

OVERVIEW



| 1. HDMI 2.1 / 2.0 | 7. USB 3.2 Gen 1 |
|--|-----------------------------|
| 2. USB 3.2 Gen 1 (Always On) | 8. Kensington Security Slot |
| 3. Nano-SIM card slot * | 9. 2.5GbE (RJ-45) |
| 4. Headphone / microphone combo jack (3.5mm) | 10. Power connector |
| 5. Smart card reader * | 11. 2x Thunderbolt 4 |
| 6. SD card reader | 12. USB-C 3.2 Gen 2 |

Notes:

• Ports with * are only available on selected models



PERFORMANCE

Processor

Processor Family

11th Generation Intel® Core™ i5 / i7 / i9 or Intel Xeon® Processor

Processor**

| Processor Name | Cores | Threads | Base Frequency | Max Frequency | Cache | Memory Support | Processor Graphics |
|----------------|-------------|-----------|----------------|---------------|----------------|--------------------|--------------------|
| Core i5-11500H | 6 | 12 2.9GHz | | 4.6GHz | 12MB | DDR4-3200 | Intel UHD Graphics |
| Core i7-11800H | 8 | 16 | 2.3GHz | 4.6GHz | 24MB | DDR4-3200 | Intel UHD Graphics |
| Core i7-11850H | 8 | 16 2.5GHz | | 4.8GHz | 24MB DDR4-3200 | Intel UHD Graphics | |
| Core i9-11950H | 8 | 16 | 2.6GHz | 5.0GHz | 24MB | DDR4-3200 | Intel UHD Graphics |
| Xeon W-11855M | 6 12 3.2GHz | | 3.2GHz | 4.9GHz | 18MB | DDR4-3200 | Intel UHD Graphics |
| Xeon W-11955M | 8 | 16 | 2.6GHz | 5.0GHz | 24MB | DDR4-3200 | Intel UHD Graphics |

Operating System

Operating System**

- Windows® 11 Pro 64
- Windows 11 Pro 64 for Workstations
- · Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Windows 11 DG Windows 10 Pro 64 for Workstations
- Windows 10 Pro 64
- Windows 10 Pro 64 for Workstations
- Windows 10 Home 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux (certified only)

Graphics

Graphics**

| Graphics | Туре | Memory | TGP | Key Features |
|-----------------------------|----------|------------|------|--------------|
| NVIDIA® T1200 Laptop GPU | Discrete | 4GB GDDR6 | 60W | DirectX® 12 |
| NVIDIA RTX A5000 Laptop GPU | Discrete | 16GB GDDR6 | 115W | DirectX 12 |
| NVIDIA RTX A4000 Laptop GPU | Discrete | 8GB GDDR6 | 115W | DirectX 12 |
| NVIDIA RTX A2000 Laptop GPU | Discrete | 4GB GDDR6 | 60W | DirectX 12 |
| NVIDIA RTX A3000 Laptop GPU | Discrete | 6GB GDDR6 | 115W | DirectX 12 |

Monitor Support

Monitor Support

Supports up to 5 independent displays (native display and 4 external monitors via $HDMI^{\circ}$, $USB-C^{\circ}$, or ThunderboltTM) on hybrid mode only

- HDMI supports up to 4K@60Hz on NVIDIA T1200, 8K@60Hz on other discrete graphics
- USB-C up to 5120x3200@60Hz
- Thunderbolt supports up to 5120x3200@60Hz

Chipset

Chipset

Intel WM590 chipset

Memory

Max Memory[1]

Up to 128GB DDR4-3200

Memory Slots



Four DDR4 SO-DIMM slots, dual-channel capable

Memory Type**

- DDR4-3200 ECC
- DDR4-3200 non-ECC

Memory Protection

ECC on models with ECC DIMMs and Xeon processor

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[1]

Up to three drives, 3x M.2 SSD

• M.2 2280 SSD up to 2TB

Storage Slot[2]

Three M.2 slots

- Two M.2 2280 PCle® Gen 3x4 slots, support M.2 2280 SSD
- One M.2 2280 PCIe Gen 4x4 slot, supports M.2 2280 SSD

Storage Type***

| Disk Type | Interface | RPM | Offering | Security |
|--------------|-------------------------------------|-----|---------------------|----------|
| M.2 2280 SSD | PCIe NVMe®, PCIe 4.0 x4 Performance | - | 512GB / 1TB / 2TB | Opal2 |
| M.2 2280 SSD | PCIe NVMe, PCIe x4 | - | 256GB / 512GB / 1TB | Opal2 |

RAID^[3]

RAID 0/1 support on two M.2 PCle Gen 3x4 slots

Notes:

- 1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.
- 2. M.2 PCle Gen 4 SSD in a M.2 PCle Gen 3 slot runs at PCle Gen 3 speeds
- 3. Opal capability is not available in RAID mode.

Removable Storage

Optical

None

Card Reader

SD card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, Dolby® Atmos®

Microphone

- Dual array microphone, far-field
- No microphone

Camera

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

Battery

Battery

Integrated Li-Polymer 94Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 230W AC adapter

Max Battery Life[1]

ThinkPad P17 Gen 2



MobileMark® 2018: 8.3 hr JEITA 2.0: 11 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]

- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

1. AC adapter offerings depend on the country.

DESIGN

Display

Display**[1][2]

| Size | Resolution | Touch | Туре | Brightness | Surface | Aspect Ratio | Contrast Ratio | Color Gamut | Viewing Angle | Key Features |
|-------|--------------------|-------|------|------------|----------------|-----------------|-------------------|-----------------------|------------------|-----------------------------------|
| 17.3" | FHD (1920×1080) | None | IPS | 300 nits | Anti- glare | 16:9 | 800:1 | 100% sRGB | 170° | - |
| 17.3" | UHD (3840x2160) | None | IPS | 500 nits | Anti- glare | 16:9 | 1000:1 | 100% Adobe® RGB | 170° | Dolby Vision™, DisplayHDR™ 400 |

Color Calibration

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

Touchscreen

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

2. For non-OLED display, HDR is only supported under hybrid mode.

Input Device

Keyboard

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

Keyboard Backlight

LED backlight

UltraNav™

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

Mechanical[®]

Dimensions (WxDxH)

415.44 x 280.81 x 24.31-32.45 mm (16.36 x 11.06 x 0.96-1.28 inches)

Weight

Starting at 3.564 kg (7.86 lbs)

Case Color

Black



Case Material

PPS / 50% GF (top), PA / 50% GF (bottom)

Notes:

1. The system dimensions and weight vary depending on configurations.

CONNECTIVITY

Network

Onboard Ethernet**

- 2.5GbE, Intel Ethernet Connection I225-LM (vPro models), supports Wake-on-LAN
- 2.5GbE, Intel Ethernet Connection I225-V (non-vPro models), supports Wake-on-LAN

WI AN + Bluetooth®[1][2]

- Intel Wi-Fi® 6E AX210, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2
- No WLAN and Bluetooth

WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Integrated Mobile Broadband 4G LTE, Quectel EM160R, MIMO 4x4, M.2 card, with embedded eSIM functionality
- No support

SIM Card

No SIM card inbox

NFC

No support

Notes:

- 1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation
- 2. 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.

Ports^[1]

Standard Ports

- 2x USB 3.2 Gen 1 (one Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 3.0, and DisplayPort™ 1.4)
- 2x Thunderbolt 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort 1.4a)
- 1x SD card reader
- 1x Ethernet (2.5GbE RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports***

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)
- 1x HDMI 2.0 (model with NVIDIA T1200 graphics)
- 1x HDMI 2.1 (model with NVIDIA RTX graphics)

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 3/4: 40 Gbit/s

Docking

Docking

Various docking solutions supported via Thunderbolt or USB-C.

For more compatible docking solutions, please visit Docking for ThinkPad® P17 Gen 2

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® Security Slot, 3 x 7 mm

Smart Card Reader

- · Smart card reader
- · No smart card reader

Fingerprint Reader

Touch style fingerprint reader on palm rest, match-on-chip

BIOS Security

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

Other Security

(Optional) IR camera for Windows Hello

MANAGEABILITY

System Management

System Management[1]

- Intel vPro
- Non-vPro

Notes:

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

SERVICE

Warranty

Base Warranty**[1]

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

Notes:

1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

ENVIRONMENTAL

Operating Environment



Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -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).

CERTIFICATIONS

Green Certifications

Green Certifications

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

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo Workstations

- 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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