated Li-Polymer 50Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max Battery Life<sup>[1]</sup>

MobileMark® 2014: 16.11 hr  
JEITA 2.0: 17.8 hr

Notes:

1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 battery-life benchmark tests. Actual battery life will vary and depends on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

**Power Adapter**

- 45W USB-C AC adapter
- 65W USB-C slim AC adapter
- 65W USB-C AC adapter

**DESIGN****Display****Display<sup>[1]</sup>**

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
14.0"	HD (1366x768)	None	TN	220 nits	Anti-glare	16:9	400:1	45% NTSC	90°	-
14.0"	FHD (1920x1080)	None	IPS	250 nits	Anti-glare	16:9	700:1	45% NTSC	170°	-
14.0"	FHD (1920x1080)	Multi-touch	IPS	300 nits	Anti-glare	16:9	700:1	45% NTSC	170°	-
14.0"	FHD (1920x1080)	None	IPS	400 nits	Anti-glare	16:9	800:1	72% NTSC	170°	Low power
14.0"	FHD (1920x1080)	None	IPS	400 nits	Anti-glare	16:9	1000:1	72% NTSC	170°	ThinkPad® Privacy Guard
14.0"	WQHD (2560x1440)	None	IPS	500 nits	Glossy	16:9	1500:1	100% Adobe® RGB	170°	Dolby Vision™, HDR

**Touchscreen**

- On-cell touch, supports 10-point touch
- Non-touch

**Notes:**

1. California Electronic Waste Recycling Fee

In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product. For more information, go to <https://www.calrecycle.ca.gov/Electronics/Consumer>

**Input Device****Keyboard**

6-row, spill-resistant, multimedia Fn keys

**Keyboard Backlight**

- LED backlight
- Not support

**UltraNav™**

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

**Mechanical****Dimensions (WxDxH)**

329 x 227 x 17.9 mm (12.95 x 8.94 x 0.70 inches)

**Weight**

Models	Weight
FHD Low Power / WQHD models	1.46 kg (3.22 lbs)
FHD Privacy Guard models	1.61 kg (3.56 lbs)
HD models	1.53 kg (3.37 lbs)
FHD touch / FHD non-touch models	1.55 kg (3.41 lbs)

**Case Color**

Black

**Case Material**

PPS / 50% GF (top), PC + ABS / Talc15 + magnesium alloy (keyboard cover), PA / 50% GF (bottom)

## CONNECTIVITY

### Network

**Onboard Ethernet**

- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models)
- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models)

**WLAN + Bluetooth™<sup>[1]</sup>**

- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.1
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2
- No WLAN and Bluetooth

**WWAN<sup>[2]</sup>**

- Wireless WAN upgradable
- Integrated Mobile Broadband 4G LTE, Fibocom L830-EB, M.2 card
- Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card
- Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 4x4, M.2 card
- Not Support

**SIM Card**

- Gemalto eSIM
- Nano-SIM Card, Verizon LTE (US)
- No SIM card

**NFC**

- Near Field Communication
- Not support

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**Notes:**

1. Intel WiFi 6 is for 10th gen processor only  
Intel WiFi 6 full features might be limited by country level restrictions  
Bluetooth 5.2 is supported with driver version 22.30 and later
2. In EMEA, WWAN upgradable is for special bid only  
Fibocom L830-EB is only available in EMEA  
For non-WWAN model, it means the model is NOT WWAN upgradable

### Ports

**Standard Ports<sup>[1]</sup>**

- 1x USB 3.1 Gen 1
- 1x USB 3.1 Gen 1 (Always On)
- 1x USB-C 3.1 Gen 1 (support data transfer, Power Delivery and DisplayPort™ 1.2)
- 1x USB-C 3.1 Gen 2 / Thunderbolt 3 (support data transfer, Power Delivery and DisplayPort 1.2)
- 1x HDMI 1.4b
- 1x microSD card reader
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)
- 1x side docking connector

**Optional Ports**

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN models)

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**Notes:**

1. Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Monitor Cable

**Monitor Cable**

- Lenovo HDMI to VGA Monitor Adapter
- Lenovo USB-C to DisplayPort Adapter

- Lenovo USB-C to HDMI Adapter
- Lenovo USB-C to VGA Adapter
- No monitor cable

## SECURITY & PRIVACY

### Security

#### Security Chip

- Discrete TPM 2.0, TCG certified
- Firmware TPM 2.0 integrated in chipset
- Disabled (in some regions)

#### Physical Locks

Kensington® Security Slot

#### Smart Card Reader

- Smart card reader
- No smart card reader

#### Fingerprint Reader

- Touch style fingerprint reader on palm rest, match-on-chip
- No fingerprint reader

#### BIOS Security

- Power-on password
- Supervisor password
- Hard disk password
- Self-healing BIOS

#### Other Security

- (Optional) ThinkShutter camera cover
- (Optional) IR camera for Windows Hello
- (Optional) Privacy Guard with Privacy Alert

## MANAGEABILITY

### System Management

#### System Management

- Intel vPro Technology, DASH
- None

## SERVICE

### Warranty

#### Base Warranty

- 1-year depot service
- 1-year limited onsite service
- 1-year depot with 2-year system board service
- 1-year + 2-year depot service
- 1-year + 2-year limited onsite service
- 3-year (1-yr battery) depot service
- 3-year (1-yr battery) limited onsite service
- No base warranty

## CERTIFICATIONS

### Green Certifications

#### Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0

- TCO
- RoHS compliant

## Other Certifications

### Mil-Spec Test

MIL-STD-810G military test passed

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