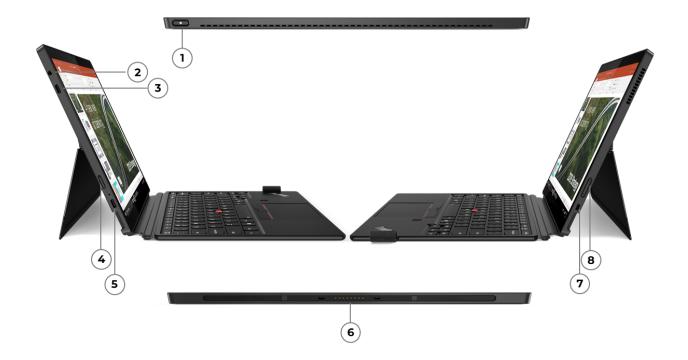
# **OVERVIEW**



| 1. Power button                              | 5. USB-C (USB 10Gbps), with USB PD 3.0 & DP 2.1 |
|--|---|
| 2. Headphone / microphone combo jack (3.5mm) | 6. Pogo pin connector (8-point)                 |
| 3. Thunderbolt 4                             | 7. Kensington Nano Security Slot                |
| 4. Nano-SIM card slot *                      | 8. Volume button                                |

Notes:

- Items with \* are only available on selected models
- Folio keyboard shown on above image is for demo only. It is available on selected models.

# PERFORMANCE

# Processor

## **Processor Family**

Intel® U Series Core Ultra 5 / 7 Processor (Series 1)

## Processor\*\*

| Processor<br>Name    | Cores  | Threads | Base Frequency  | Max Frequency   | Cache | Processor<br>Graphics | NPU                |
|----------------------|--|---------|---|---|-------|-----------------------|--------------------|
| Core Ultra 5<br>134U | 12 (2 P-core + 8<br>E-core + 2 LPE-<br>core) | 14      | P-core 700MHz / E-core<br>500MHz / LPE-core<br>400MHz | P-core 4.4GHz / E-core<br>3.6GHz / LPE-core<br>2.1GHz | 12MB  | Intel®<br>Graphics    | Intel® AI<br>Boost |
| Core Ultra 7<br>164U | 12 (2 P-core + 8<br>E-core + 2 LPE-<br>core) | 14      | P-core 1.1GHz / E-core<br>700MHz / LPE-core<br>400MHz | P-core 4.8GHz / E-core<br>3.8GHz / LPE-core<br>2.1GHz | 12MB  | Intel®<br>Graphics    | Intel® AI<br>Boost |

# AI (Artificial Intelligence)

### NPU

Integrated Intel<sup>®</sup> AI Boost, up to 11 TOPS

# **Operating System**

### **Operating System**\*\*

- Windows® 11 Pro
- Windows® 11 Home
- No preload operating system

# Graphics

## Graphics

| Graphics                    | Туре       | Memory | TGP           | Key Features  |
|-----------------------------|------------|--------|---------------|---------------|
| Intel <sup>®</sup> Graphics | Integrated | Shared | Share CPU TDP | DirectX® 12.2 |

# **Monitor Support**

#### Monitor Support<sup>[1]</sup>

Supports up to 3 independent displays (native display and 2 external monitors via USB-C<sup>®</sup> and Thunderbolt<sup>™</sup>)

- USB-C<sup>®</sup> supports up to 6K@60Hz
- Thunderbolt<sup>™</sup> supports up to 8K@60Hz

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited. 6K / 8K resolution support needs 2 display pipes. That is, simultaneous display number will "-1" when 6K / 8K resolution displayed.

# Chipset

### Chipset

Intel® SoC (System on Chip) platform

## Memory

### Max Memory

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

## Memory Type

LPDDR5x-6400<sup>[1]</sup>

Notes:

[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

# Storage

### Max Storage Support<sup>[1]</sup>

One drive, up to 1TB M.2 2242 SSD

### Storage Type

| Disk Type    | Interface                 | Offering            | Security |
|--------------|---------------------------|---------------------|----------|
| M.2 2242 SSD | PCIe® NVMe®, PCIe® 4.0 x4 | 256GB / 512GB / 1TB | Opal 2.0 |

### Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

# **Multi-Media**

### Speakers

Stereo speakers, Realtek<sup>®</sup> ALC3306-CG, 1W x2, Dolby Audio™

### Microphone

Dual-microphone array, Dolby Voice®

### Camera

Front 5.0MP + IR discrete user-facing camera, IR camera for Windows® Hello (facial recognition), privacy shutter, fixed focus

Rear 8.0MP, autofocus

## Sensor

### Vibration Motor

No support

### Sensors

- Accelerometer (G) sensor
- Gyroscope sensor
- Hall sensor
- Inclinometer sensor
- Proximity (P) sensor (WWAN models)

# Battery

### Battery

42Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

#### Max Battery Life<sup>[1]</sup>

MobileMark25@250nits: 12.47 hr Local video (1080p) playback@150nits: 17.52 hr JEITA-BAT 3.0@200nits (Video/Idle): 9.98 hr / 19.31 hr

#### Notes:

[1] All battery life claims are approximate maximum and based on results using the <u>MobileMark® 25</u>, JEITA 3.0, 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\*\*[1]

- \* 45W USB-C  $^{\circ}$  (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<sup>®</sup> (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C<sup>®</sup> slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C<sup>®</sup> slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

#### Notes:

[1] AC adapter offerings depend on the country.

# DESIGN

# Display

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

| Size  | Resolution          | Touch           | Туре | Brightness | Surface                             | Aspect<br>Ratio | Contrast<br>Ratio | Color<br>Gamut | Viewing Angle<br>(L/R/U/D) | Key<br>Features               |
|-------|---------------------|-----------------|------|------------|-------------------------------------|-----------------|-------------------|----------------|----------------------------|-------------------------------|
| 12.3″ | FHD+<br>(1920x1280) | Multi-<br>touch | IPS  | 400nits    | Anti-<br>reflection,<br>anti-smudge | 3:2             | 1500:1            | 100%<br>sRGB   | 89° / 89° /<br>89° / 89°   | Corning®<br>Gorilla®<br>Glass |

### Touchscreen

GMF / GF2 (Metal mesh film sensor) multi-touch, supports 10-point touch

#### Notes:

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

# Input Device

### Pen\*\*

- Lenovo<sup>®</sup> Digital Pen with replaceable AAAA alkaline battery, 4096 levels of pressure sensitivity. For more information, please read <u>Lenovo<sup>®</sup> Digital Pen Overview</u>
- Lenovo<sup>®</sup> Digital Pen without replaceable AAAA alkaline battery, 4096 levels of pressure sensitivity. For more
  information, please read <u>Lenovo<sup>®</sup> Digital Pen Overview</u>
- Lenovo<sup>®</sup> Precision Pen, 4096 levels of pressure sensitivity, magnetically attached to the system. For more information, please read <u>Lenovo<sup>®</sup> Precision Pen Overview</u>
- Lenovo<sup>®</sup> Yoga<sup>®</sup> Pen
- No pen (purchase separately)

# Mechanical

#### Dimensions (WxDxH)<sup>[1]</sup>

| Models                     | Dimensions  |
|----------------------------|---|
| Tablet                     | 283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.34 inches)   |
| Tablet with folio keyboard | Tablet: 283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.35 inches)<br>Folio keyboard: 283.3 x 217.8 x 5.7 mm (11.15 x 8.57 x 0.22 inches)<br>Total: 283.3 x 208.1 x 14.5 mm (11.15 x 8.19 x 0.57 inches) |

### Weight<sup>[2]</sup>

| Models                     | Weight   |
|----------------------------|--|
| Tablet with folio keyboard | Tablet: 0.76 kg (1.67 lbs)<br>Folio keyboard: 0.34 kg (0.75 lbs)<br>Total: 1.1 kg (2.42 lbs) |
| Tablet                     | around 0.76 kg (1.67 lbs)  |

#### Case Color

Black

### Case Material

Magnesium-aluminium

#### Others

- Hinge open angle: 170°
- Kensington<sup>®</sup> Nano Security Slot™

#### **Buttons**

- Power button
- Volume button

#### 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

### WLAN + Bluetooth®[1]

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

#### WWAN

- Quectel EM160R-GL Gen 2, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

#### NFC

- Near Field Communication
- No support

### Location Services

| Models   | Location |
|--|----------|
| WLAN models No location service                    |          |
| WWAN models GPS + GLONASS + Galileo + Beidou + A-G |          |

#### Notes:

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

# Ports

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

- 1x USB-C<sup>®</sup> (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort<sup>™</sup> 2.1
- 1x USB-C<sup>®</sup> (Thunderbolt<sup>™</sup> 4 / USB4<sup>®</sup> 40Gbps), with USB PD 3.0 and DisplayPort<sup>™</sup> 2.1
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Pogo pin connector (8-point)

### **Optional Ports**

1x Nano-SIM card slot (WWAN models)

#### Notes:

[1] The transfer speed of the 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 the theoretical speed.

# Docking

#### Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit <u>Docking for ThinkPad® X12 Detachable Gen 2</u>

# **SECURITY & PRIVACY**

## Security

#### Security Chip

Discrete TPM 2.0, TCG certified

#### Fingerprint Reader

- Touch style fingerprint reader on folio keyboard, match-on-chip
- No fingerprint reader

#### **BIOS Security**

- Hard disk password
- Power-on password
- Supervisor password
- System management password

- Self-healing BIOS
- More BIOS security features, please visit <u>BIOS Simulator</u><sup>[1]</sup>

#### Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

# MANAGEABILITY

# System Management

### System Management

- Intel<sup>®</sup> vPro<sup>®</sup> Enterprise
- Non-vPro®

# SERVICE

## Warranty

### Base Warranty\*\*

- 1-year courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

# ACCESSORIES

# **Bundled Accessories**

### Bundled Accessories\*\*\*[1]

- Lenovo<sup>®</sup> USB-C<sup>®</sup> Port Replicator
- Lenovo<sup>®</sup> USB-C<sup>®</sup> to Ethernet Adapter (1Gbps)
- Lenovo<sup>®</sup> USB-C<sup>®</sup> to HDMI<sup>®</sup> Adapter
- Lenovo<sup>®</sup> USB-C<sup>®</sup> to VGA Adapter
- ThinkPad® X12 Detachable Gen 2 Folio Keyboard, with touchpad (pogo pin, detachable)
- None

### Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X12 Detachable Gen 2.

# **OPERATING REQUIREMENTS**

# **Operating Environment**

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

- 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)

#### **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

90% recycled magnesium on top cover 30% PCC recycled plastic on keyboard cover 30% PCC recycled plastic on bottom cover 30% PCC recycled plastic used in speaker enclosure 50% recycled aluminium used in the kickstand 25% PCC recycled plastic used in the 42Whr battery enclosure Up to 90% PCC recycled plastic used in standard 45W and 65W USB-C®, and Slim 65W adaptors FSC-certified with 85% recycled plastic and/or sustainable content

# CERTIFICATIONS

# **Green Certifications**<sup>11</sup>

### Green Certifications<sup>[2]</sup>

- ENERGY STAR<sup>®</sup> 8.0
- EPEAT<sup>™</sup> Gold Registered<sup>[3]</sup>
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 10.0

### Notes:

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

[2] EPEAT<sup>™</sup> registration and ENERGY STAR<sup>®</sup> certification are optional and only available on the models with preloaded OS. Please visit <u>epeat.net</u> and <u>energystar.gov</u> for more information.

[3] EPEAT<sup>™</sup> 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

- Feature with \*\* means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
- Feature with \*\*\* means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
- Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.
- The specifications on this page may not be available in all regions, and may be changed or updated without notice.











