

# **OVERVIEW**





1. Thunderbolt 4	5. Pen slot
2. Thunderbolt 4	6. Headphone / microphone combo jack (3.5mm)
3. USB 3.2 Gen 1	7. USB 3.2 Gen 1 (Always On)
4. HDMI	8. Kensington Nano Security Slot

## Notes:

• Optional nano-SIM card slot on the right side (not shown on the sample product above)



## **PERFORMANCE**

## **Processor**

### **Processor Family**

12th Generation Intel® Core™ i5 / i7 Processor

### Processor\*\*

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	Dre 15-1240P     E-core)     10     1.2GHz       Dre i5-1245U     10 (2 P-core + 8 E-core)     12     P-core 1 1.2GHz       Dre i5-1250P     12 (4 P-core + 8 E-core)     16     P-core 1 1.2GHz       Dre i7-1255U     10 (2 P-core + 8 E-core)     12     P-core 1 1.2GHz       Dre i7-1255U     12 (4 P-core + 8 E-core)     12     P-core 1 1.2GHz		P-core 1.7GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i5-1245U			P-core 1.6GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® Iris® Xe Graphics
Core i5-1250P			P-core 1.7GHz / E-core 1.2GHz			Intel® Iris® Xe Graphics
Core i7-1255U			P-core 1.7GHz / E-core 1.2GHz P-core 4.7GHz / E-core 3.5GHz		12MB	Intel® Iris® Xe Graphics
Core i7-1260P			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	Core i7-1270P		P-core 2.2GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.5GHz	18MB	Intel® Iris® Xe Graphics
Core i7-1280P			P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.6GHz 24ME		Intel® Iris® Xe Graphics

### Notes:

[1] NOT available in EMEA.

## **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<sup>[2]</sup>
- Linux<sup>[3]</sup>
- No preload operating system

#### Notes:

[1] Windows® 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	Type	Memory	TGP	Key Features
Intel® Iris® Xe Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1

## **Monitor Support**

### Monitor Support[1]

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

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- Thunderbolt<sup>™</sup> 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[1]
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

#### **Memory Slots**

Memory soldered to systemboard, no slots, 8-channel

### **Memory Type**

LPDDR5-5200<sup>[2]</sup>

Notes:

[1] 8GB memory is NOT available in EMEA.

[2] Installed memory is actually LPDDR5-6400 but run as LPDDR5-5200 due to processor limitation.

## **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\*\*[2]

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 <sup>[3]</sup>	256GB / 512GB / 1TB	Opal 2.0

#### Notes:

- [1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
- [2] 512GB and 1TB M.2 2280 PCIe® 4x4 SSD are NOT available in EMEA.
- [3] 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® ALC3306 codec

### **Speakers**

Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby Atmos®

#### Microphone

Quad-microphone array, 360° far-field, Dolby Voice®

### Camera\*\*

- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus



### Sensor

#### Sensors

- Accelerometer (G) sensor
- Proximity (P) sensor

## **Battery**

### **Battery**

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

#### Battery Life[1]

Configuration 1 (max battery life)

MobileMark® 2018: up to 14.9 hr with 848 performance score @250nits

JEITA 2.0: up to 24.5 hr @150nits

Local video playback: up to 19.7 hr @150nits

#### Alternate configuration 2

MobileMark® 2018: up to 14.2 hr with 820 performance score @200nits MobileMark® 25: up to 11.3 hr with 608 performance score @250nits JEITA 2.0: up to 24.1 hr @150nits

Local video playback: up to 19.7 hr @150nits

#### Alternate configuration 3

MobileMark® 2018: up to 14.0 hr with 810 performance score @200nits MobileMark® 25: up to 11.0 hr with 614 performance score @250nits JEITA 2.0: up to 21.8 hr @150nits

Local video playback: up to 19.3 hr @150nits

#### Notes:

[1] Configuration 1 (max battery life): WUXGA (touch), Intel® i5-1235U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (touch), Intel® i5-1240P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (touch), Intel® i7-1260P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, 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<sup>®</sup> (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C<sup>®</sup> (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

### Notes:

[1] AC adapter offerings depend on the country.

[2] In EMEA only 65W USB-C® slim AC adapters are available.

## **DESIGN**

## **Display**

Display\*\*



Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
14"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[1]</sup>	400nits	Anti- reflection, anti- smudge	16:10	1000:1	100% sRGB	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified
14"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[2]</sup>	400nits	Anti-glare	16:10	1000:1	100% sRGB	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified
14"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[3]</sup>	500nits	Anti-glare	16:10	1000:1	100% sRGB	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard
14"	WQUXGA (3840x2400)	Multi- touch	OLED	500nits	Anti- reflection, anti- smudge	16:10	100,000:1	100% DCI-P3	85° / 85° / 85° / 85°	Low power, DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified

#### **Touchscreen**

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:

[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Multi-mode

#### Multi-mode

Laptop, tent, stand, and tablet modes supported by 360° hinge

## **Input Device**

## Pen

Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable

### Keyboard

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

## **Keyboard Backlight**

LED backlight

### UltraNav™

TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

## Mechanical

## Dimensions (WxDxH)[1]

314.4 x 222.3 x 15.53 mm (12.38 x 8.75 x 0.61 inches)

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

Starting at 1.38 kg (3.04 lbs)

#### **Case Color**

Storm grey

#### **Case Material**

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® 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**

No onboard Ethernet[1]

### WLAN + Bluetooth®\*\*[2]

- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[3]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[4]

#### WWAN\*\*

- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- Fibocom FM350-GL, 5G 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] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
- [2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
- [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<sup>[1]</sup>

### **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® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

## **Optional Ports**

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<sup>™</sup> / USB-C<sup>®</sup>.

For more compatible docking solutions, please visit Docking for ThinkPad® X1 Yoga® Gen 7

## **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

## **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**

- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
- Glance by Mirametrix®
- (Optional) Computer Vision-based User Presence Sensing including lock on leave
- Tile ready

## **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

## **ACCESSORIES**

## **Bundled Accessories**

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

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

### Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Yoga® Gen 7.



## **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

95% PCC recycled plastic used in speaker enclosure 25-30% PCC recycled plastic used in the 57Wh battery frame 95% PCC recycled plastic used in standard 65W adapter Low-temperature solder 90% recycled and/or sustainable packaging

## **CERTIFICATIONS**

## 

### Green Certifications[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered<sup>[3]</sup>
- 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 self-declaration. For ESG & regulatory compliance documents, please visit <a href="https://compliance.lenovo.com">https://compliance.lenovo.com</a>.

[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 epeat.net for registration status by country.

### Other Certifications

### Mil-Spec Test

MIL-STD-810H military test passed

## **Other Certifications**

- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)
- 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

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models.

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