

PERFORMANCE

Processor

Processor Family

11th Generation Intel® Core™ i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-1145G7	4	8	2.6GHz	4.4GHz	8MB	LPDDR4x-4266	Intel Iris® Xe Graphics
Core i5-1135G7	4	8	2.4GHz	4.2GHz	8MB	LPDDR4x-4266	Intel Iris Xe Graphics
Core i7-1165G7	4	8	2.8GHz	4.7GHz	12MB	LPDDR4x-4266	Intel Iris Xe Graphics
Core i7-1185G7	4	8	3.0GHz	4.8GHz	12MB	LPDDR4x-4266	Intel Iris Xe Graphics

Operating System

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Fedora Linux
- Linux
- Ubuntu Linux
- No operating system

Graphics

Graphics

Graphics	Type	Memory	Key Features
Intel Iris Xe Graphics	Integrated	Shared	DirectX® 12

Monitor Support

Monitor Support^[1]

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via Thunderbolt™ (5K@60Hz) or HDMI® (up to 4K@60Hz)

Notes:

1. Refresh rates >60hz also supported, however max resolution will be limited

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Memory Type

LPDDR4x-4266

Memory Slots

Memory soldered to systemboard, no slots, 8-channel

Max Memory^[1]

- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Notes:

1. 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

ThinkPad X1 Carbon Gen 9

One drive, up to 2TB M.2 2280 SSD

Storage Type

Disk Type	Interface	Security
M.2 2280 SSD	PCIe NVMe, PCIe x4	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Performance	Opal2

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, 2W x2 and 0.8W x2, Dolby® Atmos®

Microphone

Four array microphones, 360° far-field

Camera

- 720p, with privacy shutter, fixed focus
- IR & 720p, with privacy shutter, fixed focus

Battery

Battery

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max Battery Life^[1]

MobileMark® 2014: 21.3 hr

MobileMark 2018: 16.7 hr

JEITA 2.0: 26.0 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^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
14.0"	FHD+ (1920x1200)	None	IPS	400 nits	Anti-glare	16:10	1000:1	100% sRGB	170°	Low power, low blue light
14.0"	FHD+ (1920x1200)	Multi-touch	IPS	400 nits	Anti-glare	16:10	1000:1	100% sRGB	170°	Low power, low blue light
14.0"	FHD+	Multi-	IPS	500 nits	Anti-	16:10	1000:1	100%	170°	Low power,

	(1920x1200)	touch			glare			sRGB		ThinkPad® Privacy Guard
14.0"	UHD+ (3840x2400)	None	IPS	500 nits	Glossy	16:10	1500:1	100% DCI-P3	170°	Low blue light

Touchscreen

- Capacitive-type on-cell multi-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 with Unified Communications controls

Keyboard Backlight

LED backlight

UltraNav™

TrackPoint® pointing device and glass surface multi-touch touchpad

Mechanical**Dimensions (WxDxH)**

315 x 221.6 x 14.9 mm (12.4 x 8.72 x 0.59 inches)

Weight

1.133 kg (2.49 lbs)

Case Color

- Black, paint
- Black, weave

Case Material

Carbon fiber (top), magnesium alloy (bottom)

CONNECTIVITY**Network****Onboard Ethernet**

Ethernet support via optional Lenovo USB-C to Ethernet Adapter

WLAN + Bluetooth™⁽¹⁾

Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

WWAN

- Wireless WAN upgradable
- Integrated Mobile Broadband 4G LTE, Quectel EM120R-GL, M.2 card, with embedded eSIM functionality
- Qualcomm® Snapdragon™ X55 5G Modem M.2 card - RF System with embedded eSIM functionality
- Not Support

SIM Card

No SIM card

NFC

- Near Field Communication
- Not support

Notes:

1. Intel WiFi 6 full features might be limited by country level restrictions
Bluetooth 5.2 is supported with driver version 22.30 and later

Ports

Standard Ports^[1]

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt 4 / USB4™ 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI 2.0
- 1x headphone / microphone combo jack (3.5mm)

Optional Ports

1x Nano-SIM card slot (WWAN models)

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
- 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® Nano Security Slot

Smart Card Reader

No smart card reader

Fingerprint Reader

Touch style fingerprint reader on power button, match-on-chip

BIOS Security

- Power-on password
- Supervisor password
- NVMe password
- Self-healing BIOS

Other Security

- Camera privacy shutter
- (Optional) IR camera for Windows Hello
- (Optional) Privacy Guard with Privacy Alert
- (Optional) Human Presence Detection

MANAGEABILITY

System Management

System Management

- Intel vPro Technology, DASH
- None

SERVICE

Warranty

Base Warranty^[1]

- 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

Notes:

1. No base warranty is for special bid only

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo USB-C to Ethernet Adapter
- None

CERTIFICATIONS

Green Certifications

Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0
- TCO
- RoHS compliant

Other Certifications

Mil-Spec Test

Work in progress

Other Certifications

- TUV Rheinland Dynamic Privacy Filter (DPF) Certification
- (Optional) Intel Evo™ Platform
- (Optional) TÜV Low Blue Light certified