# **OVERVIEW**



1. USB-A (USB 5Gbps)	5. Thunderbolt 4
2. Ethernet (RJ-45)	6. USB-A (USB 10Gbps), Always On
3. Kensington Nano Security Slot	7. HDMI
4. USB-C (USB 20Gbps), with USB PD 3.0 & DP 1.4	8. Headphone / microphone combo jack (3.5mm)

# ThinkPad E16 Gen 2 (Intel)

# PERFORMANCE

### **Processor**

#### **Processor Family**

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

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	AI Engine
Core™ Ultra 5 125H	14 (4 P-core + 8 E-core + 2 LPE- core)	18	P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz	P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ Graphics <sup>[1]</sup>	Intel® AI Boost
Core™ Ultra 5 125U	12 (2 P-core + 8 E-core + 2 LPE- core)	14	P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz	P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz	12MB	Intel® Graphics	Intel® AI Boost
Core™ Ultra 5 135U	12 (2 P-core + 8 E-core + 2 LPE- core)	14	P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz	P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz	12MB	Intel® Graphics	Intel® AI Boost
Core™ Ultra 7 155H	16 (6 P-core + 8 E-core + 2 LPE- core)	22	P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ Graphics <sup>[2]</sup>	Intel® AI Boost
Core™ Ultra 7 155U	12 (2 P-core + 8 E-core + 2 LPE- core)	14	P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz	12MB	Intel® Graphics	Intel® AI Boost
Core™ Ultra 7 165U	12 (2 P-core + 8 E-core + 2 LPE- core)	14	P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz	P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz	12MB	Intel® Graphics	Intel® AI Boost

#### Notes:

[1], [2] Intel<sup>®</sup> Arc<sup>™</sup> Graphics only available on select H-series Intel<sup>®</sup> Core<sup>™</sup> Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel<sup>®</sup> Graphics.

# **Operating System**

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

- Windows<sup>®</sup> 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux<sup>[1]</sup>
- No preload operating system

#### Notes:

[1] 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	TGP	Key Features
Intel <sup>®</sup> Arc <sup>™</sup> Graphics <sup>[1]</sup>	Integrated	Shared	Share CPU TDP	DirectX® 12.1
Intel <sup>®</sup> Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1

Notes:

[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

# **Monitor Support**

### **Monitor Support**

# ThinkPad E16 Gen 2 (Intel)

Lenovo

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C®, and Thunderbolt™)

- + HDMI  $\ensuremath{^{\ensuremath{\text{\circle*{1.5}}}}}$  supports up to 4K@60Hz
- USB-C<sup>®</sup> supports up to 5K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

## Chipset

#### Chipset

Intel<sup>®</sup> SoC (System on Chip) platform

### Memory

Max Memory<sup>[1]</sup>

Up to 64GB DDR5-5600

#### Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

#### Memory Type

DDR5-5600

Notes:

[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

# Storage

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

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

#### Storage Slot

#### Two M.2 slots

- One M.2 2242 PCIe<sup>®</sup> 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

#### 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 system supports dual SSD via two M.2 slots, but Lenovo® only offers one M.2 2242 SSD configuration and M.2 2280 slot for user self-extension.

# Removable Storage

#### **Card Reader**

No card reader

#### Multi-Media

#### Audio Chip

High Definition (HD) Audio, Senary SN6141 codec

#### Speakers

Stereo speakers, 2W x2, Dolby® Atmos®, audio by HARMAN

## Microphone

Dual-microphone array with smart noise-cancelling

## Camera\*\*

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

# Battery

Battery\*\*

# ThinkPad E16 Gen 2 (Intel)

Lenovo

- Integrated Li-Polymer 47Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

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

Configuration 1 (max battery life) MobileMark® 25: up to 11.58 hr with 615 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 10.82 hr / 20.22 hr @200nits Local video playback: up to 20.09 hr @150nits

Alternate configuration 2 MobileMark® 25: up to 11.36 hr with 640 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 10.5 hr / 19.71 hr @200nits Local video playback: up to 18.5 hr @150nits

Alternate configuration 3 MobileMark® 25: up to 9.13 hr with 655 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 8.5 hr / 16.3 hr @200nits Local video playback: up to 15.15 hr @150nits

#### Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB+8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 125H, 16GB DDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (touch), Intel® Core™ Ultra 5 125H, 16GB DDR5, Win 11, 47Wh battery, best power efficiency power mode

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

• 65W USB-C<sup>®</sup> (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

#### Notes:

[1] AC adapter offerings depend on the country.

# DESIGN

# Display

#### Display\*\*

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 <sup>[1]</sup>	300nits	Anti- glare	16:10	800:1	45% NTSC	60Hz	85°/85°/85°/85°	TÜV Low Blue Light (Software)
16″	WUXGA (1920x1200)	Multi- touch	IPS <sup>[2]</sup>	300nits	Anti- glare	16:10	800:1	45% NTSC	60Hz	85°/85°/85°/85°	TÜV Low Blue Light (Software)
16″	WUXGA (1920x1200)	None	IPS <sup>[3]</sup>	400nits	Anti- glare	16:10	1000:1	100% sRGB	60Hz	85°/85°/85°/85°	Eyesafe® Certified 2.0
16″	WQXGA (2560x1600)	None	IPS <sup>[4]</sup>	400nits	Anti- glare	16:10	1200:1	100% sRGB	60Hz	85°/85°/85°/85°	Eyesafe® Certified

|--|

### Touchscreen

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

Notes:

[1], [2], [3], [4] 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, numeric keypad

#### Keyboard Backlight

- LED backlight
- Non-backlight

#### UltraNav™

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu Mylar® surface multi-touch touchpad, 68 x 115 mm (2.68 x 4.53 inches)

## **Mechanical**

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

Models	Dimensions
Models with aluminium (top) and aluminium (bottom)	Starting at 356.1 x 247.7 x 19.85 mm (14.02 x 9.75 x 0.78 inches)
Models with aluminium (top) and PC-ABS (bottom)	Starting at 356.1 x 247.7 x 20.20 mm (14.02 x 9.75 x 0.80 inches)

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

Models	Weight
Models with aluminium (top) and PC-ABS (bottom)	Starting at 1.78 kg (3.92 lbs)
Models with aluminium (top) and aluminium (bottom)	Starting at 1.81 kg (3.99 lbs)

#### Case Color

Graphite black

#### Case Material\*\*

- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

#### Notes:

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

[2] The system weight is approximate and based on results in Lenovo<sup>®</sup> 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), 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]

- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel<sup>®</sup> Wi-Fi<sup>®</sup> 6 AX201, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 Card
- Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.3, M.2 card<sup>[2]</sup>
- Realtek<sup>®</sup> Wi-Fi<sup>®</sup> 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.3, M.2 card<sup>[3]</sup>
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card  $^{[4]}$

## WWAN

No support

#### SIM Card

No physical SIM card inbox

### NFC

No support

#### Notes:

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

[2], [3], [4] Wi-Fi<sup>®</sup> 6E full features might be limited by country-level restrictions.

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.

Bluetooth<sup>®</sup> 5.3 operation requires Windows<sup>®</sup> 11. For more information please see <u>General Bluetooth<sup>®</sup> Support Information</u> <u>on Microsoft<sup>®</sup></u>.

## Ports<sup>III</sup>

#### Standard Ports

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-C<sup>®</sup> (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort<sup>™</sup> 1.4
- 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 HDMI<sup>®</sup> 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

#### 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<sup>®</sup> 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

# Docking

#### Docking

Various docking solutions supported via Thunderbolt<sup>™</sup> or USB-C<sup>®</sup>. For more compatible docking solutions, please visit <u>Docking for ThinkPad<sup>®</sup> E16 Gen 2 (Intel<sup>®</sup>)</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

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<sup>®</sup> password
- Self-healing BIOS

#### **Other Security**

- (Optional) IR camera for Windows<sup>®</sup> Hello (facial recognition)
- Camera privacy shutter

# MANAGEABILITY

## System Management

### System Management

- Intel<sup>®</sup> vPro<sup>®</sup> Enterprise<sup>[1]</sup>
- Non-vPro<sup>®</sup>

Notes:

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

# SERVICE

## Warranty

#### Base Warranty\*\*

- 1-year mail-in service
- 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
- No base warranty

# **ENVIRONMENTAL**

## Sustainability

#### Material

25% PCC recycled plastic used in the battery 30% PCC recycled plastic used in speaker enclosure 90% PCC recycled plastic used in standard 65W adapter Plastic free packaging Dry-pressed bamboo & sugarcane fiber Cushions FSC Certified paper in packaging

# **Operating Environment**

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

- 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).

# ACCESSORIES

# **Bundled Accessories**

## Bundled Accessories<sup>[1]</sup>

- Lenovo® 15.6" laptop casual toploader, polyester
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E16 Gen 2 (Intel®)

# CERTIFICATIONS

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

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

- ENERGY STAR<sup>®</sup> 8.0
- EPEAT<sup>™</sup> Gold Registered<sup>[3]</sup>
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
  TCO Contified 0.0
- 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.

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

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

# **Other Certifications**

### Mil-Spec Test

Work in progress

### Other Certifications

- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland<sup>®</sup> Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland<sup>®</sup> Low Blue Light (Software Solution)
- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
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