

OVERVIEW



1. Power button	5. USB4
2. Headphone / microphone combo jack (3.5mm)	6. USB4
3. USB-C 3.2 Gen 2	7. SD card reader
4. 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

AMD Ryzen™ 5 / 7 / 9 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen™ 5 PRO 6650H	6	12	3.3GHz	4.5GHz	3MB L2 / 16MB L3	AMD Radeon™ 660M
AMD Ryzen™ 7 PRO 6850H	8	16	3.2GHz	4.7GHz	4MB L2 / 16MB L3	AMD Radeon™ 680M
AMD Ryzen™ 9 PRO 6950H	8	16	3.3GHz	4.9GHz	4MB L2 / 16MB L3	AMD Radeon™ 680M

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux^[1]
- Ubuntu Linux^[2]
- Linux^[3]
- No preload operating system

Notes:

[1], [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	Key Features
AMD Radeon™ 660M	Integrated	Shared	DirectX® 12
AMD Radeon™ 680M	Integrated	Shared	DirectX® 12
AMD Radeon™ RX 6500M	Discrete	4GB GDDR6	DirectX® 12 Ultimate

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via USB4® and USB-C®)

- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)
- USB4® supports up to 8K@30Hz^[1]

Notes:

[1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

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

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5-6400

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**

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 ^[2]	256GB	Opal 2.0

Notes:

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

[2] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage

Card Reader

SD card reader, supports UHS-II SD card

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

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

Camera**

- FHD 1080p + IR discrete, with E-shutter, fixed focus
- FHD 1080p + IR hybrid, with E-shutter, fixed focus

Battery

Battery

Integrated Li-Polymer 72Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life^[1]

Configuration 1 (max battery life)

MobileMark® 2018: up to 20.5 hr with 657 performance score @200nits

MobileMark® 25: up to 20.0 hr with 624 performance score @250nits

JEITA 2.0: up to 25.9 hr @150nits

Local video playback: up to 28.2 hr @150nits

Alternate configuration 2

MobileMark® 2018: up to 19.4 hr with 635 performance score @200nits

MobileMark® 25: up to 19.0 hr with 524 performance score @250nits

JEITA 2.0: up to 25.6 hr @150nits

Local video playback: up to 24.6 hr @150nits

Alternate configuration 3

MobileMark® 2018: up to 9.4 hr with 619 performance score @200nits

MobileMark® 25: up to 6.9 hr with 485 performance score @250nits

JEITA 2.0: up to 9.1 hr @150nits

Local video playback: up to 13.6 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 6850H, 16GB LPDDR5, Win 11, 72Wh

battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 7 PRO 6850H, 16GB LPDDR5, Win 11, 72Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA OLED (touch), AMD Ryzen™ 5 PRO 6650H, 16GB LPDDR5, Win 11, 72Wh 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]

135W USB-C® slim (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	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	WUXGA (1920x1200)	None	IPS ^[1]	400nits	Anti-glare	16:10	1000:1	100% sRGB	60Hz	89° / 89° / 80° / 80°	Low power, TÜV Low Blue Light (Hardware Solution), 92.3% screen to body ratio
16"	WUXGA (1920x1200)	On-cell touch	IPS ^[2]	400nits	Anti-reflection, anti-smudge	16:10	1000:1	100% sRGB	60Hz	89° / 89° / 80° / 80°	Low power, TÜV Low Blue Light (Hardware Solution), 92.3% screen to body ratio
16"	WQUXGA (3840x2400)	OGS touch	OLED	400nits	Anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	60Hz	87.5° / 87.5° / 87.5° / 87.5°	DisplayHDR™ 400, Dolby Vision®, TÜV Low Blue Light (Hardware Solution), 92.3% screen to body ratio

Touchscreen**

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

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

Input Device

Pen

- No pen (purchase separately)
- No support (non-touch display doesn't support pen input)

Keyboard

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

Keyboard Backlight

LED backlight

UltraNav™

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 80 x 120 mm (3.15 x 4.72 inches)

Mechanical

Dimensions (WxDxH)^[1]

354.4 x 237.4 x 15.8 mm (13.95 x 9.35 x 0.62 inches)

Weight^[2]

Models	Weight
OLED models	Starting at 1.81 kg (3.99 lbs)
WUXGA non-touch models	Starting at 1.83 kg (4.04 lbs)
WUXGA multi-touch models	Starting at 1.94 kg (4.28 lbs)

Case Color

Arctic grey (top), black (bottom)

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]

Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)^[3]

WWAN**

- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

SIM Card

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

NFC

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® 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^[1]

Standard Ports

- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader

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 USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® Z16 Gen 1](#)

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

No smart card reader

Fingerprint Reader

Touch style fingerprint reader in keyboard key, 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

- IR camera for Windows® Hello (facial recognition)
- E-shutter
- Glance by Mirametrix®

MANAGEABILITY

System Management

System Management

- DASH
- Non-DASH

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

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® Z16 Gen 1](#).

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

75% post-consumer recycled aluminium
97% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 70Wh battery frame
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered^[3]
- 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 <https://compliance.lenovo.com>.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov 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

TÜV Rheinland® Low Blue Light (Hardware Solution)

- 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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