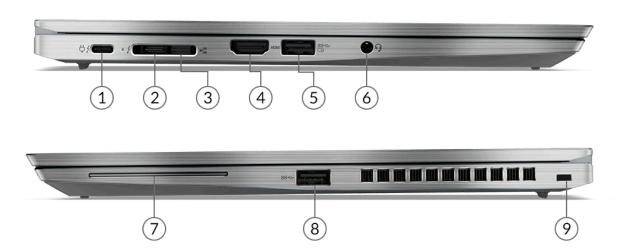


# **OVERVIEW**



1. Thunderbolt 4	6. Headphone / microphone combo jack (3.5mm)
2. Thunderbolt 4	7. Smart card reader *
3. Ethernet extension connector *	8. USB 3.2 Gen 1
4. HDMI 2.0	9. Kensington Nano Security Slot
5. USB 3.2 Gen 1 (Always On)	

### Notes:

- Ports with \* are only available on selected models
- Optional nano-SIM card slot on the rear side (not shown on the sample product above)
- The combination of 2 and 3 is side docking connector



# **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 i5-1135G7	4	8	2.4GHz	4.2GHz	8MB	LPDDR4x-4266	Intel Iris® Xe Graphics
Core i5-1145G7	4	8	2.6GHz	4.4GHz	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® 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Windows 10 Pro 64
- Windows 10 Home 64
- Windows 10 IoT Enterprise LTSC
- Linux
- Ubuntu Linux
- No operating system

# **Graphics**

# **Graphics**

Graphics	Туре	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<sup>TM</sup> (5K@60Hz) or HDMI<sup>SM</sup> (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**

## Max Memory[1]

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

# **Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

# **Memory Type**

LPDDR4x-4266

### 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**

One drive, up to 256GB M.2 2242 SSD or 2TB M.2 2280 SSD

### Storage Type\*\*

Disk Type	Interface	Security
M.2 2242 SSD	PCIe® NVMe®, PCIe 3.0 x4	-
M.2 2280 SSD	PCIe NVMe, PCIe x4	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Performance	Opal 2.0

# **Removable Storage**

#### **Optical**

None

#### **Card Reader**

No card reader

### Multi-Media

### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

#### **Speakers**

Stereo speakers, 2W x2, Dolby® Audio™

#### Microphone

- · Dual array microphone, far-field
- · No microphone

### Camera\*\*

- 720p, with privacy shutter, fixed focus
- IR & 720p hybrid, with privacy shutter, fixed focus
- IR & 1080p hybrid, with privacy shutter, fixed focus
- · No camera

# **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® 2018: 14.5 hr JEITA 2.0: 23.6 hr

#### Notes:

1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) 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\*\*[1]

- 45W USB-C (2-pin) AC adapter
- 45W USB-C (3-pin) AC adapter
- 65W USB-C slim (3-pin) AC adapter
- 65W USB-C slim (2-pin) AC adapter
- 65W USB-C (2-pin) AC adapter
- 65W USB-C (3-pin) AC adapter
- No power adapter

#### Notes:

1. No power adapter is for special bid only.



# **DESIGN**

# **Display**

# Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
14.0"	FHD (1920x1080)	None	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)	Multi- touch	IPS	300 nits	Anti- glare	16:9	700:1	45% NTSC	170°	-
14.0"	FHD (1920x1080)	Multi- touch	IPS	500 nits	Anti- glare	16:9	800:1	72% NTSC	170°	ThinkPad® Privacy Guard
14.0"	UHD (3840x2160)	None	IPS	500 nits	Anti- glare	16:9	1500:1	100% Adobe® RGB	170°	Dolby Vision™, HDR 400

#### **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 with Unified Communications controls

### **Keyboard Backlight**

- · LED backlight
- No support

# UltraNav™

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

### Mechanical

# Dimensions (WxDxH)

Models	Dimensions
Model with black cover and FHD Low Power / UHD display	327.5 x 224 x 16.14 mm (12.89 x 8.82 x 0.64 inches)
Model with black cover and FHD touch / FHD non-touch / FHD Privacy Guard display	327.5 x 224.4 x 16.81 mm (12.89 x 8.83 x 0.66 inches)
Storm grey models	327.5 x 225.3 x 16.81 mm (12.89 x 8.87 x 0.66 inches)

### Weight

Models	Weight
Model with black cover and FHD Low Power / UHD display	1.28 kg (2.83 lbs)
Model with black cover and FHD touch / FHD non-touch / FHD Privacy Guard display	1.36 kg (2.99 lbs)
Storm grey with FHD Low Power / UHD models	1.51 kg (3.32 lbs)
Storm grey with FHD touch / FHD non-touch / FHD Privacy Guard models	1.57 kg (3.46 lbs)

### Case Color\*\*



- Storm grey
- · Villi black

#### Case Material\*\*

- · Villi black models: carbon fiber hybrid (top), magnesium (keyboard cover), aluminium (bottom)
- Storm grey models: aluminium (top), aluminium (keyboard cover & bottom)

#### Notes:

1. The system weight varies depending on configurations.

### CONNECTIVITY

# **Network**

#### Onboard Ethernet\*\*

- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models), RJ-45 via optional ThinkPad Ethernet Extension Adapter Gen 2
- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), RJ-45 via optional ThinkPad Ethernet Extension Adapter Gen 2
- No Ethernet

#### WLAN + Bluetooth®\*\*[1]

- Intel Wi-Fi® 6 AX200, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2
- Intel Wi-Fi 6 AX201, 802,11ax 2x2 Wi-Fi + Bluetooth 5,2
- Intel Wi-Fi 6E AX210, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

#### WWAN\*

- Wireless WAN upgradable to 4G (with antenna ready)
- 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
- No support

#### SIM Card

No SIM card inbox

# NFC

- Near Field Communication
- No support

### Notes:

1. Intel WiFi 6 full features might be limited by country level restrictions.

6GHz Wi-Fi 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth 5.2 is supported with driver version 22.30 and later.

# Ports<sup>[1]</sup>

# **Standard Ports**

- 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\*\*\*[2]

- 1x Ethernet extension connector
- 1x Side docking connector (Ethernet model only)
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN model)

#### Notes:

- 1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed. USB 2.0: 480 Mbit/s:
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;



USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

Thunderbolt 3: 40 Gbit/s; FireWire 400: 400 Mbit/s; FireWire 800: 800 Mbit/s

2. Ethernet and side docking connector are coexisting. On some models, both of them are equipped. On some models, neither of them is equipped.

If your computer has Ethernet icon, it supports wired Ethernet connection with ThinkPad Ethernet Extension Adapter or ThinkPad Basic/Pro/Ultra Docking Station.

If your computer does not have Ethernet icon, the Ethernet connector does not support Ethernet connection. We recommend you use the Lenovo USB-C to Ethernet Adapter for Ethernet connection.

### **Monitor Cable**

#### Monitor Cable\*\*\*

- Lenovo HDMI to VGA Monitor Adapter
- Lenovo USB-C to DisplayPort 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® Nano Security Slot

### **Smart Card Reader**

- Smart card reader
- No smart card reader

#### Fingerprint Reader

- · Touch style fingerprint reader on power button, match-on-chip
- · No fingerprint reader

### **BIOS Security**

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

# Other Security

- (Optional) 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-year depot service
- 1-year depot with 2-year system board service



- 1-year limited onsite 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

### **ENVIRONMENTAL**

# **Operating Environment**

### Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

## Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

#### **Altitude**

Maximum altitude (without pressurization): 3048 m (10,000 ft)

#### Notes:

1. When you charge the battery, its temperature must be no lower than 10°C (50°F).

# **ACCESSORIES**

### **Bundled Accessories**

#### **Bundled Accessories\*\*\***

- · Lenovo USB-C to Ethernet Adapter
- ThinkPad Ethernet Extension Adapter Gen 2
- None

# **CERTIFICATIONS**

# **Green Certifications**

### **Green Certifications**

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

# **Other Certifications**

### Mil-Spec Test

MIL-STD-810H military test passed

#### Other Certifications[1]

(Optional) Intel Evo™ Platform

#### Notes

1. Intel Evo is only available for the models with FHD Low Power, FHD Privacy Guard, or UHD display.

- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
- Feature with \*\*\* means that one or more offerings listed under the feature could be configured on selected models.



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