OVERVIEW

1. Thunderbolt 4  
2. Thunderbolt 4  
3. Ethernet extension connector (mini RJ-45) *  
4. HDMI 2.0  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. USB 3.2 Gen 1  
9. Kensington Nano Security Slot

Notes:
- Items 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™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-1115G4</td>
<td>2</td>
<td>4</td>
<td>3.0GHz</td>
<td>4.1GHz</td>
<td>6MB</td>
<td>Intel UHD Graphics</td>
</tr>
<tr>
<td>Core i5-1135G7</td>
<td>4</td>
<td>8</td>
<td>2.4GHz</td>
<td>4.2GHz</td>
<td>8MB</td>
<td>Intel Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-1145G7</td>
<td>4</td>
<td>8</td>
<td>2.6GHz</td>
<td>4.4GHz</td>
<td>8MB</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1165G7</td>
<td>4</td>
<td>8</td>
<td>2.8GHz</td>
<td>4.7GHz</td>
<td>12MB</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1185G7</td>
<td>4</td>
<td>8</td>
<td>3.0GHz</td>
<td>4.8GHz</td>
<td>12MB</td>
<td>Intel Iris Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System

- Linux
- Ubuntu Linux
- Windows® 10 Home 64
- Windows 10 Home 64 Single Language
- Windows 10 IoT Enterprise LTSC
- Windows 10 Pro 64
- Windows 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:
[1], [2] 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

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Iris Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

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

- 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-3733
- LPDDR4x-4266

Notes:
[1] Installed memory is actually 4266MHz, but run at 3733MHz due to processor limitation.

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

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe 3.0 x2</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe, PCIe 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe x4</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe 4.0 x4 Performance</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

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.

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
- No microphone

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

Battery
Battery
- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max Battery Life

- Models with 41Wh battery:
  - MobileMark® 2018: 10.5 hr
  - JEITA 2.0: 16.5 hr
- Models with 54.7Wh battery:
  - MobileMark 2018: 14.5 hr
  - JEITA 2.0: 22.2 hr

Notes:
[1] All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018,
MobileMark 25, 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 depending 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® (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
- No power adapter

Notes:


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

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot; WUXGA</td>
<td>(1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot; WUXGA</td>
<td>(1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot; WUXGA</td>
<td>(1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>13.3&quot; WQXGA</td>
<td>(2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>Low power, low blue light</td>
</tr>
</tbody>
</table>

**Touchscreen**

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

Notes:

[1] California Electronic Waste Recycling Fee
In California USA, 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, please go to https://www.calrecycle.ca.gov/Electronics/Consumer.

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

**Input Device**

**Keyboard**

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

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

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

**Mechanical**

**Dimensions (WxDxH)**
### Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with PPS top cover</td>
<td>305.8 x 217.06 x 18.19 mm (12.04 x 8.55 x 0.72 inches)</td>
</tr>
<tr>
<td>Models with carbon fiber top cover</td>
<td>305.8 x 217.39 x 18.97 mm (12.04 x 8.56 x 0.75 inches)</td>
</tr>
<tr>
<td>Models with aluminium top cover</td>
<td>305.8 x 217.89 x 18.06 mm (12.04 x 8.58 x 0.71 inches)</td>
</tr>
</tbody>
</table>

### Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with WQXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.21 kg (2.67 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 41Wh battery, and storm grey top cover</td>
<td>Starting at 1.28 kg (2.82 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 54.7Wh battery, and black PPS top cover</td>
<td>Starting at 1.26 kg (2.78 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 54.7Wh battery, and storm grey top cover</td>
<td>Starting at 1.34 kg (2.94 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.19 kg (2.62 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.25 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and storm grey top cover</td>
<td>Starting at 1.33 kg (2.93 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.26 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black PPS top cover</td>
<td>Starting at 1.31 kg (2.88 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and storm grey top cover</td>
<td>Starting at 1.38 kg (3.04 lbs)</td>
</tr>
</tbody>
</table>

### Case Color**
- Storm grey
- Villi black

### Case Material**
- Villi black models: carbon fiber or PPS (top), magnesium (keyboard cover), aluminium (bottom)
- Storm grey & WWAN models: aluminium (top), magnesium (keyboard cover), aluminium (bottom)
- Storm grey & non-WWAN models: aluminium (top), aluminium (keyboard cover & 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.

### CONNECTIVITY

#### Network

**Ethernet**
- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models), mini RJ-45 to RJ-45 via optional ThinkPad Ethernet Extension Adapter Gen 2, supports Wake-on-LAN
- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), mini RJ-45 to RJ-45 via optional ThinkPad Ethernet Extension Adapter Gen 2, supports Wake-on-LAN
- No onboard Ethernet

**WLAN + Bluetooth®**
- Intel Wi-Fi® 6 AX200, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1
- Intel Wi-Fi 6E AX210, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM120R-GL, 4G LTE CAT12, M.2 card
- Qualcomm Snapdragon™ X55 5G Modem-RF System, Sub-6 GHz, M.2 card, with embedded eSIM functionality
- No support

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

NFC
• Near Field Communication
• No support

Notes:
[1] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.
[2], [3] Wi-Fi 6 full features might be limited by country-level restrictions.
[4] 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.

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 Headphone / microphone combo jack (3.5mm)

Optional Ports
• 1x Ethernet extension connector (mini RJ-45)
• 1x Side docking connector (Ethernet models only)
• 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.
[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.

Docking

Docking
Various docking solutions supported via side docking connector (optional) or Thunderbolt / USB-C.
For more compatible docking solutions, please visit Docking for ThinkPad X13 Gen 2 (Intel)

Monitor Cable

Monitor Cable
• Lenovo HDMI to VGA Monitor Adapter
• Lenovo USB-C to VGA Adapter
• Lenovo USB-C to DisplayPort Adapter
• No monitor cable

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Nano Security Slot™

Smart Card Reader
• Smart card reader
• No smart card reader

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

BIOS Security
• Power-on password
• Supervisor 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
• 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

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ENVIRONMENTAL

Operating Environment

Temperature
• 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[1]
Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[2]
- TCO Certified
- RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration.
[2] EPEAT is registered where applicable, please see https://www.epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Intel Evo™ Platform[1]

Notes:
[1] Intel Evo is NOT available for the models with i3 processor, 41Wh battery, or 128GB storage.

• 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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