

# IdeaCentre 5i (14L, 6), IdeaCentre 5 (14L, 6) User Guide



Lenovo



## **Read this first**

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*
- *Setup Guide*

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## About this documentation

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

| Model name          | Machine types (MT) |
|---------------------|--------------------|
| IdeaCentre 5 14IOB6 | 90RJ               |
| IdeaCentre 5 14ACN6 | 90RX               |

- For further compliance information, refer to the *Generic Safety and Compliance Notices* at [https://pcsupport.lenovo.com/docs/generic\\_notices](https://pcsupport.lenovo.com/docs/generic_notices).
- 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 <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 As a result, some information in this documentation might become outdated.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.





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## Chapter 1. Meet your computer

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### Front



|                             |                                     |
|-----------------------------|-------------------------------------|
| 1. Optical drive*           | 2. Power button                     |
| 3. Headset connector        | 4. USB-C® connector (USB 3.2 Gen 1) |
| 5. USB 3.2 connectors Gen 1 | 6. USB 3.2 connectors Gen 2         |
| 7. 3 in 1 card reader slot* |                                     |

\* for selected models

\*\* The icon varies with the configuration of the model.

#### Power indicator

Show the system status of your computer.

- **On:** The computer is on.
- **Off:** The computer is off or in hibernation mode.
- **Blinking:** The computer is in sleep mode.

#### Headset connector (for IdeaCentre 5 14IOB6 only)

The headset connector is compatible with:

- Headphones or earphones with a 3.5mm (0.14 inch), TRS (3-pole) plug
- Headsets with a 3.5mm (0.14 inch), CTIA-compliant TRRS (4-pole) plug



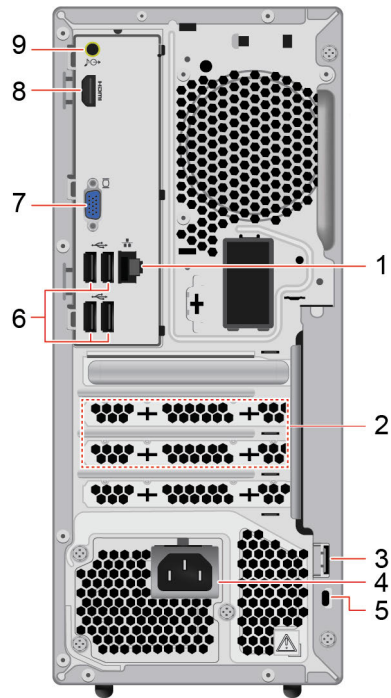
**Note:** This headset connector does not support standalone external microphones with a TRS (3-pole) plug or headsets with an OMTP-compliant TRRS (4-pole) plug.

#### **Related topics**

- “Use the optical drive (for selected models)” on page 10.
- “Use a media card (for selected models)” on page 11.
- “USB specifications” on page 4.



## Rear



|                             |                                                                     |
|-----------------------------|---------------------------------------------------------------------|
| 1. Ethernet connector       | 2. PCI-Express card area                                            |
| 3. Padlock loop             | 4. Power cord connector                                             |
| 5. Security-lock slot       | 6. USB 2.0 connectors (4)                                           |
| 7. VGA-out connector        | 8. HDMI™ 2.0 connector (HDMI 1.4 connector for IdeaCentre 5 14ACN6) |
| 9. Audio line-out connector |                                                                     |

### Related topics

- “USB specifications” on page 4.



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## Features and specifications

For detailed specifications of your computer, go to <https://psref.lenovo.com>.

|                                      |                                                                                                                                                                                                                                                                          |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hardware</b>                      | To view the hardware information of your computer, type device manager in the Windows search box and then press Enter.                                                                                                                                                   |
| <b>Power supply</b>                  | 260-watt automatic voltage-sensing power supply                                                                                                                                                                                                                          |
| <b>Adaptability for power supply</b> | <ul style="list-style-type: none"><li>• Mainland China: 220 V<math>\pm</math>22 V, 50 Hz<math>\pm</math>1 Hz</li><li>• Adaptive voltage positioning: 90 V to 264 V, 50/60 Hz</li><li>• With voltage selection switch: 90 V to 264 V, 50 Hz<math>\pm</math>1 Hz</li></ul> |
| <b>Microprocessor</b>                | To view the microprocessor information of your computer, type system information in the Windows search box and then press Enter.                                                                                                                                         |
| <b>Memory</b>                        | Double data rate 4 (DDR4) dual in-line memory module (DIMM)                                                                                                                                                                                                              |
| <b>Storage device</b>                | <p>To view the storage drive capacity of your computer, type disk management in the Windows search box and then press Enter.</p> <p><b>Note:</b> The storage drive capacity indicated by the system is less than the nominal capacity.</p>                               |
| <b>Expansion</b>                     | <ul style="list-style-type: none"><li>• 3 in 1 card reader*</li><li>• Memory slots</li><li>• M.2 solid-state drive slot</li><li>• Optical drive*</li><li>• PCI-Express card slots</li><li>• Storage drive bay</li></ul>                                                  |
| <b>Network features</b>              | <ul style="list-style-type: none"><li>• Bluetooth</li><li>• Ethernet LAN</li><li>• Wireless LAN</li></ul>                                                                                                                                                                |

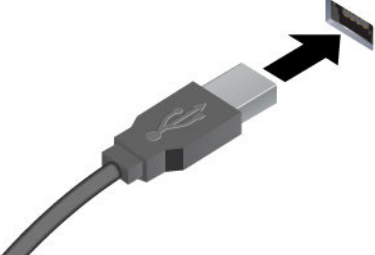
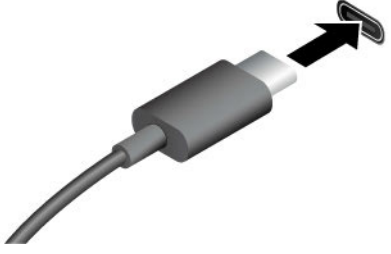
\* for selected models

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## 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"> <li>•  USB 2.0 connector</li> <li>•  USB 3.2 connector Gen 1</li> <li>•  USB 3.2 connector Gen 2</li> </ul>                                                                                                                                                            | <p>Connect USB-compatible devices, such as a USB keyboard, USB mouse, USB storage device, or USB printer.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|  <ul style="list-style-type: none"> <li>•  USB-C (3.2 Gen 1) connector</li> <li>•  USB-C (3.2 Gen 2) connector</li> <li>•  Thunderbolt 3 connector (USB-C)</li> <li>•  Thunderbolt 4 connector (USB-C)</li> </ul> | <ul style="list-style-type: none"> <li>• Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A.</li> <li>• Connect to an external display: <ul style="list-style-type: none"> <li>– USB-C to VGA: 1900 x 1200 pixels, 60 Hz</li> <li>– USB-C to DP: 3840 x 2160 pixels, 60 Hz</li> </ul> </li> <li>• Connect to USB-C accessories to help expand your computer functionality. To purchase USB-C accessories, go to <a href="https://www.lenovo.com/accessories">https://www.lenovo.com/accessories</a>.</li> </ul> |

### 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 below for each corresponding device.

| USB device            | Data rate (Gbit/s) |
|-----------------------|--------------------|
| 3.2 Gen 1 / 3.1 Gen 1 | 5                  |
| 3.2 Gen 2 / 3.1 Gen 2 | 10                 |
| 3.2 Gen 2 × 2         | 20                 |
| Thunderbolt 3 (USB-C) | 40                 |
| Thunderbolt 4 (USB-C) | 40                 |



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## Operating environment

### Temperature

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage or transportation:
  - For common desktop computers: From -40°C (-40°F) to 60°C (140°F)
  - For all-in-one desktop computers: From -20°C (-4°F) to 60°C (140°F)

### Relative humidity

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

### Altitude

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 12192m (40,000 ft)



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## Chapter 2. Get started with your computer

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### Work with Windows

The following table contains Windows frequently used settings. You can learn the basics and start working with Windows right away.

To configure settings, type the corresponding keywords in the Windows search box and select the best match. Follow the on-screen instructions to customize settings.

Table 1. Basic settings

| Functions                 | Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Search by keywords |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Control Panel             | View or change Windows settings, including hardware and software setup and configuration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Control Panel      |
| Connect to Wi-Fi networks | For models with a wireless LAN module, you can connect your computer to a Wi-Fi® network. Click the network icon in the Windows notification area, and then select a network for connection.<br><b>Note:</b> 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.                                                                                                                                                                                            | Wi-Fi              |
| Connect to wired networks | For models with an Ethernet (RJ-45) connector, you can use an Ethernet cable to connect your computer to a wired network.                                                                                                                                                                                                                                                                                                                                                                                                                                                        | —                  |
| Airplane mode             | Airplane mode is a convenient setting to turn all wireless communications of your computer on and off. You may need to turn it on when boarding an airplane.                                                                                                                                                                                                                                                                                                                                                                                                                     | Airplane mode      |
| Night light mode          | Night light is a switch in Windows that you can turn on and off. When it is turned on, your screen shows warmer colors and the amount of emitted blue light is reduced. Enabling night light reduces the chances of developing eye fatigue or eye strain.<br><b>Note:</b> For more guidance on reducing eye fatigue or eye strain, go to <a href="https://www.lenovo.com/us/en/compliance/visual-fatigue">https://www.lenovo.com/us/en/compliance/visual-fatigue</a> .                                                                                                           | Night light        |
| Adjust color temperature  | If night light mode is turned on, you can adjust the color temperature of the screen.<br><b>Note:</b> Selected Lenovo computers are low blue light certified. These computers are tested with night light turned on and color temperature set to the default value of 48.                                                                                                                                                                                                                                                                                                        | Night light        |
| Windows Updates           | Microsoft periodically releases feature and security updates to the Windows operating system. Updates that are applicable to your Windows version are downloaded automatically when your computer is connected to the Internet. When updates are downloaded, you are prompted to restart the computer to install these updates. You can also manually check if there are available updates for the installed version of Windows.<br><b>Attention:</b> Only use Windows Update to download and install updates. Updates downloaded from other sources may include security risks. | Windows Updates    |

### Windows help information

If the on-screen instructions cannot solve your problem, refer to the following to get the online Windows help information.



- Type Get Help or Tips in the Windows search box and then press Enter. When the app opens, type the problem description and select the matched result.
- Visit Microsoft support Web site: <https://support.microsoft.com>. Enter what you are looking for in the search box and get search results.

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## Connect an external display

Connect a projector or a monitor to your computer to give presentations or expand your workspace.

### Connect a wireless display

Ensure that both your computer and the wireless display support Miracast®.

Press the **Windows** and **K** Keys, and then select a wireless display to connect.

### Change display settings

To change display settings, type display settings in the Windows search box and then press Enter.

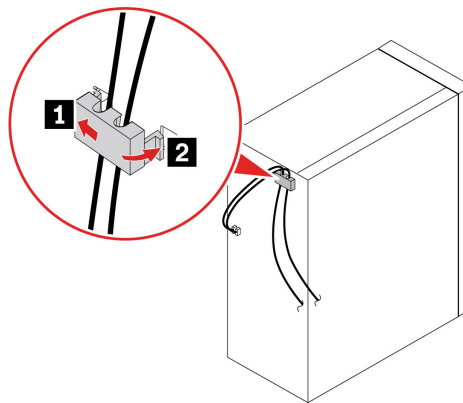
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## Manage cables with a smart cable clip

**Note:** You can purchase a smart cable clip from Lenovo.

To manage cables of devices (such as the keyboard and the mouse) with a smart cable clip:

1. Pull the cables through the dents in the clip.
2. Install the clip as shown.



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## Chapter 3. Explore your computer

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### Lenovo Vantage



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

#### Access Lenovo Vantage

Type Lenovo Vantage in the search box and then press Enter.

To download the latest version of Lenovo Vantage, go to Microsoft Store and search by the app name.

#### Key features

Lenovo Vantage enables you to:

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware and driver updates 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.

#### Notes:

- The available features vary depending on the computer model.
- Lenovo Vantage 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.

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### 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 25 minutes

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

To change or customize a power plan:

1. Type power plan in the Windows search box and then press Enter.
2. Customize a power plan of your preference.



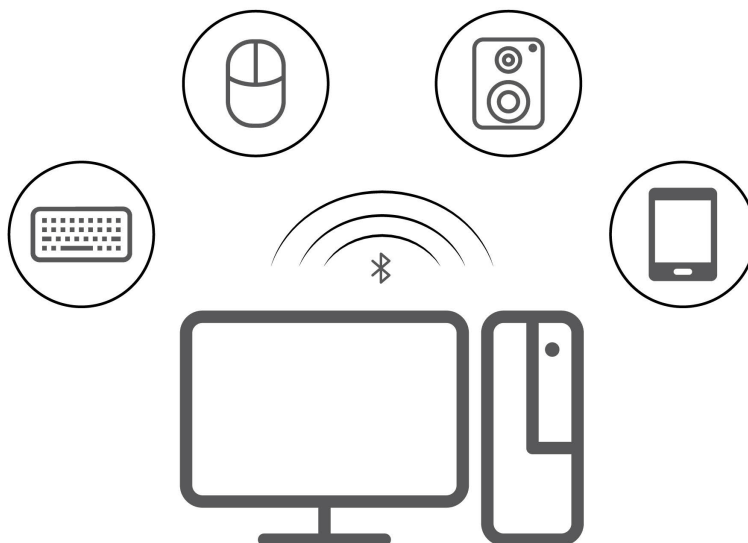
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## Transfer data

Quickly share your files using the built-in Bluetooth technology among devices with the same features. You also can install a disc or media card to transfer data.

### Connect to a Bluetooth-enabled device (for selected models)

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



1. Click the action center icon in the Windows notification area. Enable the Bluetooth feature.
2. Click the bluetooth options to add a bluetooth device, and then follow the on-screen instructions.

### Use the optical drive (for selected models)

If your computer has an optical drive, read the following information.

#### Know the type of your optical drive

To view the type of the optical driver, type device manager in the Windows search box and then press Enter.

#### Install or remove a disc

1. With the computer on, press the eject button on the optical drive. The tray slides out of the drive.
2. Insert a disc into the tray or remove a disc from the tray, and then push the tray back into the drive.

**Note:** If the tray does not slide out of the drive when you press the eject button, turn off the computer. Then, insert a straightened paper clip into the emergency-eject hole adjacent to the eject button. Use the emergency eject only in an emergency.

#### Record a disc

1. Insert a recordable disc into the optical drive that supports recording.
2. Do one of the following:
  - Open Windows Media Player.



- Double-click the ISO file.
3. Follow the on-screen instructions.

## Use a media card (for selected models)

If your computer has a SD-card slot, read the following information.

### Install a media card

1. Locate the SD-card slot.
2. Ensure that the metal contacts on the card are facing the ones in the SD-card slot. Insert the card firmly into the SD-card slot until it is secured in place.

### Remove a media card

**Attention:** Before removing a media card, eject the card from the Windows operating system first. Otherwise, data on the card might get corrupted or lost.

To remove a media card, type remove hardware and eject media in the Windows search box and then press Enter.

---

## Purchase accessories

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

To shop at Lenovo, go to <https://pcsupport.lenovo.com/warrantyupgrade>.





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## Chapter 4. CRU replacement

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

- **Self-service CRUs:** Refer to parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to parts that can be installed or replaced by customers with a greater skill level. Trained service technicians can also provide service to install or 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](https://www.lenovo.com/warranty/llw_02)

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### CRU list

The following is the CRU list of your computer.

#### Self-service CRUs

- Keyboard\*
- Mouse\*
- Computer cover
- Front bezel
- M.2 solid-state drive
- Memory module
- Optical drive\*
- PCI-Express card
- PCI-Express card holder
- Power cord
- Screw kit
- Storage drive
- Storage drive bracket
- Storage drive rubber

#### Optional-service CRUs

- Coin-cell battery
- Internal speaker\*
- Keyboard
- Memory module
- Heat sink assembly



- Power supply assembly

\* for selected models

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## Remove or replace a CRU

This section provides instructions on how to remove or replace a CRU.

### Power cord

#### Prerequisite

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

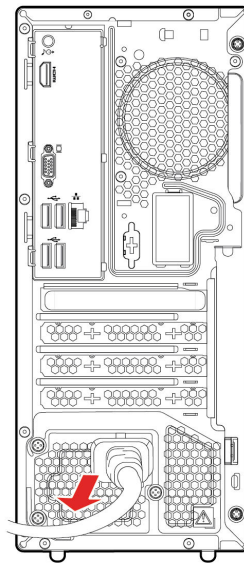


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

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

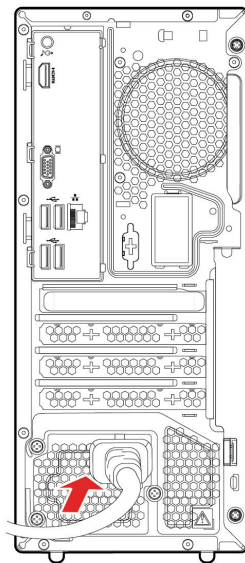
#### Replacement procedure

1. Turn off the computer and remove all connected peripheral devices and cables.
2. Remove the power cord.



3. Connect the new power cord to the computer.





4. Reinstall all removed parts.
5. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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

## Computer cover

### Prerequisite

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

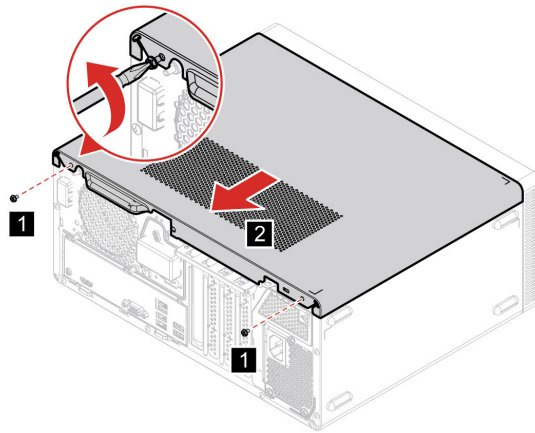


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

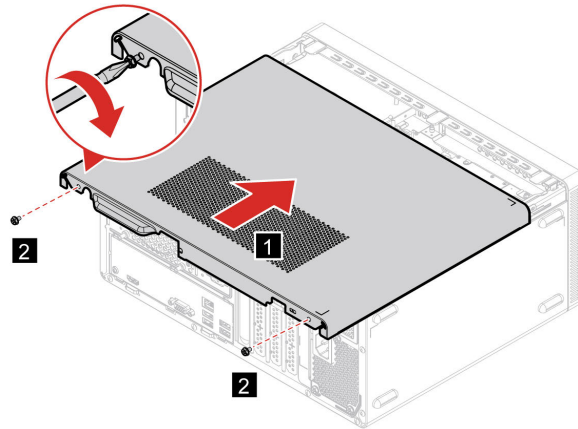
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Unlock any locking device that secures the computer cover.
3. Hold the sides of the computer and gently lay it down so that the computer cover is facing up.
4. Remove the screws and slide the computer cover out of the chassis.





5. Install the new computer cover and secure the cover with the screws.



6. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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

## Front bezel

### Prerequisite

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

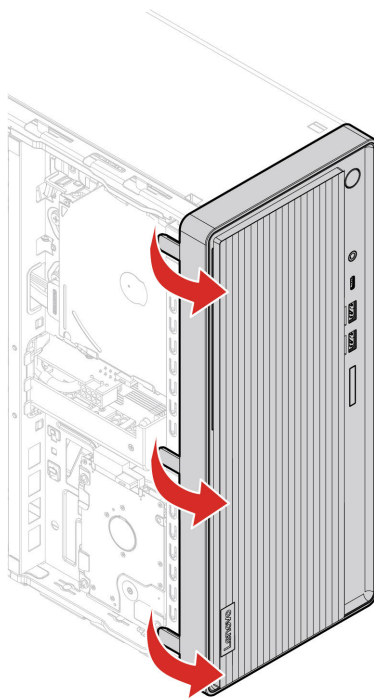


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

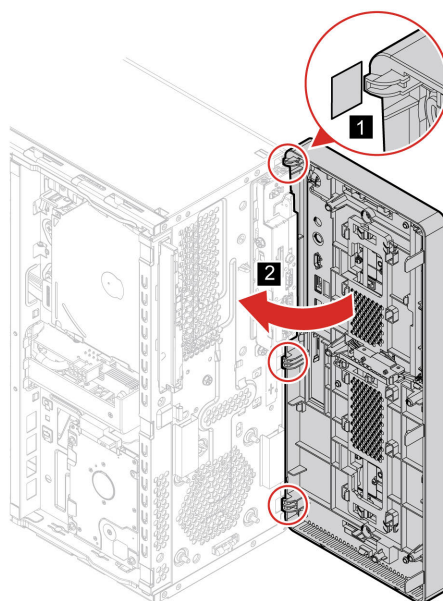
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel by releasing the three plastic tabs as shown.





4. Install the front bezel by securing the three plastic tabs as shown.



5. Reinstall all removed parts.
6. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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



# Storage drive

## Prerequisite

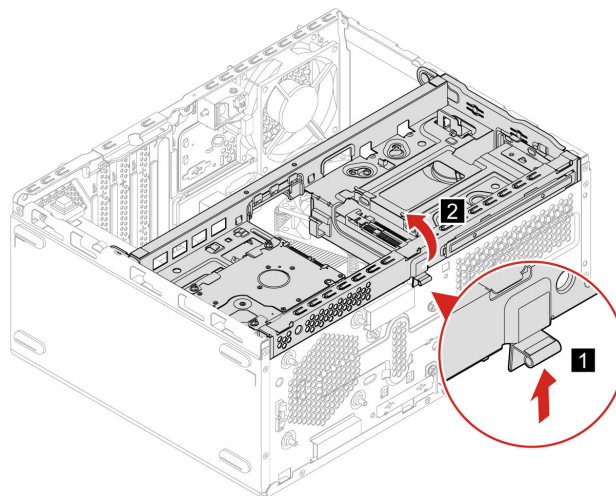
Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

**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.

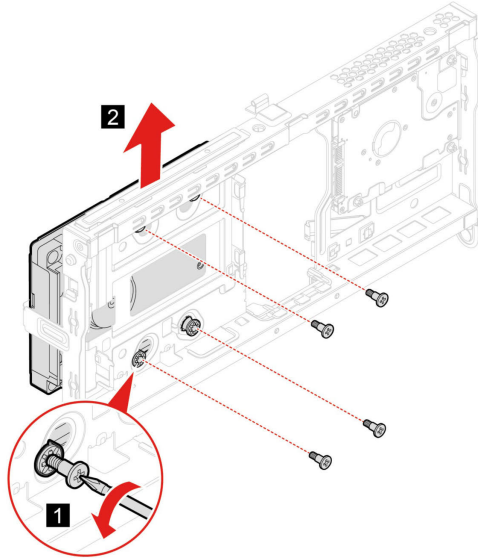
## Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16 .
4. Remove the optical drive. See “Optical drive” on page 28.
5. Pivot the drive bay assembly upward.

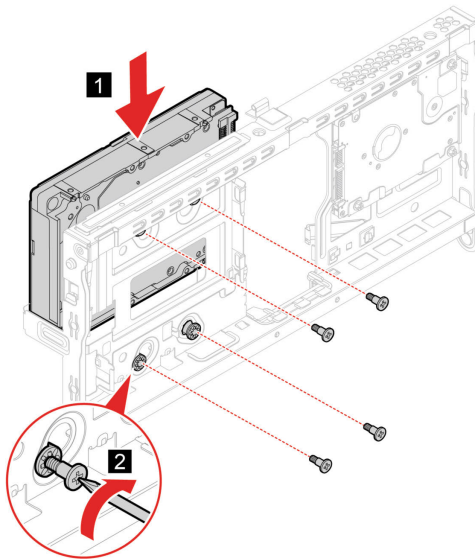


6. Disconnect the data cable and power cable from the storage drive.
7. Remove the screws, then remove the storage drive.



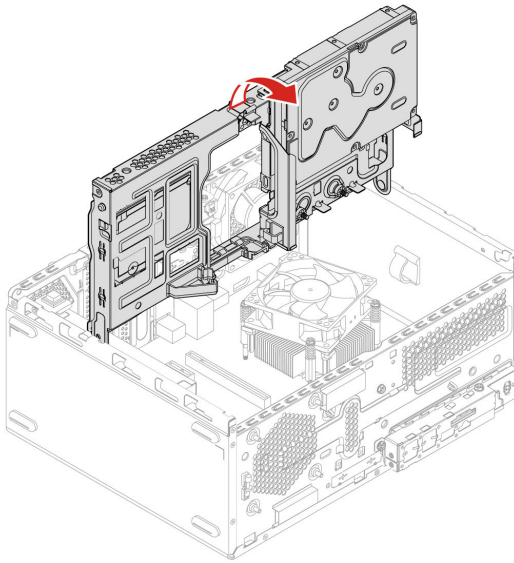


8. Install the storage drive and secure it with screws.



9. Pivot the drive bay assembly downward until it snaps into position.





10. Reinstall all removed parts.
11. Place the computer in an upright position. Then, reconnect the data cable and power cable to the computer.

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

## Storage drive bracket

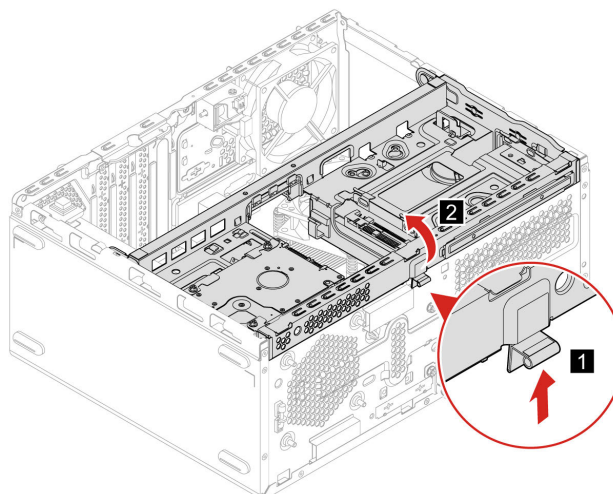
### Prerequisite

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

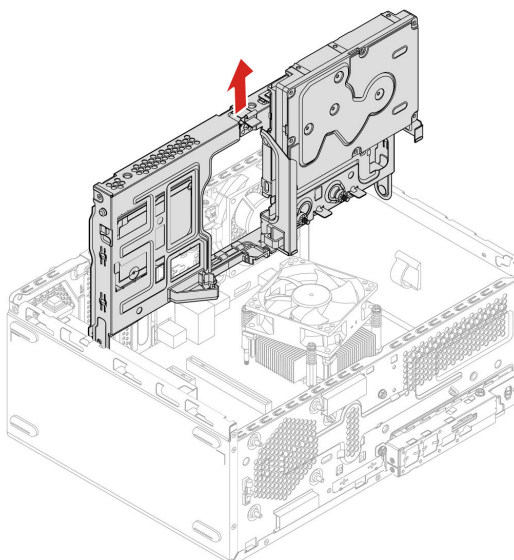
### Replacement Procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Disconnect the data cables and power cables for optical drive and storage drive.
5. Remove the optical drive. See “Optical drive” on page 28
6. Remove the storage drive. See “Storage drive” on page 18
7. Pivot the drive bay assembly upward.



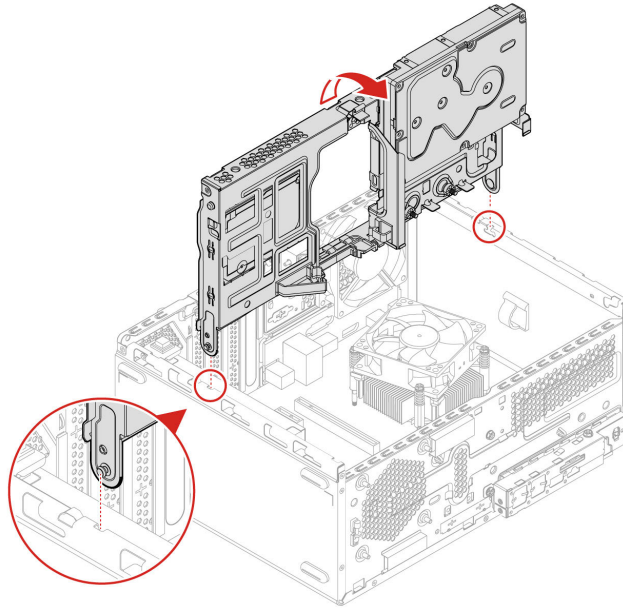


8. Remove the storage drive bracket.



9. Install the new storage drive bracket and pivot the drive bay assemble downward.





10. Reinstall all removed parts.
11. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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

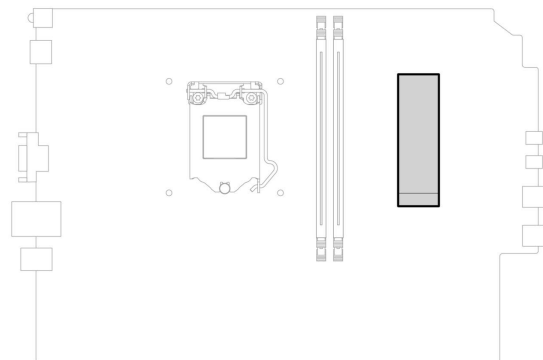
## M.2 solid-state drive

### Prerequisite

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

**Attention:** To replace the Optane memory in the M.2 solid-state drive slot, go to [https://support.lenovo.com/docs/tg\\_ssd](https://support.lenovo.com/docs/tg_ssd) for details.

The following illustration shows the location of the M.2 solid-state drive on the system board.

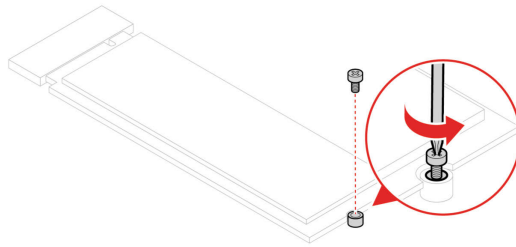


### Replacement procedure

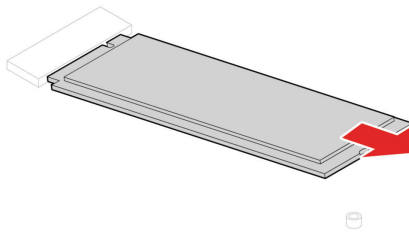
1. Turn off the computer and remove all connected devices and cables.



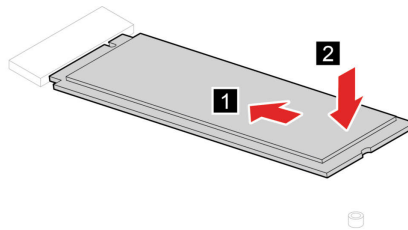
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Remove the screw from M.2 solid-state drive.



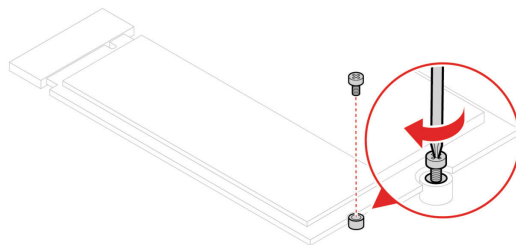
5. Slide the M.2 solid-state drive out.



6. Install the M.2 solid-state drive in.



7. Secure the M.2 solid-state drive with the screw.



8. Reinstall all removed parts.
9. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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



# Power supply assembly

## Prerequisite

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

**Attention:** Do not open your computer or attempt any repairs before reading the *Important Product Information Guide*.

Although there are no moving parts in your computer after the power cord has been disconnected, the following warnings are required for your safety and proper Underwriters Laboratories (UL) certification.

### CAUTION:



**Hazardous moving parts. Keep fingers and other body parts away.**

### CAUTION:

**Never remove the cover on a power supply or any part that has the following label attached.**

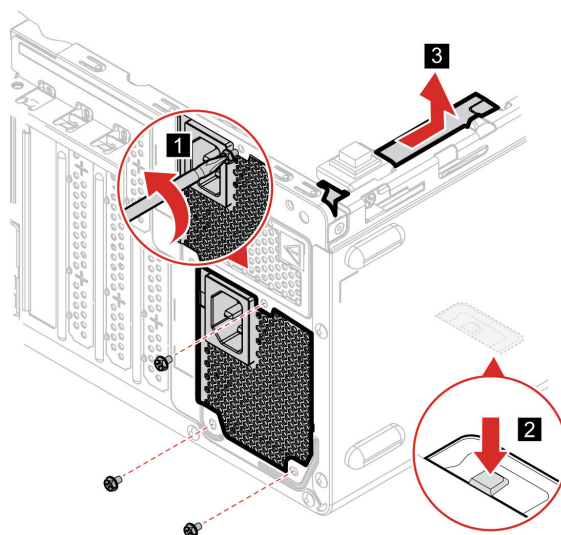


**Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.**

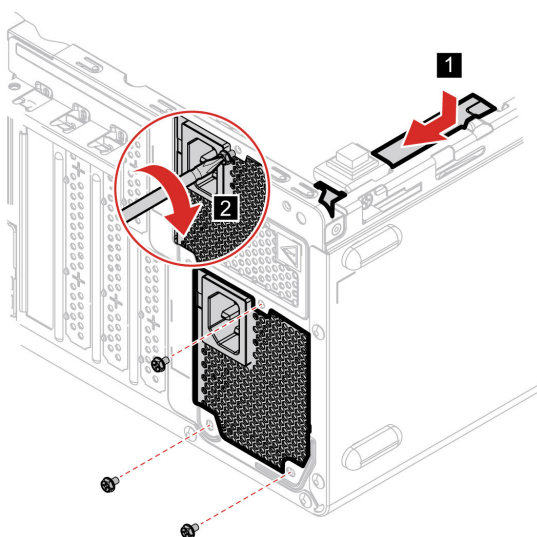
## Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 20.
5. Disconnect the power supply cables from the system board.
6. Remove the screws then, press the lock button and slide the power supply assembly out of the computer.





7. Connect the new power supply assembly cables to the system board.
8. Install the power supply assembly and then, install the screws.



9. Reinstall all removed parts.
10. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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

## Coin-cell battery

### Prerequisite

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

**Attention:** Do not open your computer or attempt any repairs before reading the *Important Product Information Guide*.





## DANGER

If the coin-cell battery is incorrectly replaced, there is danger of an explosion. The coin-cell battery contains a small amount of harmful substance. To avoid possible injury:

- Replace only with a battery of the type recommended by Lenovo.
- Keep the battery away from fire.
- Do not expose it to excessive heat.
- Do not expose it to water or rain.
- Do not short-circuit it.
- Do not drop, crush, puncture the battery, or make it subject to strong forces. Battery abuse or mishandling can cause the battery to overheat, which can cause gasses or flame to "vent" from the battery or coin-cell battery.

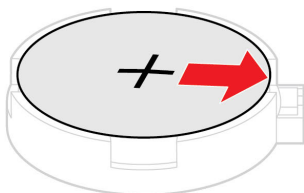
**Note:** To dispose of the coin-cell battery, refer to "Lithium coin-cell battery notice" in the *Safety and Warranty Guide*.

Your computer has a special type of memory that maintains the date, time, and settings for built-in features, such as parallel connector assignments (configurations). A coin-cell battery keeps this information active when you turn off the computer.

The coin-cell battery normally requires no charging or maintenance throughout its life; however, no coin-cell battery lasts forever. If the coin-cell battery fails, the date, time, and configuration information (including passwords) is lost. An error message is displayed when you turn on the computer.

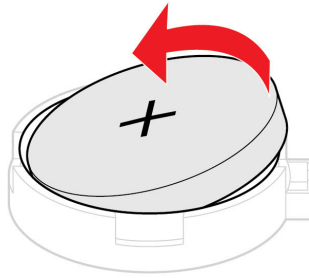
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See "Computer cover" on page 15.
3. Disengage the latch.

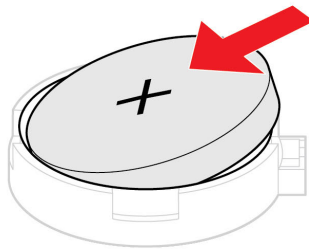


4. Remove the coin-cell battery.

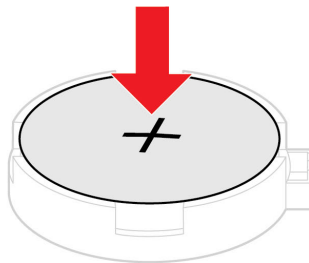




5. Install the coin-cell battery.



6. Secure the coin-cell battery with the latch.



7. Reinstall all removed parts.

8. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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



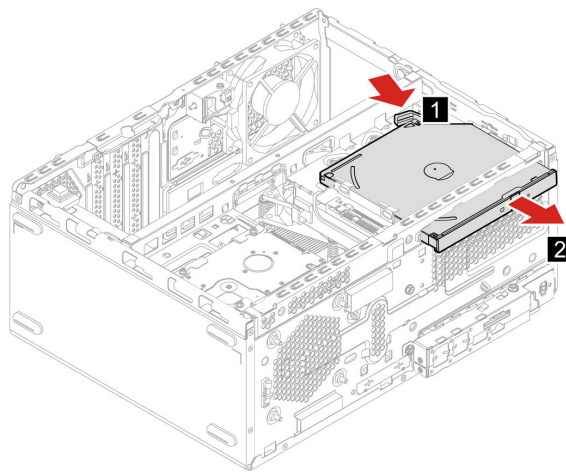
# Optical drive

## Prerequisite

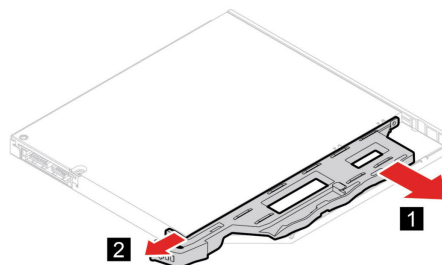
Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

## Replacement procedure

1. Remove the computer cover. See “Computer cover” on page 15.
2. Remove the front bezel. See “Front bezel” on page 16.
3. Disconnect the data cable and power cable from the rear of the optical drive.
4. Press the release button and push the optical drive straight out of the front of the chassis.

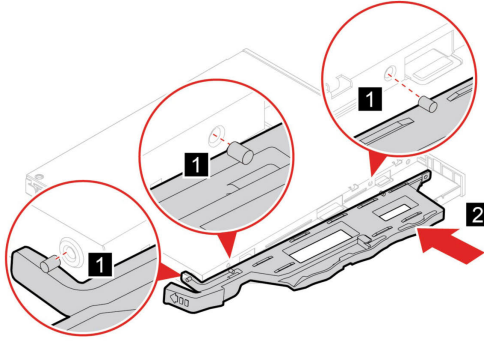


5. Detach the optical drive bracket from the optical drive.

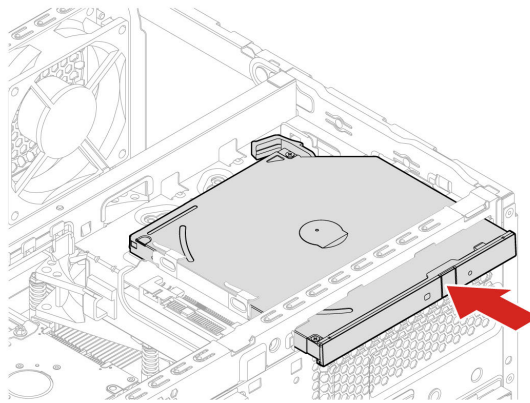


6. Install the optical drive bracket on the optical drive.





7. Install the optical drive and reconnect the cables.



8. Reinstall all the removed parts.

9. Reconnect the power cord and all disconnected cables to the computer.

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

## Heat sink assembly

### Prerequisite

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

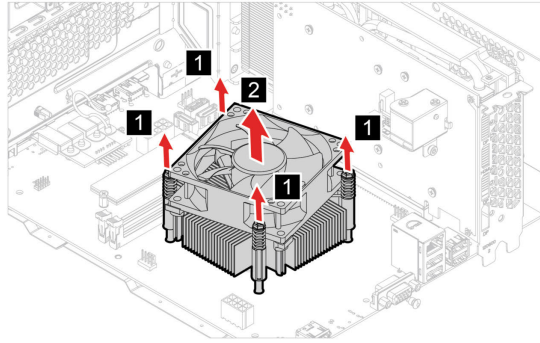


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

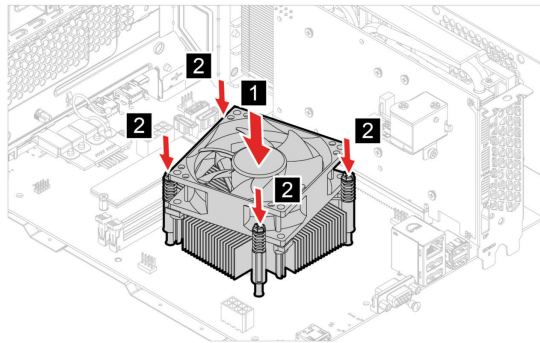
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 20.
5. Remove the screws. Then, remove the heat sink.





6. Install the heat sink and secure it with screws.



7. Reinstall all removed parts.
8. Place the computer in an upright position. Then, reconnect the power cord and all disconnected cables to the computer.

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

## PCI-Express card

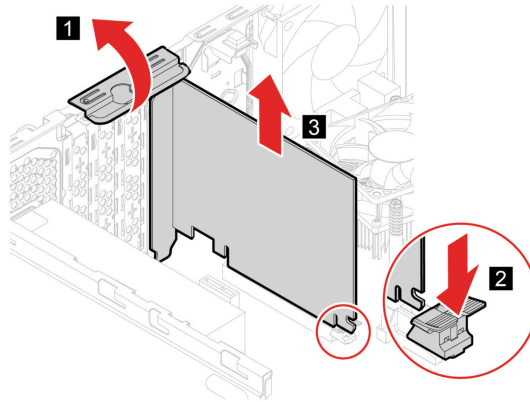
### Prerequisite

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

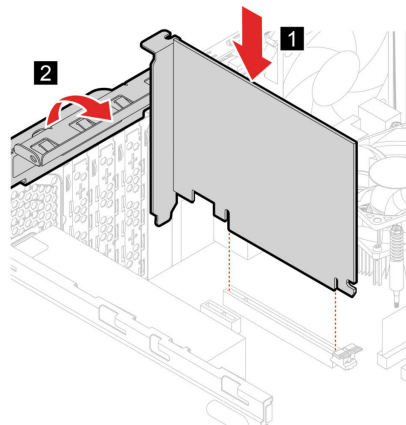
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Remove the storage drive bracket. See “Storage drive bracket” on page 20.
5. Pivot the card retaining latch and the card latch to remove the PCI-Express card.





6. Install the PCI-Express card then, secure it by closing the card latch.



7. Reinstall all removed parts.

8. Reconnect all disconnected cables to the computer and reconnect the power cord to the electrical outlet.

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

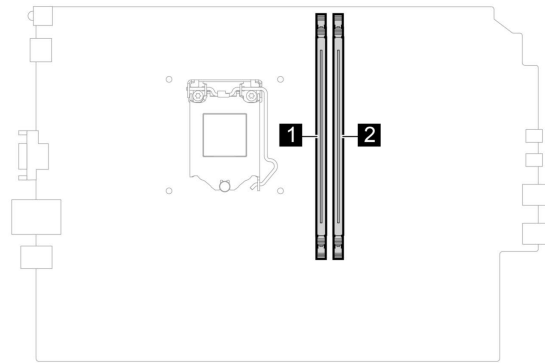
## Memory module

### 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 as shown in the following illustration.

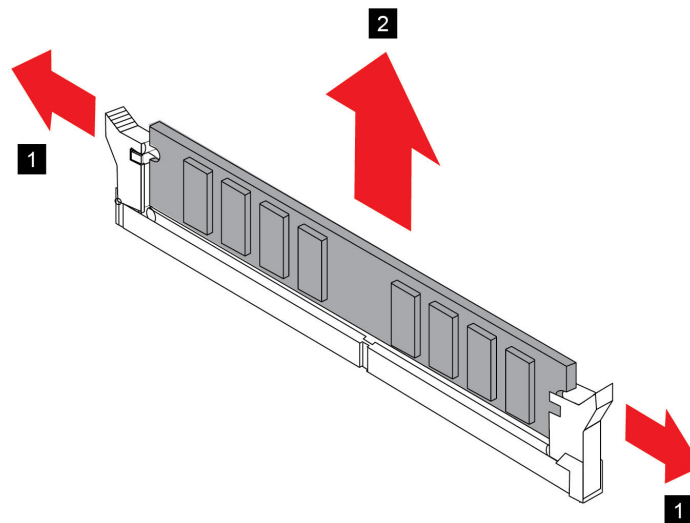




**Attention:** Do not touch the contact edge of the memory module. Otherwise, the memory module might get damaged.

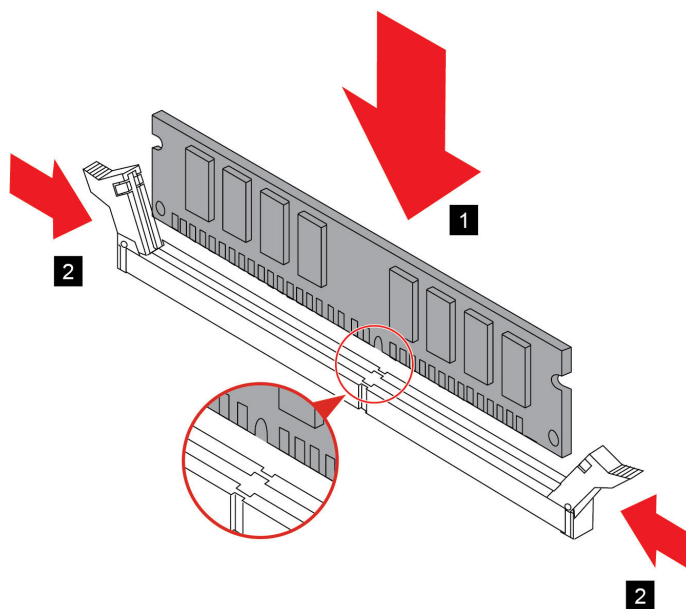
### Replacement procedure

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 15.
3. Remove the front bezel. See “Front bezel” on page 16.
4. Disengage the latches and remove the memory module.



5. Install a memory module and secure the memory module with the latches.





6. Reinstall all removed parts.
7. Reconnect all disconnected cables to the computer and reconnect the power cord to the electrical outlet.

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





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## Chapter 5. Help and support

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### Frequently asked questions

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|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| How do I partition my storage drive?                     | Refer to <a href="https://support.lenovo.com/solutions/ht503851">https://support.lenovo.com/solutions/ht503851</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| What should I do if my computer stops responding.        | Press and hold the power button until the computer turns off. Then restart the computer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| What should I do if I spill liquid on the computer?      | <ol style="list-style-type: none"><li>1. Carefully unplug the ac power adapter and turn off the computer immediately. The more quickly you stop the current from passing through the computer the more likely you will reduce damage from short circuits.</li></ol> <p><b>Attention:</b> Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable.</p> <ol style="list-style-type: none"><li>2. Wait until you are certain that all the liquid is dry before turning on your computer.</li></ol> <p><b>CAUTION:</b><br/><b>Do not try to drain out the liquid by turning over the computer. If your computer has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.</b></p> |
| Where can I get the latest device drivers and UEFI/BIOS? | <ul style="list-style-type: none"><li>• Lenovo Vantage or Lenovo PC Manager</li><li>• Lenovo Support Web site at <a href="https://support.lenovo.com">https://support.lenovo.com</a></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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### Self-help resources

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

| Resources                                      | How to access?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Troubleshooting and frequently asked questions | <ul style="list-style-type: none"><li>• <a href="https://www.lenovo.com/tips">https://www.lenovo.com/tips</a></li><li>• <a href="https://forums.lenovo.com">https://forums.lenovo.com</a></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Accessibility information                      | <a href="https://www.lenovo.com/accessibility">https://www.lenovo.com/accessibility</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Reset or restore Windows                       | <ul style="list-style-type: none"><li>• Use Lenovo recovery options.<ol style="list-style-type: none"><li>1. Go to <a href="https://support.lenovo.com/HowToCreateLenovoRecovery">https://support.lenovo.com/HowToCreateLenovoRecovery</a>.</li><li>2. Follow the on-screen instructions.</li></ol></li><li>• Use Windows recovery options.<ol style="list-style-type: none"><li>1. Go to <a href="https://pcsupport.lenovo.com">https://pcsupport.lenovo.com</a>.</li><li>2. Detect your computer or manually select your computer model.</li><li>3. Click <b>Diagnostics</b> → <b>Operating System Diagnostics</b> and then follow the on-screen instructions.</li></ol></li></ul> |

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| Resources                                                                                                                                                                                                                                                                                                                                                                                  | How to access?                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Use Lenovo Vantage to:</p> <ul style="list-style-type: none"> <li>• Configure device settings.</li> <li>• Download and install UEFI BIOS, drivers and firmware updates.</li> <li>• Secure you computer from outside threats.</li> <li>• Diagnose hardware problems.</li> <li>• Check the computer warranty status.</li> <li>• Access <i>User Guide</i> and helpful articles.</li> </ul> | Type Lenovo Vantage in the search box and then press Enter.                                                                                                                                                                                                                       |
| <p>Product documentation:</p> <ul style="list-style-type: none"> <li>• <a href="#">Generic Safety and Compliance Notices</a></li> <li>• <i>Safety and Warranty Guide</i></li> <li>• <i>Setup Guide</i></li> <li>• This <i>User Guide</i></li> <li>• <i>Regulatory Notice</i></li> </ul>                                                                                                    | Go to <a href="https://pcsupport.lenovo.com">https://pcsupport.lenovo.com</a> . Then, follow the on-screen instructions to filter out the documentation you want.                                                                                                                 |
| <p>Lenovo Support Web site with the latest support information of the following:</p> <ul style="list-style-type: none"> <li>• Drivers and software</li> <li>• Diagnostic solutions</li> <li>• Product and service warranty</li> <li>• Product and parts details</li> <li>• Knowledge base and frequently asked questions</li> </ul>                                                        | Go to <a href="https://support.lenovo.com">https://support.lenovo.com</a> .                                                                                                                                                                                                       |
| Windows help information                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Use <b>Get Help</b> or <b>Tips</b>.</li> <li>• Use Windows Search or the Cortana® personal assistant.</li> <li>• Go to Microsoft support Web site: <a href="https://support.microsoft.com">https://support.microsoft.com</a>.</li> </ul> |



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## Call Lenovo

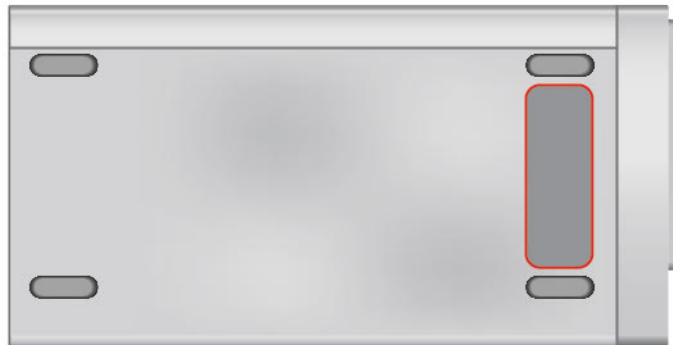
If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

## Before you contact Lenovo

Prepare the following 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

The following illustration shows where to find the machine type and serial number of your computer.



## Lenovo Customer Support Center

During the warranty period, you can call Lenovo Customer Support Center for help.

### Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region, go to:

<https://pcsupport.lenovo.com/supportphonenumberlist>

**Note:** Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

### Services available during the warranty period

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.



- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

### **Services not covered**

- Replacement or use of parts not manufactured for or by Lenovo or nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, see “Warranty information” in the *Safety and Warranty Guide* that comes with your computer.

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## **Purchase additional services**

During and after the warranty period, you can purchase additional services from Lenovo at <https://www.lenovo.com/services>.

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



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## Appendix A. Notices and trademarks

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U.S.A.  
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