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	DDR4-3200	Intel Iris® Xe Graphics
Core i5-1145G7	4	8	2.6GHz	4.4GHz	8MB	DDR4-3200	Intel Iris Xe Graphics
Core i7-1185G7	4	8	3.0GHz	4.8GHz	12MB	DDR4-3200	Intel Iris Xe Graphics
Core i7-1165G7	4	8	2.8GHz	4.7GHz	12MB	DDR4-3200	Intel Iris Xe Graphics

Operating System

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

Graphics

Graphics	Type	Memory	Key Features
Intel Iris Xe Graphics	Integrated	Shared	DirectX® 12
NVIDIA® GeForce® MX450	Discrete	2GB GDDR6	DirectX 12

Notes:

- Intel Iris Xe Graphics capability requires system to be configured with Intel Core i5 or i7 processor and dual channel memory. On the system with Intel Core i5 or i7 processor and single channel memory, Intel Iris Xe Graphics will function as Intel UHD graphics

Monitor Support

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:

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

Chipset

Intel SoC (System on Chip) platform

Memory

Memory Type

DDR4-3200

Memory Slots

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

Max Memory

- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Notes:

- 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 2TB
• M.2 2242 SSD up to 128GB

Storage Type

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

Notes:
• The SSD with PCI 4.0 performance is downgraded to closer to PCIe 3.0x4 performance due to the system slot limitation

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™

Microphone

• Dual array microphone, far-field
• No microphone

Notes:
• Microphone not configured is for speical bid only

Camera

• 720p, with privacy shutter, fixed focus
• IR & 720p, with privacy shutter, fixed focus
• No camera

Battery

Battery

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

Max Battery Life

MobileMark® 2018: 10.7 hr
JEITA 2.0: 14.5 hr

Notes:
• 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

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

Notes:
• 45W USB-C AC adapter is only available for the models with integrated gaphics
  In EMEA only 65W USB-C AC adapter is available

DESIGN

Display

Display

Size	Resolution	Touch	Type	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)	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)	Multi-touch	IPS	500 nits	Anti-glare	16:9	1000:1	72% NTSC	178°	ThinkPad® Privacy Guard
14.0″	UHD (3840x2160)	None	IPS	500 nits	Anti-glare	16:9	1500:1	100% Adobe® RGB	178°	Dolby Vision™, HDR 400

Notes:

- 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

Color Calibration

- X-Rite Pantone factory color calibration (UHD display)
- No color calibration

Touchscreen

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

Input Device

Keyboard

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight

- LED backlight
- Not support

UltraNav™

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

Mechanical

Dimensions (WxDxH)

Models	Dimensions
Aluminium models	329.4 x 227.5 x 17.9 mm (12.97 x 8.96 x 0.70 inches)
PPS models	329 x 227 x 17.9 mm (12.95 x 8.94 x 0.70 inches)

Weight

Models	Weight
FHD non-touch model with PPS top cover	1.53 kg (3.37 lb)
FHD non-touch model with aluminium top cover	1.502 kg (3.31 lb)
FHD touch model with PPS top cover	1.53 kg (3.37 lb)
FHD touch model with aluminium top cover	1.502 kg (3.31 lb)
FHD low power model with PPS top cover	1.47 kg (3.23 lbs)
FHD privacy guard model with PPS top cover	1.58 kg (3.49 lbs)

FHD privacy guard model with aluminium top cover	1.55 kg (3.42 lbs)
UHD model with PPS top cover	1.47 kg (3.24 lbs)

Case Color

- Black
- Storm grey

Notes:

- Storm grey case is NOT available in EMEA

Surface Treatment

- ISO 22196 compliant anti-microbial surface treatment (not including keyboard, display, and display bezel)
- Not anti-microbial surface treatment

Notes:

- Anti-microbial surface treatment is NOT available for aluminium models

Case Material

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

WLAN + Bluetooth™

Intel Wi-Fi 6E AX210, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

Notes:

- 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

WWAN

- Wireless WAN upgradable
- Not Support

Notes:

- WWAN is NOT available for aluminium models

SIM Card

No SIM card

NFC

- Near Field Communication
- Not support

Notes:

- NFC is NOT available for aluminium models, and is mutually exclusive with FIPS 201 fingerprint reader and RFID reader

Ports

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 microSD card reader
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)
- 1x side docking connector

Notes:

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

Optional Ports

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

Notes:

- RFID reader is ONLY available with FIPS 201 fingerprint reader and anti-microbial covers, and NOT available on Aluminium models
  Smart card reader is NOT available with FIPS 201 fingerprint reader and anti-microbial covers

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® Security Slot

Smart Card Reader

- Smart card reader
- No smart card reader

Fingerprint Reader

- FIPS 201 fingerprint reader on palm rest
- Touch style fingerprint reader on palm rest, match-on-chip
- No fingerprint reader

Notes:

- Match-on-card fingerprint reader is mutually exclusive with RFID reader
  FIPS 201 fingerprint reader is ONLY available for the models with anti-microbial black covers, and is mutually exclusive with NFC
  No fingerprint reader is ONLY available for black models

BIOS Security

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

Other Security

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

MANAGEABILITY

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

Notes:

- No base warranty is for speical bid only

ACCESSORIES

Bundled Accessories

None

CERTIFICATIONS

Green Certifications
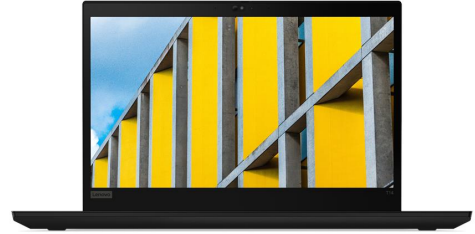
- EPEAT™ Gold
- ENERGY STAR® 8.0
- TCO
- RoHS compliant
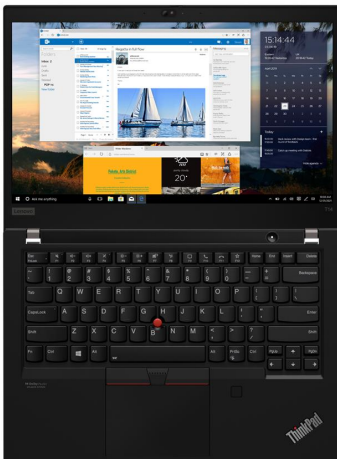
Other Certifications

Mil-Spec Test

Work in progress

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