OVERVIEW



1. Smart card reader *	6. Thunderbolt 4
2. USB 3.2 Gen 1	7. HDMI
3. Kensington Nano Security Slot	8. USB 3.2 Gen 1 (Always On)
4. Ethernet (RJ-45)	9. Headphone / microphone combo jack (3.5mm)
5. Thunderbolt 4	10. Nano-SIM card slot *

Notes:

• Items with * are only available on selected models

ThinkPad T16 Gen 1 (Intel)

PERFORMANCE

Processor

Processor Family

12th Generation Intel® Core™ i5 / i7 Processor

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5-1235U	10 (2 P-core + 8 E-core)	12	P-core 1.3GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i5-1240P	12 (4 P-core + 8 E-core)	16	P-core 1.7GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i5-1245U	10 (2 P-core + 8 E-core)	12	P-core 1.6GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i5-1250P	12 (4 P-core + 8 E-core)	16	P-core 1.7GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i7-1255U	10 (2 P-core + 8 E-core)	12	P-core 1.7GHz / E-core 1.2GHz	P-core 4.7GHz / E-core 3.5GHz	12MB	Intel® Iris® Xe Graphics
Core i7-1260P	12 (4 P-core + 8 E-core)	16	P-core 2.1GHz / E-core 1.5GHz	P-core 4.7GHz / E-core 3.4GHz	18MB	Intel® Iris® Xe Graphics
Core i7-1265U	10 (2 P-core + 8 E-core)	12	P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.6GHz	12MB	Intel® Iris® Xe Graphics
Core i7-1270P	12 (4 P-core + 8 E-core)	16	P-core 2.2GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.5GHz	18MB	Intel® Iris® Xe Graphics
Core i7-1280P	14 (6 P-core + 8 E-core)	20	P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.6GHz	24MB	Intel® Iris® Xe Graphics

Notes:

[1] Intel[®] Iris[®] Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel[®] Iris[®] Xe Graphics will function as Intel[®] UHD Graphics.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows[®] 11 Home Single Language
- Windows[®] 11 DG Windows[®] 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021^[1]
- Ubuntu Linux^[2]
- Linux^[3]
- No preload operating system

Notes:

[1] Windows $^{\scriptscriptstyle \otimes}$ 10 IoT Enterprise LTSC 2021 is for special bid only.

[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

Graphics	Туре	Memory	Key Features
Intel [®] Iris [®] Xe Graphics ^[1]	Integrated	Shared	DirectX® 12.1
NVIDIA® GeForce MX550	Discrete	2GB GDDR6	DirectX® 12

Notes:

ThinkPad T16 Gen 1 (Intel)

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support^[1]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt[™] and HDMI®)

- Thunderbolt[™] supports up to 5K@60Hz
- HDMI® supports 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]

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

Memory Slots

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

Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support^[1]

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

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4 Performance	512GB / 1TB / 2TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® x4[2]	256GB / 512GB / 1TB	Opal 2.0

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo[®] storage offerings.
[2] PCle[®] x4 may be PCle[®] 3.0x4 or PCle[®] 4.0x4 as substitution.

Removable Storage

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-microphone array, far-field, Dolby Voice®
- No microphone^[1]

Camera**[2]

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:

[1] No microphone is for special bid only.

[2] Only HD 720p and FHD 1080p + IR hybrid are available in EMEA.

Battery

Battery**

- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 135W AC adapter
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

Battery Life^[1]

Configuration 1 (max battery life) MobileMark® 2018: up to 10.1 hr with 786 performance score @200nits MobileMark® 25: up to 8.5 hr with 617 performance score @250nits JEITA 2.0: up to 17.1 hr @150nits Local video playback: up to 16.5 hr @150nits

Alternate configuration 2 MobileMark® 2018: up to 9.4 hr with 911 performance score @200nits MobileMark® 25: up to 6.6 hr with 655 performance score @250nits JEITA 2.0: up to 12.0 hr @150nits Local video playback: up to 10.1 hr @150nits

Alternate configuration 3 MobileMark® 2018: up to 7.5 hr with 1101 performance score @200nits MobileMark® 25: up to 5.0 hr with 722 performance score @250nits JEITA 2.0: up to 8.6 hr @150nits Local video playback: up to 7.4 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1240P, 8GB soldered DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (touch), Intel[®] i5-1250P, 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode

Alternate configuration 3: WQXGA, Intel[®] i7-1280P, 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200, NVIDIA[®] GeForce MX550, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using <u>MobileMark® 2018</u>, <u>MobileMark® 25</u>, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft[®] link for more information about the Windows[®] Performance power slider.

Power Adapter

Power Adapter**[1][2]

- 45W USB-C[®] (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C[®] (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C[®] (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- * 65W USB-C° (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- + 65W USB-C* slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C[®] slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C $^{\circ}$ slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter^[3]

Notes:

[1] AC adapter offerings depend on the country.

[2] 45W USB-C[®] AC adapter is ONLY available for the models with integrated graphics.

45W USB-C® AC adapter and 65W USB-C® slim AC adapter are NOT available in EMEA.

[3] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16″	WUXGA (1920x1200)	None	IPS	300nits	Anti- glare	16:10	800:1	45% NTSC	-	85° / 85° / 85° / 85°	-
16″	WUXGA (1920x1200)	Multi- touch	IPS	300nits	Anti- glare	16:10	800:1	45% NTSC	60Hz	85° / 85° / 85° / 85°	-
16″	WUXGA (1920x1200) ^[2]	None	IPS	400nits	Anti- glare	16:10	1000:1	100% sRGB	-	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified
16″	WUXGA (1920x1200)	Multi- touch	IPS	500nits	Anti- glare	16:10	1000:1	100% sRGB	-	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard
16″	WQXGA (2560x1600)	None	IPS	400nits	Anti- glare	16:10	1200:1	100% sRGB	-	85° / 85° / 85° / 85°	Eyesafe® Certified

Touchscreen

• Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

[2] Low power display is NOT available in EMEA.

Input Device

Keyboard

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

Keyboard Backlight

- LED backlight
- Non-backlight

UltraNav™

TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

Mechanical

Dimensions (WxDxH)^[1]

Models	Dimensions
Integrated graphics models	361.9 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)
Discrete graphics models	361.9 x 255.5 x 21.1 mm (14.25 x 10.06 x 0.83 inches)

Weight^[2]

lodels with thunder black cover and integrated graphics Starti	ng at 1.769 kg (3.9 lbs)
lodels with storm grey cover Starti	ng at 1.803 kg (3.97 lbs)
lodels with thunder black cover and discrete graphics Starti	ng at 1.842 kg (4.06 lbs)

Case Color**

[•] On-cell multi-touch, supports 10-point touch

ThinkPad T16 Gen 1 (Intel)

- Storm grey^[3]
- Thunder black

Case Material**

- Storm grey models: aluminium (top), PPS (bottom)
- Thunder black models: PC + 20% CF + 50% GF (top), PPS (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo[®] lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

[3] Storm grey cover is ONLY available for the models with integrated graphics.

Storm grey cover is ONLY available with backlit keyboard.

Storm grey cover is NOT available in EMEA.

CONNECTIVITY

Network

Ethernet**

- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**[1]

- Qualcomm[®] Wi-Fi[®] 6E NFA725A, 802.11ax 2x2 Wi-Fi[®] + Bluetooth[®] 5.1 (Bluetooth[®] 5.2 hardware ready)^[2]
- Intel[®] Wi-Fi[®] 6E AX211, 802.11ax 2x2 Wi-Fi[®] + Bluetooth[®] 5.1 (Bluetooth[®] 5.2 hardware ready)^[3]

WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)^[4]
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card^[5]
- No support

SIM Card

- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC^[6]

- Near Field Communication
- No support

Notes:

[1] Bluetooth[®] may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2], [3] Wi-Fi[®] 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

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.

[4] Wireless WAN upgradable to 4G is ONLY available in EMEA.

[5] Fibocom L860-GL CAT16 is special bid only in EMEA.

[6] NFC is NOT available for storm grey models.

NFC is special bid only in EMEA.

Ports^{III}

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[™] 1.4)
- 1x HDMI[®] 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports***

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

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; USB4[®] 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s; USB4[®] 40Gbps (USB 40Gbps): 40 Gbit/s; Thunderbolt[™] 3/4: 40 Gbit/s.

Docking

Docking

Various docking solutions supported via Thunderbolt[™] / USB-C[®]. For more compatible docking solutions, please visit <u>Docking for ThinkPad[®] T16 Gen 1 (Intel[®])</u>

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader^[1]

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

BIOS Security

- Supervisor password
- Power-on password
- System management password
- NVMe[®] password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security

- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad[®] Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Human Presence Detection (software)

Notes:

[1] Fingerprint reader is standard on storm grey models and optional on thunder black models.

MANAGEABILITY

System Management

System Management

- Intel[®] vPro[®] Enterprise^[1]
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty^[1]

Notes:

[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo[®] USB-C[®] to Ethernet Adapter (1Gbps)
- Lenovo[®] USB-C[®] to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 1 (Intel®).

OPERATING REQUIREMENTS

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)

Relative 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).

ENVIRONMENTAL

Sustainability

Material

97% PCC recycled plastic used in speaker enclosure 97% PCC recycled plastic used in the 52.5Wh battery frame 25-30% PCC recycled plastic used in the 86Wh battery frame 95% PCC recycled plastic used in standard 65W adapter Low-temperature solder 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications^{III}

Green Certifications^[2]

- ENERGY STAR[®] 8.0
- EPEAT[™] Gold Registered^[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or selfdeclaration. For ESG & regulatory compliance documents, please visit <u>https://compliance.lenovo.com</u>.

[2] EPEAT[™] registration and ENERGY STAR[®] certification are dependent on system OS. Please visit <u>epeat.net</u> and <u>energystar.gov</u> for more information.

[3] EPEAT[™] is registered where applicable, please visit <u>epeat.net</u> for registration status by country.

Other Certifications

Mil-Spec Test MIL-STD-810H military test passed Other Certifications (Optional) Eyesafe® Certified

- 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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