

User Guide



Lenovo

IdeaCentre Tower 08

About this documentation

This documentation applies to the Lenovo product models listed below. Illustrations in this documentation may look slightly different from your product model.

Model name	Machine types (MT)
IdeaCentre Tower 08IAS10	91CF

Before using this documentation and the product it supports, ensure that you read and understand the following:

- *Safety and Warranty Guide*
- *Generic Safety and Compliance Notices*
 - For computers purchased in mainland China: https://iknow.lenovo.com.cn/detail/dc_191404.html
 - For computers purchased outside mainland China: https://pcsupport.lenovo.com/docs/generic_notices
- *Setup Guide (if provided with your computer)*

Notes:

- Illustrations in this documentation may look slightly different from your product model.
- For more compliance information, refer to:
 - For computers purchased in mainland China
Generic Safety and Compliance Notices at https://iknow.lenovo.com.cn/detail/dc_191404.html
 - For computers purchased outside mainland China
Regulatory Notice at https://support.lenovo.com/docs/common_commercial_rnhttps://support.lenovo.com/docs/common_consumer_dt_rn and *Generic Safety and Compliance Notices* at <https://www.lenovo.com/compliance>
- Depending on the model, some optional accessories, features, and software programs might not be available on your computer.
- Depending on the version of the operating systems and programs, some user interface instructions might not be applicable to your computer.
- Documentation content is subject to change without notice. Lenovo makes constant improvements to the documentation of your computer, including this *User Guide*. To get the latest documentation, go to:
 - For computers purchased in mainland China: <https://newsupport.lenovo.com.cn>
 - For computers purchased outside mainland China: <https://pcsupport.lenovo.com>
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. As a result, some information in this documentation might become outdated. Refer to Microsoft resources for the latest information.

First Edition (August 2025)

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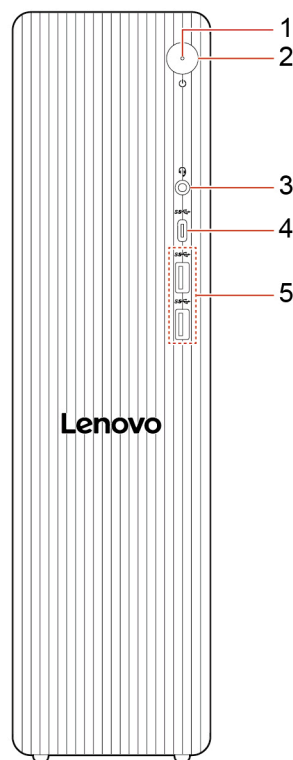
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Chapter 1. Meet your computer

This computer is equipped with an extensive selection of ports, providing convenient connectivity options for multiple devices.

Front



Item	Description	Item	Description
1	Power indicator	2	Power button
3	Headphone / microphone combo jack (3.5mm)	4	USB-C® connector (USB 5Gbps)
5	USB-A connectors (USB 5Gbps)		

Note: For more information about the USB connector name update, see Appendix A “Supplementary information” on page 32.

Statement on USB transfer rate

Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed in the connector name or below for each corresponding device.

USB device	Data rate (Gbit/s)
Thunderbolt 3	40
Thunderbolt 4	40

Power indicator

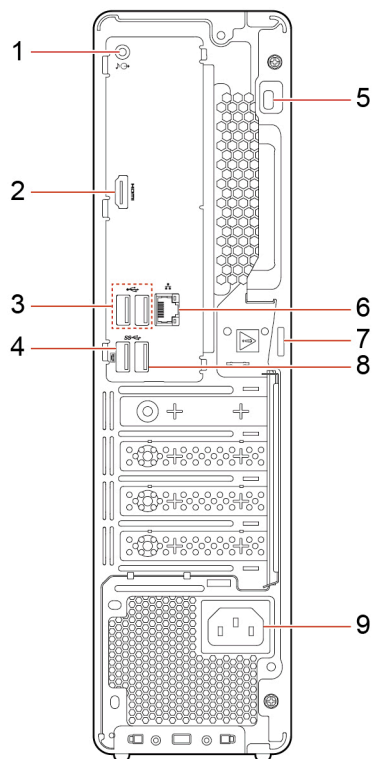
Show the system status of your computer.

- **Blinking for three times:** The computer is initially connected to power.
- **On:** The computer is starting up or working.
- **Off:** The computer is off or in hibernation mode.
- **Blinking rapidly:** The computer is entering sleep or hibernation mode.
- **Blinking slowly:** The computer is in sleep mode.

Related topics

- “USB specifications” on page 4.
- “Set the power plan” on page 7.

Rear



Item	Description	Item	Description
1	Audio line-out connector	2	HDMI™ 2.1 TMDS out connector
3	USB-A connectors (Hi-Speed USB)	4	USB-A connector (USB 5Gbps, with smart power on)
5	Security lock slot	6	Ethernet connector
7	Padlock loop	8	USB-A connectors (USB 5Gbps)
9	Power cord connector		

Related topics

- “USB specifications” on page 4.
- “Change display settings” on page 6.
- “Lock the computer” on page 8.

Specifications

Specification	Description
Hardware configuration	Type Device Manager in the Windows search box and then press Enter. Type the administrator password or provide confirmation, if prompted.
Power supply	<ul style="list-style-type: none">• 200 -watt automatic voltage-sensing power supply• 260 -watt automatic voltage-sensing power supply
Memory	Double data rate 5 (DDR5) unbuffered dual in-line memory module (UDIMM)
Storage device	M.2 solid-state drive To view the storage drive capacity of your computer, type Disk Management in the Windows search box and then press Enter. Note: The storage drive capacity indicated by the system is less than the nominal capacity.
Video features	The integrated graphics card supports the following: HDMI out connector
Expansion	<ul style="list-style-type: none">• Memory slots• M.2 solid-state drive slot• Storage drive bay
Network features	<ul style="list-style-type: none">• Bluetooth• Ethernet LAN• Wireless LAN

Operating environment

Maximum altitude (without pressurization)

- Operating: From 0 m (0 ft) to 3048 m (10 000 ft)
- Storage: From 0 m (0 ft) to 12192 m (40 000 ft)

Temperature

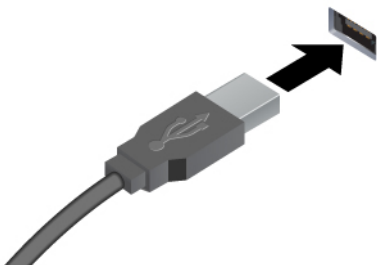


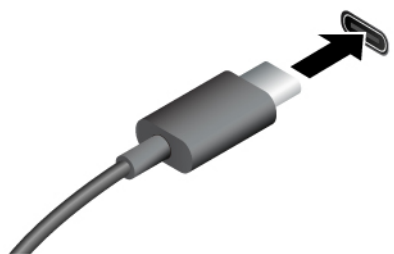

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage: From -40°C (-40°F) to 60°C (140°F)

Relative humidity

- Operating: 20%-80% (non-condensing)
- Storage: 10%-90% (non-condensing)

USB specifications

Note: Depending on the model, some USB connectors might not be available on your computer.

Connector name	Description
 <ul style="list-style-type: none"> •  USB-A connector (Hi-Speed USB) •  USB-A connector (USB 5Gbps) 	<p>Connect USB-A compatible devices, such as a USB-A keyboard, USB-A mouse, USB-A storage device, or USB-A printer.</p>
 <p> USB-C connector (USB 5Gbps)</p>	<ul style="list-style-type: none"> • Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A. • Connect to USB-C accessories to help expand your computer functionality. To purchase USB-C accessories, go to https://www.lenovo.com/accessories.

The Vantage app

The Vantage app is a customized one-stop solution to help you maintain your computer with automated updates and fixes, configure hardware settings, and get personalized support.

To access the Vantage app, type **Vantage** in the Windows search box.

Notes:

- The available features vary depending on the computer model.
- The Vantage app makes periodic updates of the features to keep improving your experience with your computer. The description of features might be different from that on your actual user interface. You can download the latest version of Vantage app from Microsoft Store.

The Vantage app enables you to:

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware, and driver to keep your computer up-to-date.
- Monitor your computer health, and secure your computer against outside threats.
- Scan your computer hardware and diagnose hardware problems.
- Look up warranty status (online).
- Access *User Guide* and helpful articles.

Chapter 2. Get started with your computer

Set up the computer

Step 1. Connect wired or wireless external displays on the computer.

- **Wired external displays:** Connect the cables of wired external displays to the HDMI out connector on the computer.
- **Wireless external displays:** Press Windows logo key + K and then select a wireless display to connect. Ensure that both your computer and the wireless display support Miracast®.

To change display settings, refer to “Change display settings” on page 6.

Step 2. Connect the following peripheral devices on the computer if any.

- Keyboard and mouse
- Dust shield
- Air deflector
- Vertical stand

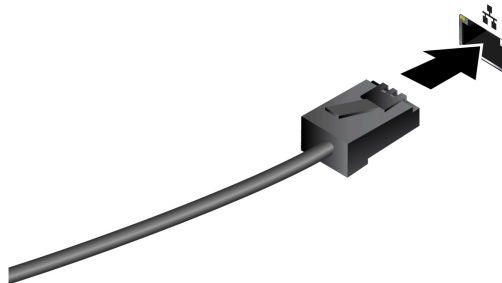
Step 3. Connect the power cord to the power cord connector on the computer and then connect it to a properly-grounded electrical outlet.


Step 4. Press the power button to turn on the computer.

Step 5. Follow the on-screen instructions to complete the setup procedures.

Step 6. Connect to a wired or wireless network.

- **Wired network:** Connect Ethernet cable of local network to the Ethernet connector on the computer.



- **Wireless network:** Click  on the bottom right of your display to connect to an available network. Provide required information if needed.

Note: The wireless LAN module on your computer may support different standards. For some countries or regions, use of 802.11ax may be disabled according to local regulations.

Change display settings

1. Right-click a blank area on the desktop and select display settings.
2. Select the display that you want to configure and change display settings of your preference.

Connect to a Bluetooth device

You can connect all types of Bluetooth-enabled devices to your computer, such as a keyboard, a mouse, a smartphone, or speakers. To ensure successful connection, place the devices at most 10 meters (33 feet) from the computer.

Conventional pair

This topic helps you connect to a Bluetooth device by conventional pair.

- Step 1. Type **Bluetooth** in the Windows search box and then press Enter.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Select the device when it is displayed on the **Add a device** list, and then follow the on-screen instructions.

Notes: If the Bluetooth connection failed, do the following:

1. Type **Device Manager** in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

Swift pair

This topic helps you connect to a Bluetooth device by swift pair.

If your Bluetooth device supports swift pair, do the following:

- Step 1. Enable swift pair notification on Bluetooth settings page.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Click **Connect** when a swift pair notification appears on your computer.

Notes: If the Bluetooth connection failed, do the following:

1. Type **Device Manager** in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

Set the power plan

For ENERGY STAR® compliant computers, the following power plan takes effect when your computers have been idle for a specified duration:

- Turn off the display: After 10 minutes
- Put the computer to sleep: After 10 minutes

To awaken the computer from Sleep mode, press any key on your keyboard.

To set the power plan:

1. Type **Power Options** in the Windows search box and then press Enter.
2. Choose or customize a power plan of your preference.

Security

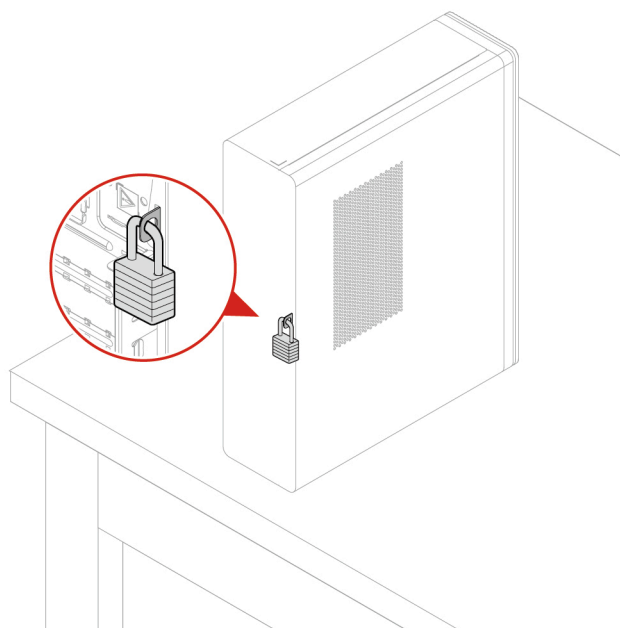
This computer offers a wealth of security measures to protect both the device and data safety.

Lock the computer

Note: Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. You can purchase computer locks from Lenovo.

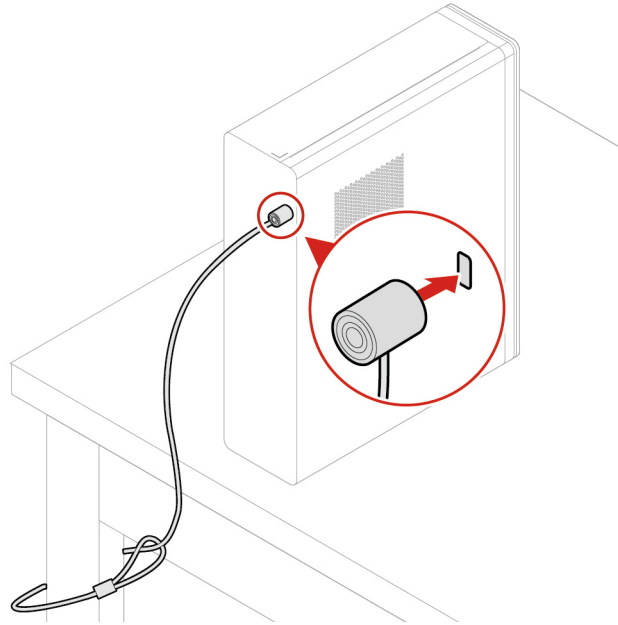
Padlock

Locking the computer cover through a padlock prevents unauthorized access to the inside of your computer.



Security lock

Lock your computer to a desk, table, or other fixtures through a security lock.



Use software security solutions

The following software solutions help secure your computer and information.

- **Windows Security**

Windows Security is a software built-in to the operating system. It continually scans for malicious software, viruses, and other security threats. Besides, Windows updates are downloaded automatically to help keep your computer safe. Windows Security also enables you to manage tools including firewall, account protection, application and browser control, and so on.

- **Antivirus programs**

Lenovo preinstalls a full-version antivirus software on selected models of computer. It helps defend the computer against viruses, safeguard your identity, and keep your personal information secured.

Note: For more information about how to use these software solutions, refer to their help systems respectively.

Chapter 3. CRU replacement

Customer Replaceable Units (CRUs) are parts that can be replaced by the customer. Lenovo computers contain the following types of CRUs:

- **Self-service CRUs:** Refer to parts that can be replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to parts that can be replaced by customers with a greater skill level. Trained service technicians can also provide service to replace the parts under the type of warranty designated for the customer's machine.

If you intend on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty documentation at:

https://www.lenovo.com/warranty/llw_02

CRU list

The following is the CRU list of your computer.

Self-service CRUs

- Computer cover
- Front bezel
- Front bezel deco*
- Keyboard*
- Mouse*
- Power cord
- Vertical stand*

Optional-service CRUs

- Heat sink
- M.2 solid-state drive*
- M.2 solid-state drive heat sink*
- Memory module
- Power supply assembly
- Storage drive*
- Storage drive bracket

* for selected models

Power cord

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



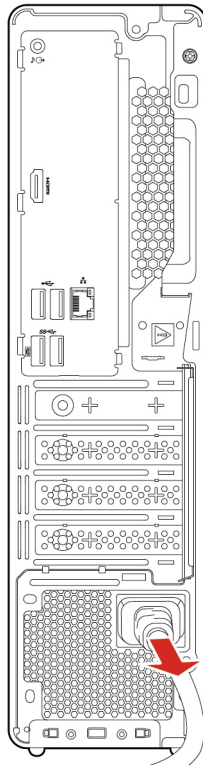
Before you remove the power cord, turn off the computer and wait several minutes until the computer is cool.

For access, turn off the computer and remove all connected devices and cables.

Note: Do not remove the power cord when the computer is connected to ac power. Otherwise, there might be a risk of short circuits.

Removal step

Place the computer on a flat surface and remove the power cord.



Vertical stand

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

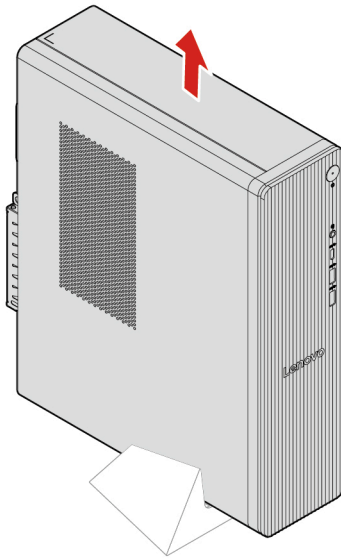
For access, do the following:

1. Remove any media from the drives and turn off all connected devices and the computer.

2. Disconnect all power cords from electrical outlets and disconnect all cables from the computer.

Removal step

Pick up the computer and remove the vertical stand.



Computer cover

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

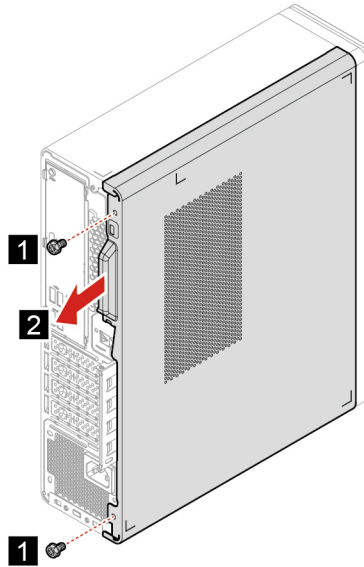
1. Remove any media from the drives and turn off all connected devices and the computer.
2. Disconnect all power cords from electrical outlets and disconnect all cables from the computer.
3. Unlock any locking device that secures the computer cover.
4. Remove the vertical stand. See “Vertical stand” on page 11.

Removal steps

1. Remove the two screws which secure the computer cover to the chassis, one screw at each edge of the chassis. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
Screw, #6-32 x L8, Hexhead (2)	3 ± 0.5 lb/in

2. Pull the computer cover to remove it.



Note: If a locking device is available, use it to lock the computer after installing the computer cover.

Front bezel deco

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

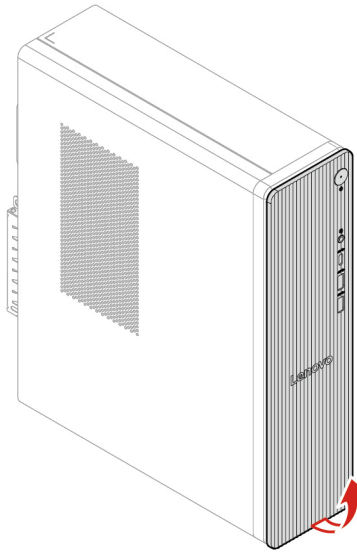
Before you open the front bezel deco, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

- Remove the vertical stand. See “Vertical stand” on page 11.

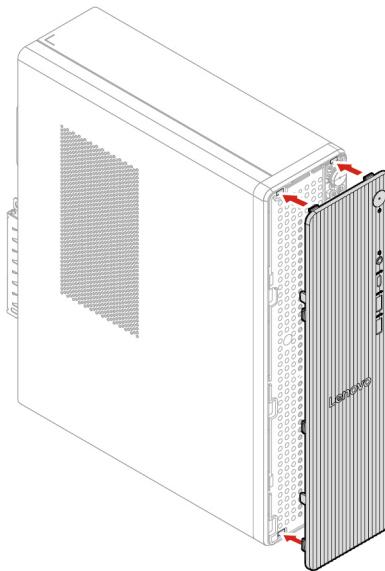
Removal step

Pull upward from the bottom edge of the front bezel deco.



Installation step

Install the front bezel deco horizontally, and press firmly after ensuring full alignment.



Front bezel

Prerequisite

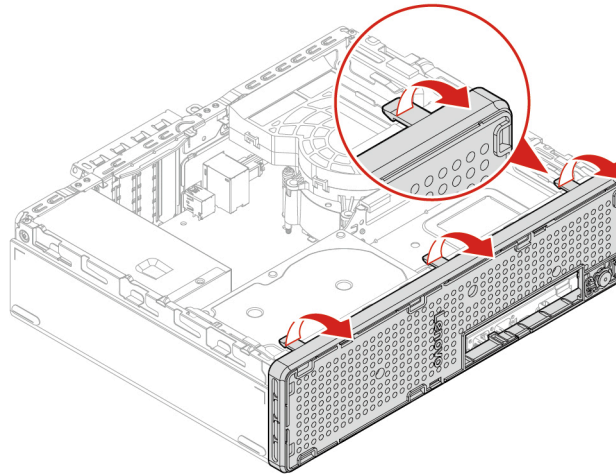
Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

For access, do the following:

1. Remove the vertical stand. See “Vertical stand” on page 11.
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel deco. See “Front bezel deco” on page 13.

Removal step

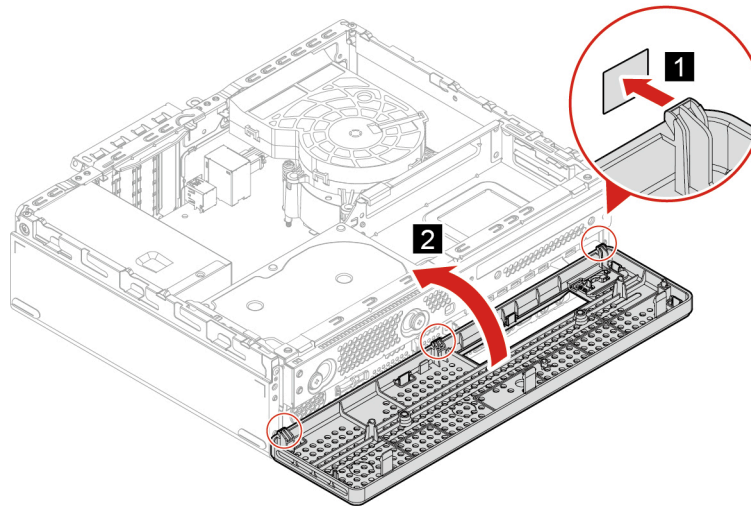
Release three elastic hooks from the top of the front bezel.



Installation steps

There are three swivel hooks at the bottom of the front bezel, and there are three hook slots at the bottom of the front panel.

1. Insert the three swivel hooks to each hook slot.
2. Pivot the front bezel inwards to install it to the chassis.



Storage drive bracket

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

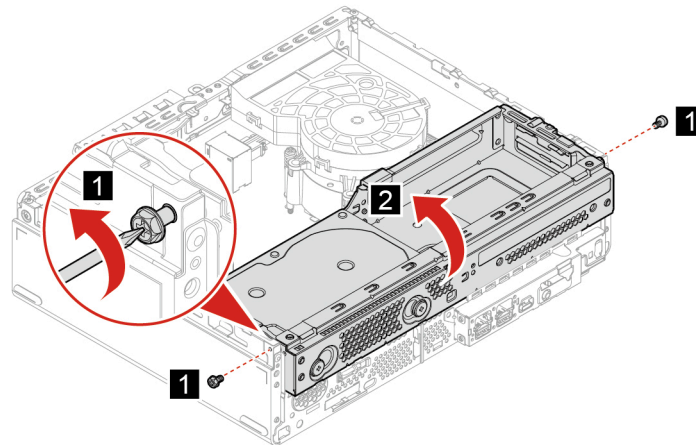
1. Remove the vertical stand. See “Vertical stand” on page 11.
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel assembly. See “Front bezel” on page 14.
4. Disconnect the signal cable and the power cable from the storage drive.

Removal steps

1. Remove the two screws which secure the storage drive bracket to the chassis, one screw at each corner of the chassis. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
Screw, #6-32 x L8, Hexhead (2)	5 ± 0.5 lb/in

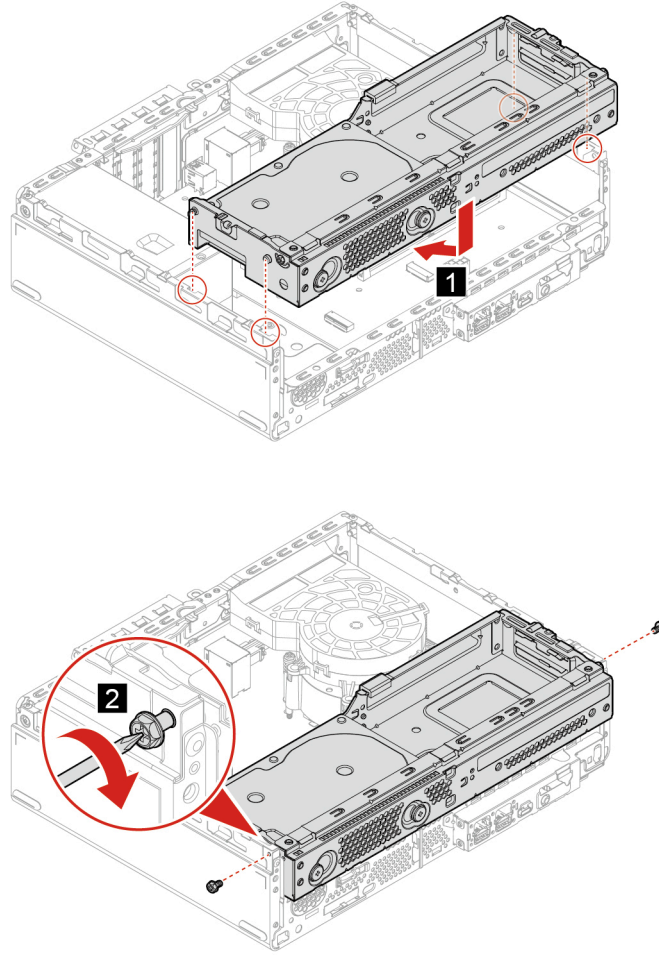
2. Pivot the storage drive bracket upward, then remove it.



Installation steps

There are four holes on the chassis to locate the drive bay assembly.

1. Insert the drive bay assembly into the four holes. Then pivot the drive bay assembly downward to install it to the chassis.
2. Secure the two screws.



Storage drive

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Attention: The internal storage drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the internal storage drive, observe the following guidelines:

- Replace the internal storage drive only for upgrade or repair. The internal storage drive is not designed for frequent changes or replacement.
- Before replacing the internal storage drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the internal storage drive. Otherwise, the internal storage drive might get damaged.
- Do not apply pressure to the internal storage drive.
- Do not make the internal storage drive subject to physical shocks or vibration. Put the internal storage drive on a soft material, such as cloth, to absorb physical shocks.

For access, do the following:

1. Remove the vertical stand. See “Vertical stand” on page 11.

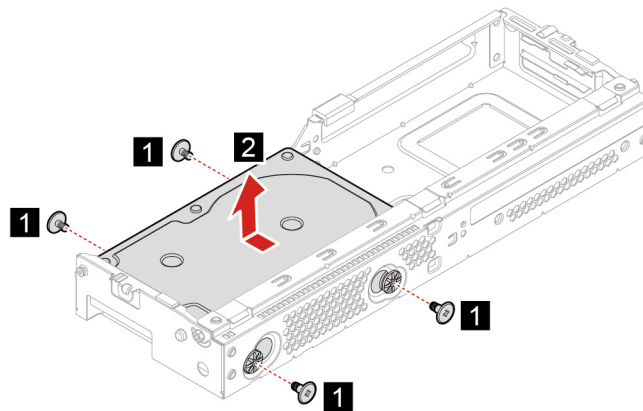
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel assembly. See “Front bezel” on page 14.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 15.

Removal steps

1. Remove the four screws which secure the storage drive to the drive bay assembly, two screws at each side of the storage drive. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
Step-screw, #6-32 (4)	5 ± 0.5 lb/in

2. Remove the storage drive.

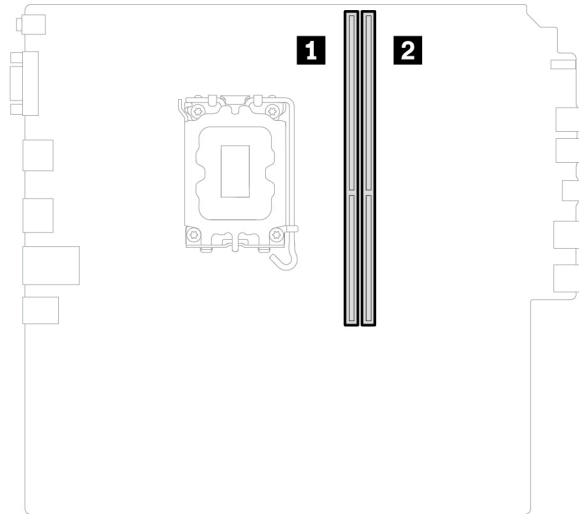


Memory module

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Ensure that you follow the installation order for memory modules shown in the following illustration.

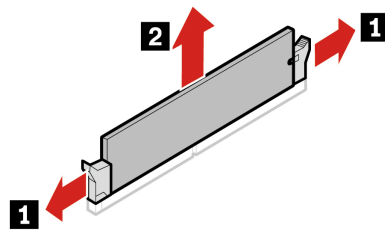


For access, do the following:

1. Remove the vertical stand. See “Vertical stand” on page 11.
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel assembly. See “Front bezel” on page 14.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 15.

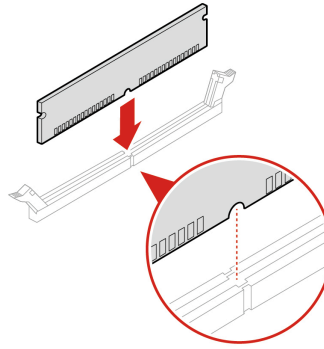
Removal steps

1. Open the two retaining clips.
2. Gently pull the memory module out of the memory slot.



Installation step

Align the memory module to the slot and press down on both ends until the latches are fully engaged with a click.



M.2 solid-state drive

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Although there are no moving parts in the computer after the power cord has been disconnected, the following warnings are required for your safety.



The M.2 solid-state drive might be very hot. Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

Attention: The M.2 solid-state drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the M.2 solid-state drive, observe the following guidelines:

- Replace the M.2 solid-state drive only for upgrade or repair. The M.2 solid-state drive is not designed for frequent changes or replacement.
- Before replacing the M.2 solid-state drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the M.2 solid-state drive. Otherwise, the M.2 solid-state drive might get damaged.
- Do not apply pressure to the M.2 solid-state drive.
- Do not make the M.2 solid-state drive subject to physical shocks or vibration. Put the M.2 solid-state drive on a soft material, such as cloth, to absorb physical shocks.

For access, do the following:

1. Remove the vertical stand. See “Vertical stand” on page 11.
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel assembly. See “Front bezel” on page 14.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 15.

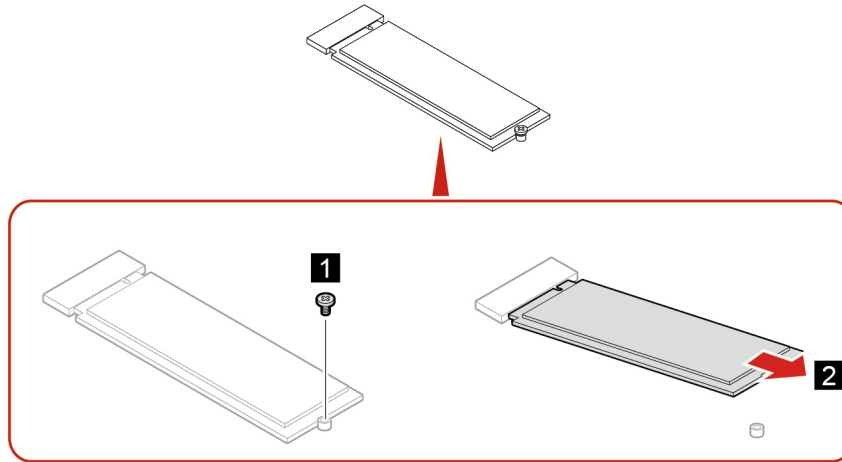
Removal steps for M.2 solid-state drive without heat sink

The M.2 solid-state drive is installed on the system board.

1. Remove the screw which secures the M.2 solid-state drive to the system board. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
M2 x L4, black coated (1)	1.5 ± 0.5 lb/in

- Remove the M.2 solid-state drive.



Note: The thermal pad is installed beneath the M.2 solid-state drive. Remove it if necessary.

Removal steps for M.2 solid-state drive with heat sink

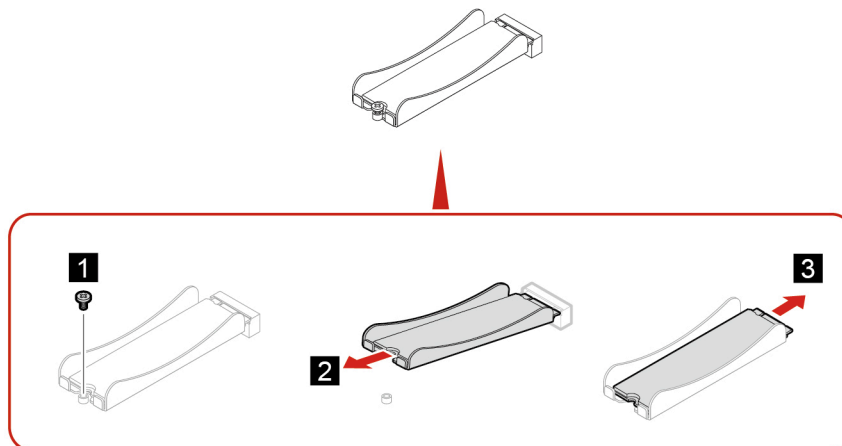
Type 1

The M.2 solid-state drive is installed in its heat sink, and the heat sink is secured with one screw.

- Remove the screw which secures the heat sink to the chassis. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
M2 x L4, black coated (1)	1.5 ± 0.5 lb/in

- Remove the heat sink.
- Remove the M.2 solid-state drive and thermal pad (if any) depending on the computer model.



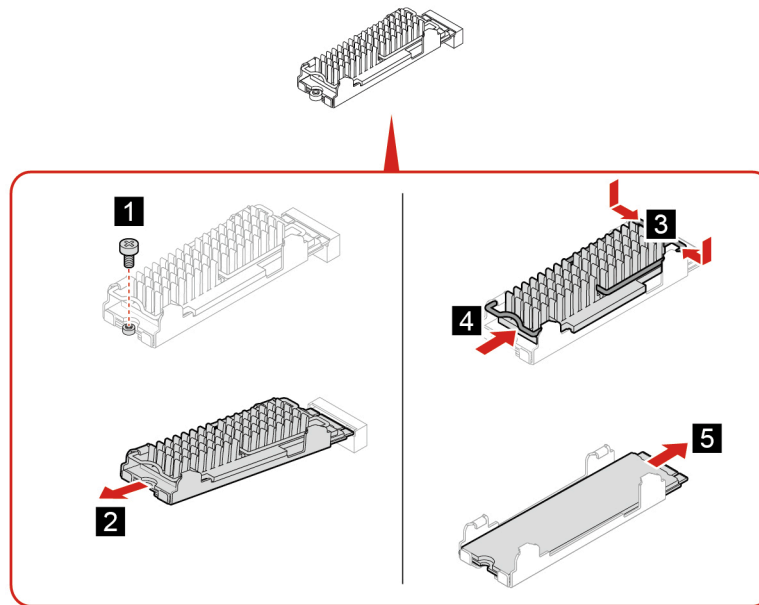
Type 2

The M.2 solid-state drive is installed in its heat sink, and the heat sink is secured with one screw.

1. Remove the screw which secures the heat sink to the chassis. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
M2 x L4, black coated (1)	1.5 ± 0.5 lb/in

2. Remove the heat sink.
3. Pinch the two latches on top of the heat sink to remove the heat sink cover.
4. Remove the M.2 solid-state drive and thermal pad (if any) depending on the computer model.



Note: Remove the film that covers the thermal pad (if any) when installing the M.2 solid-state drive, heat sink, and thermal pad.

Power supply assembly

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Although there are no moving parts in the computer after the power cord has been disconnected, the following warnings are required for your safety.



Keep fingers and other parts of your body away from hazardous, moving parts. If you suffer an injury, seek medical care immediately. Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

For access, do the following:

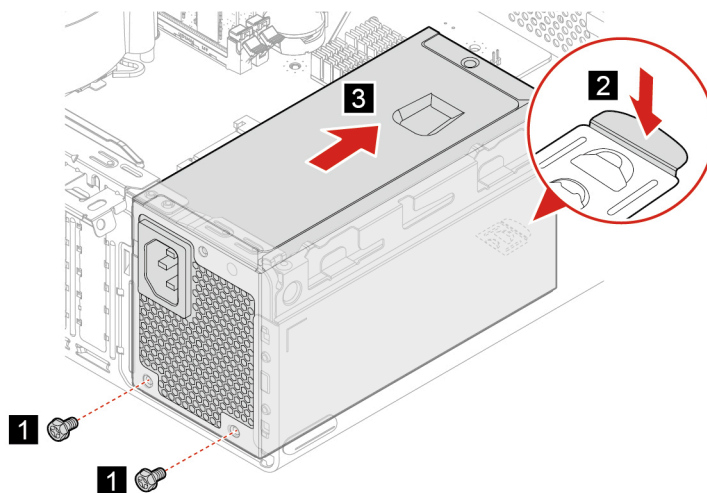
1. Remove the vertical stand. See “Vertical stand” on page 11.
2. Remove the computer cover. See “Computer cover” on page 12.
3. Remove the front bezel assembly. See “Front bezel” on page 14.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 15.
5. Disconnect the power supply assembly cables from the system board.

Removal steps

1. Remove the two screws which secure the power supply assembly to the chassis. Find screw specification like torque in the following screw table.

Screw (quantity)	Torque
Screw, #6-32 x L8, Hexhead (2)	5 ± 0.5 lb/in

2. Press the retaining clip from inside of the chassis.
3. Push the power supply assembly inwards to remove it.



Heat sink

Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



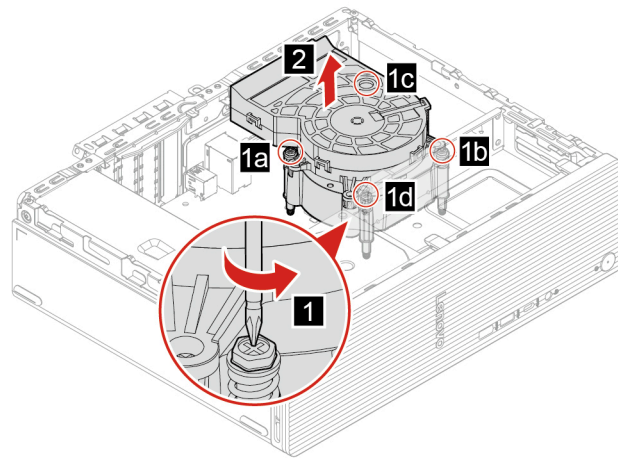
The heat sink might be very hot. Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

1. For access, remove the following parts in order:
 - “Vertical stand” on page 11.
 - “Computer cover” on page 12.
2. Disconnect the heat sink cable from the system board.

Removal steps

Notes:

- Ensure that the heat sink is horizontal when loosening or fastening the screws.
 - Do not touch the thermal grease while handling the heat sink.
1. Loosen the four screws which secure the heat sink to the system board, two screws at each side of the heat sink. Loosen the four screws in this order: from bottom left, top right, top left, to bottom right.
 2. Remove the heat sink.



Note: To avoid the heat sink misalignment and the damage to the screw threads, the four screws on the heat sink should be fastened in sequence. First, fasten the top right screw half. Then, fasten the bottom left, bottom right and top left screw in sequence. Finally, fasten the top right screw well.


Chapter 4. Intelligent features

Lenovo PCs continuously develops convenient and intelligent features to enhance users' computing experiences. This part explores the intelligent features or software that may be available on your computer.

Lenovo AI Now

Lenovo AI Now is a personal and private AI assistant to help with inspiration, writing, summarizing, and quick settings for your computer. Depending on the country or region, it might be available.

Access the apps

- Use the Lenovo AI Now icon  if present on the taskbar.
- Or type the app name in the Windows search box and press Enter.

Explore key features

- Import files to create your personal knowledge base and start searching, Q&A, summarization, and generation based on it.
- Set up your computer or find service information. For example, you can ask it to help turn on the Eye Care mode or find the nearest service center.


Notes:

- For more information about Lenovo AI Now, see the User Guide in the apps' Help Center.
- Software features may vary by computer model and be subject to change. Explore the apps based on your actual user interface.

Lenovo AI Turbo Engine

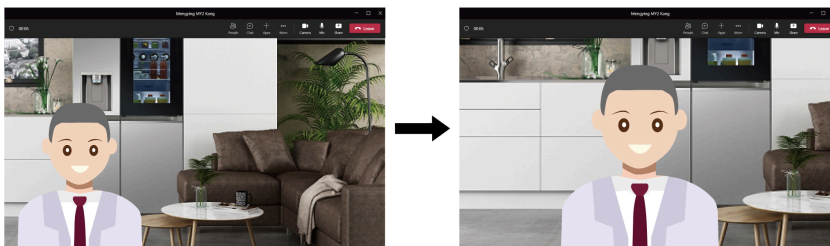
Lenovo AI Turbo Engine is a smart audio and video enhancement software. Powered by plentiful sensing and computing adaption technologies, it can optimize your experience in video and audio capture and playback.

Access the app

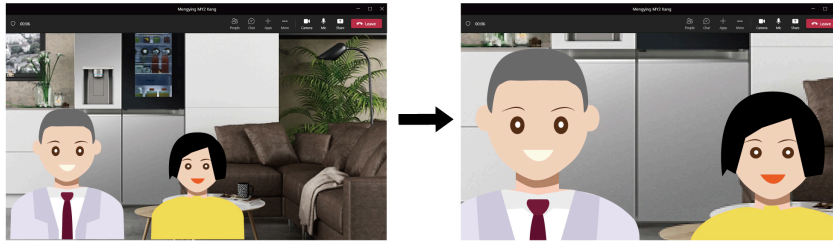
- Use the Lenovo AI Turbo Engine icon  if present on the taskbar.
- Or type the app name in the Windows search box and press Enter.

Explore key features

- **Video enhancement**
 - **Auto framing mode** (for a single person): Automatically track and keep your face centered in the video.



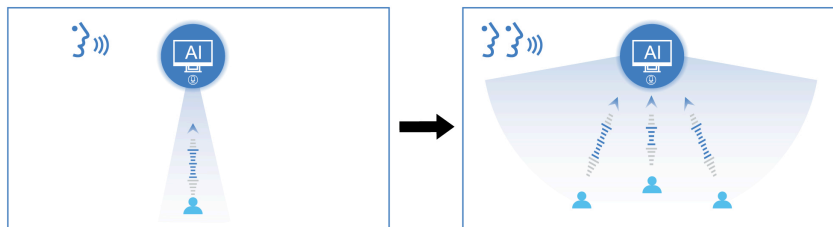
- **Auto framing mode** (for multiple persons): Automatically crop the video to capture all persons' faces.



- **Single-person tracking mode**: You can manually select this mode to track only one person's face even if others are present.

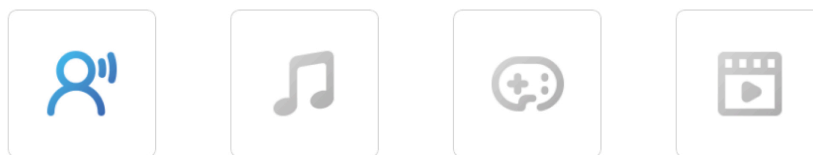
- **Audio enhancement**

- **Microphone capture effect auto adaption**: The microphone capture scope can change based on the number of persons captured by the camera.

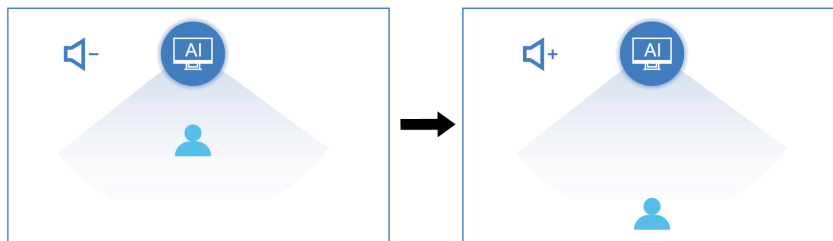


Note: You can also manually switch between personal, shared, or music modes based on your needs.

- **Speaker playback effect auto adaption**: The speaker playback effect can change depending on the audio type.



- **Speaker playback volume auto adaption** (for models with a radar card): System volume can change according to the user's distance from the speaker.



Notes:

- The available features vary depending on computer models.
- This app might not be available in your country or region.
- This app makes periodic updates of the features. Explore this app on your actual user interface.

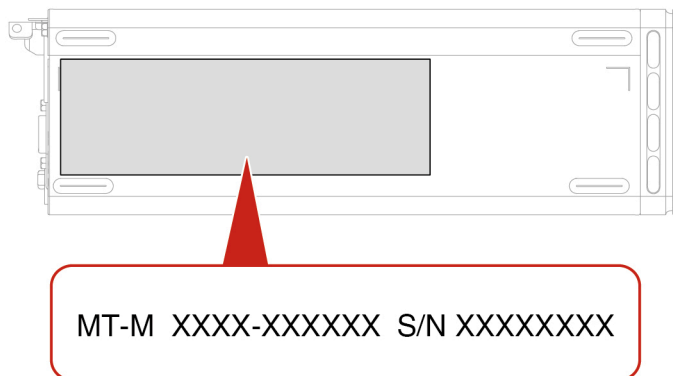
Chapter 5. Help and support

Find your serial number

This topic helps you find computer serial number.

You can find your serial number via:

- **Dashboard** or **Device** in the **Vantage** app
- The lower right corner of the base cover assembly of your computer (shown as below illustration)



Diagnose and troubleshoot your computer

This section provides introduction to a set of diagnostics and troubleshooting tools at Lenovo Support Web site and the Vantage app. They can help you diagnose common software and hardware issues.

The following table lists these diagnostics tools and the recommended conditions for each tool.

Diagnostics tool	Recommended scenario
Troubleshoot and diagnose at Lenovo Support Web site	You want to have an online troubleshooting or scan of hardware and drivers on your computer.
Hardware scan	<ul style="list-style-type: none">• Your computer is installed with the Vantage app.• You want to perform basic examinations of the hardware components.

Troubleshoot and diagnose at Lenovo Support Web site

Lenovo provides two different diagnosing solutions to help you identify and resolve problems on your computer.

For computers purchased in mainland China

1. Go to <https://newsupport.lenovo.com.cn/>.
2. Enter the troubleshooting section and find the question you are encountering.

For computers purchased outside mainland China

1. Go to <https://www.pcsupport.lenovo.com/> and enter your product name in the search box.
2. Click **Troubleshoot & Diagnose** and select the option that fits your need.

Notes:

- Before launching any automatic diagnosing process, a pop-up window will be prompted to install Lenovo Service Bridge. Lenovo Service Bridge helps to connect your computer with Lenovo diagnosing tools.
- Lenovo Support Web site makes periodic updates of the sections to keep improving your experience with your computer. The Web site interface and descriptions of sections might be different from that on your actual interface.
- If you are unaware of what problem your computer goes with, it is recommended that you select **Easy** and follow on-screen instructions to get your firmware updated and obtain the hardware status.
- If you have identified the problem on your computer, you can select **Custom** and follow on-screen instructions to resolve the problem.

If solutions can not resolve problems on your computer, you can follow on-screen instructions to submit an e-ticket or contact Lenovo for professional assistance.

Hardware scan

Hardware scan is an effective hardware testing tool to help you identify existing hardware issues.

To run the Hardware scan:

- Step 1. Type **Vantage** in the Windows search box and then press Enter.
- Step 2. Click **Hardware scan** or **Support → Hardware scan**.
- Step 3. Select **QUICK SCAN** or **CUSTOMIZE** and then follow the on-screen instructions to run the hardware scan.

Notes:

- The Quick Scan tool contains a pre-selected suite of tests that performs basic examinations of the hardware components found in the system. The Customize tool enables you to select one or several hardware components to perform the examinations.
 - Before selecting **QUICK SCAN**, click **Refresh Modules** to ensure that the list of hardware components is the components currently available for the computer.
- Step 4. If any hardware failure is detected, the result varies depending on the warranty status and varies by country or region. Follow the on-screen instructions to resolve the issue.

Recover your Windows operating system

When you encounter some unexpected issues with your operating system, you can choose to recover your operating system by yourself or call Lenovo Customer Support Center.

Note: Microsoft constantly makes updates to the Windows operating system. Before installing a particular Windows version, check the compatibility list for the Windows version. For details, go to <https://support.lenovo.com/us/en/solutions/ht512575>.

For computers purchased in mainland China

Go to https://iknow.lenovo.com.cn/detail/199198_1.html.

For computers purchased outside mainland China

To recover your operating system to...	See.
Factory defaults	Refer to the instructions in https://support.lenovo.com/HowToCreateLenovoRecovery
A previous system point	Refer to the instructions in Popular Topics: https://support.lenovo.com/solutions/ht118590

Call Lenovo

If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

Before you contact Lenovo

Prepare the needed information before you contact Lenovo.

1. Record the problem symptoms and details:
 - What is the problem? Is it continuous or intermittent?
 - Any error message or error code?
 - What operating system are you using? Which version?
 - Which software applications were running at the time of the problem?
 - Can the problem be reproduced? If so, how?
2. Record the system information:
 - Product name
 - Machine type and serial number.

Self-help resources

Use the following self-help resources to learn more about the computer and troubleshoot problems.

Resources	How to access?
Lenovo Support Web Site	<ul style="list-style-type: none">• For computers purchased in mainland China https://www.lenovo.com.cn• For computers purchased outside mainland China https://pcsupport.lenovo.com
Tips	<ul style="list-style-type: none">• For computers purchased in mainland China https://iknow.lenovo.com.cn• For computers purchased outside mainland China https://www.lenovo.com/tips
Lenovo Community	<ul style="list-style-type: none">• For computers purchased in mainland China https://iknow.lenovo.com.cn• For computers purchased outside mainland China https://forums.lenovo.com

Resources	How to access?
Accessibility information (for computers purchased outside China)	https://www.lenovo.com/accessibility
Windows help information	<ul style="list-style-type: none"> • Open the Start menu and click Get Help or Tips. • Use Windows Search. • Microsoft support Web site: https://support.microsoft.com

Purchase accessories or additional services

This topic provides instructions on how to purchase accessories or additional services.

Accessories

Lenovo has a number of hardware accessories and upgrades to help expand the functionalities of your computer. Accessories include memory modules, storage devices, network cards, power adapters, keyboards, mice, and so on.

To shop at Lenovo, go to:

- For computers purchased in mainland China
<https://www.lenovo.com.cn>
- For computers purchased outside mainland China
<https://www.lenovo.com/accessories>

Additional services

During and after the warranty period, you can purchase additional services from Lenovo at:

- For computers purchased in mainland China
<https://newsupport.lenovo.com.cn>
- For computers purchased outside mainland China
<https://pcsupport.lenovo.com/warrantyupgrade>

Service availability and service names might vary by country or region.

Accessibility features

Lenovo is committed to making information technology accessible to everyone, including individuals with hearing, vision, mobility, cognitive, or speech disabilities. To get the most up-to-date and detailed accessibility features information for the product, go to https://support.lenovo.com/docs/product_accessibility_features.

Appendix A. Supplementary information

This section contains the notice for USB connector name update. The USB Implementers Forum published a revision of the guideline for USB connector names in September, 2022. Lenovo follows the revised guideline and updates USB connector names accordingly. You can refer to the table below for naming update details.

Notice for USB connector name update

Current name	Previous name
USB-A connector (Hi-Speed USB)	USB-A 2.0 connector
USB-A connector (USB 5Gbps)	USB-A 3.2 Gen 1 connector
USB-A connector (USB 10Gbps)	USB-A 3.2 Gen 2 connector
USB-A connector (USB 5Gbps, Always On USB)	Always on USB-A 3.2 Gen 1 connector
USB-A connector (USB 10Gbps, Always On USB)	Always on USB-A 3.2 Gen 2 connector
USB-C connector (USB 5Gbps)	USB-C (3.2 Gen 1) connector
USB-C connector (USB 10Gbps)	USB-C (3.2 Gen 2) connector
USB-C connector (USB 20Gbps)	USB 3.2 Gen 2x2
USB-C connector (USB4 20Gbps)	USB 4 Gen 2x2
USB-C connector (USB4 40Gbps)	USB-C (USB 4) connector
USB-C connector (Thunderbolt 3)	USB-C (Thunderbolt 3) connector
USB-C connector (Thunderbolt 4)	USB-C (Thunderbolt 4) connector

효율관리기자재 소비전력량

효율관리기자재 표시사항	소비효율 정보
컴퓨터 유형	D
연간소비 전력량 (kWh)	20.8
슬립모드 소비전력 (W)	1.14
오프모드 소비전력 (W)	0.64

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<https://pcsupport.lenovo.com>

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