



ExpertCenter PB64 Series

User Guide

Regulatory Model: PB64



E26165

First Edition

October 2025

Important information

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ACCESSIBILITY STATEMENT

ASUS is committed to making our documentation accessible, in accordance with Directive (EU) 2019/882 of the European Parliament and of the Council. This document is designed to meet requirements for WCAG 2.1 (level AA)/EN 301 549 and be accessible to screen readers such as NVDA Screen Reader or Microsoft Narrator.

SERVICE AND SUPPORT

Visit our multi-language website at <https://www.asus.com/support/>.

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About this guide

This user guide includes information on the following SKUs:

- **Mini PC**
(Memory and M.2 solid state drive already included in the Mini PC system; Windows 11/11 Pro 64-bit Operating System included):
Specifications and steps to set up your Mini PC.
- **Kit (barebone)**
(Memory and M.2 solid state drive not included; Operating system not included):
Specifications and steps to set up your Kit.

NOTE: If you purchased a barebone SKU, you will also need to purchase and install memory, M.2 SSD, and other required components to complete the system. To comply with regulatory requirements, ensure the system does not interfere with nearby radar systems.

Audience

This user guide is intended to provide basic setup information about the Mini PC and components to vendors, system integrators, and other engineers and technicians who need this level of information.

Conventions used in this guide

To highlight key information in this manual, some text are presented as follows:

IMPORTANT! This message contains vital information that must be followed to complete a task.

NOTE: This message contains additional information and tips that can help complete tasks.

WARNING! This message contains important information that must be followed to keep you safe while performing certain tasks and prevent damage to your Mini PC system's data and components.

Other Common Notations

Abbrev.	Description
#	Used after a signal name to identify an active-low signal (such as USBP0#)
GB	Gigabyte (1,073,741,824 bytes)
GB/s	Gigabytes per second
Gb/s	Gigabits per second
KB	Kilobyte (1024 bytes)
Kb	Kilobit (1024 bits)
kb/s	1000 bits per second
MB	Megabyte (1,048,576 bytes)
MB/s	Megabytes per second
Mb	Megabit (1,048,576 bits)
Mb/s	Megabits per second
TDP	Thermal Design Power
xxh	An address or data value ending with a lowercase h indicates a hexadecimal value.
x.x V	Volts. Voltages are DC unless otherwise specified.
x.x A	Amperes.

Production identification information

ASUSTeK Mini PC Product ExpertCenter PB64 Identification Information

Product Name	ExpertCenter PB64
PB64	Mini PC

Where to find more information

Refer to the following source(s) for additional information and for product and software updates.

ASUS website

The ASUS website (www.asus.com) provides updated information on ASUS hardware and software products.

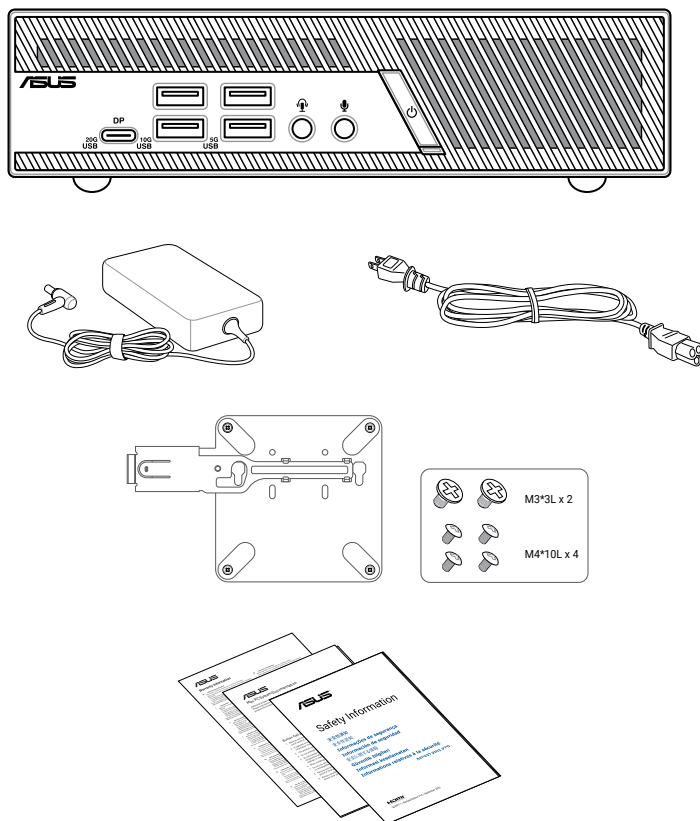
Safety and caution information

- Accessories that came with this product have been designed and verified for the use in connection with this product. Never use accessories from other products to prevent the risk of electric shock or fire.
- This device may interfere with the operation of some pacemakers, hearing aids or other medical devices. To reduce the risk, maintain a separation distance of 20 cm (8 inches) between the device and the medical device. Refer to the medical device for additional information.
- Modification of the wireless solution, thermal solution, device components or enclosure shall violate regulatory compliance requirements and may induce safety hazards.



Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

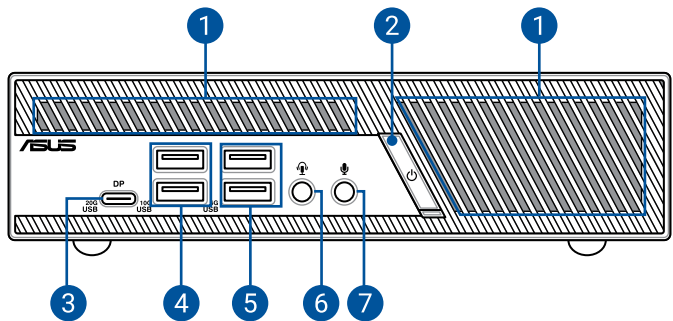
Package contents



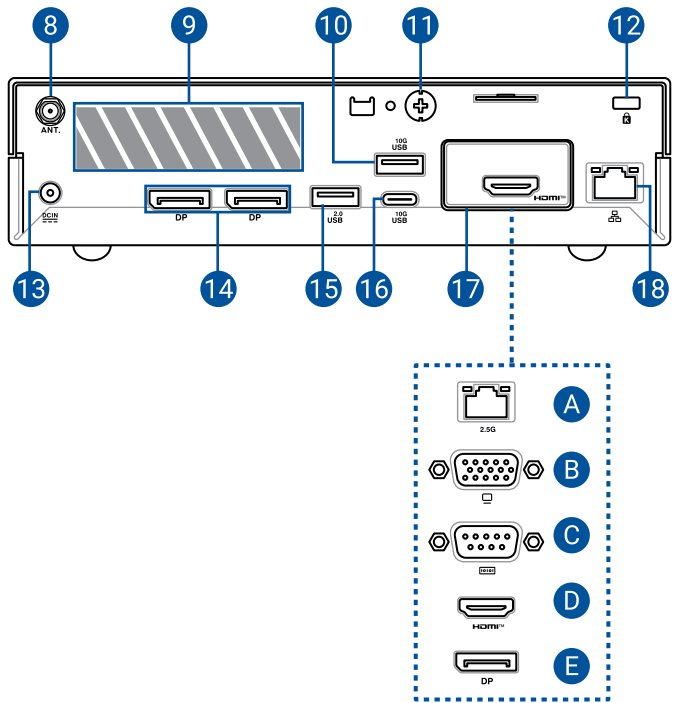
NOTE:

- The most up-to-date and accurate product specifications are available on www.asus.com for download.
 - Product and accessory images are for illustrative purposes only. The actual appearance and specifications may vary depending on the model.
 - *The bundled power adapter may vary depending on the model and the country (or region) of sale.
 - Some bundled accessories may vary depending on the model. For details on these accessories, refer to their respective user manuals.
 - If the device or its components fail or malfunction during normal and proper use within the warranty period, bring the warranty card to the ASUS Service Center for replacement of the defective components.
-

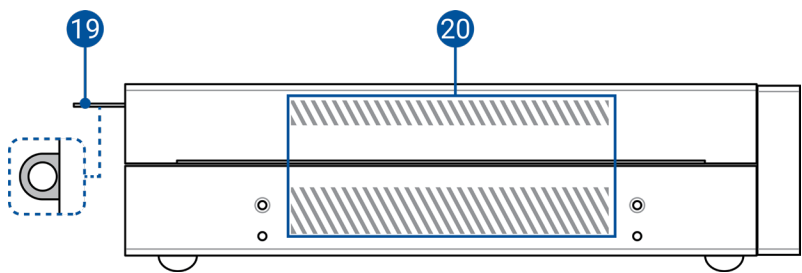
Front view



Rear view



Left view

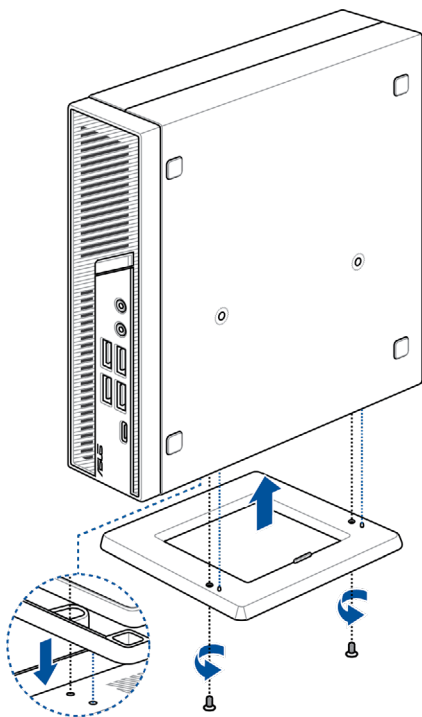


No.	Feature	No.	Feature
1.	Air vents (intake vent)	14.	DisplayPort
2.	Power button	15.	USB 2.0 port
3.	USB 20Gbps Type-C® port with DisplayPort	16.	USB 10Gbps Type-C® port
4.	USB 10Gbps port	17.	Configurable port
5.	USB 5Gbps port	A.	2.5Gbps LAN port
6.	Headphone / Headset jack	B.	VGA port
7.	Microphone jack	C.	Serial (COM) connector
8.	Wireless antenna jack	D.	HDMI port
9.	Air vents (exhaust vent)	E.	DisplayPort
10.	USB 10Gbps port	18.	2.5Gbps LAN port
11.	Punch-out port	19.	Padlock ring (optional)
12.	Kensington® security slot	20.	Air vents (intake vent)
13.	Power input jack		

Mini PC setup guide

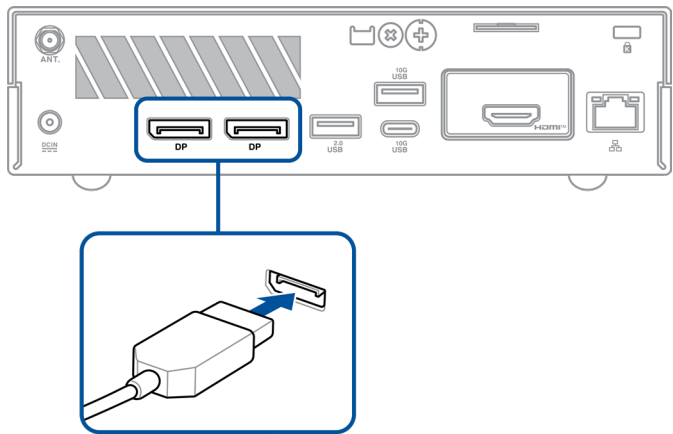
Installing the stand (optional)

1. Locate the mounting holes on the left panel of your Mini PC.
2. Align the stand's mounting holes with the mounting holes on your Mini PC, then secure it in place with the two (2) screws bundled with the stand.

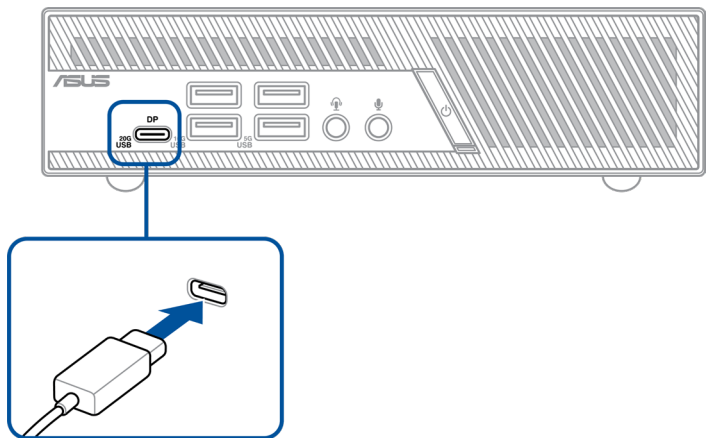


Connecting the display

DisplayPort

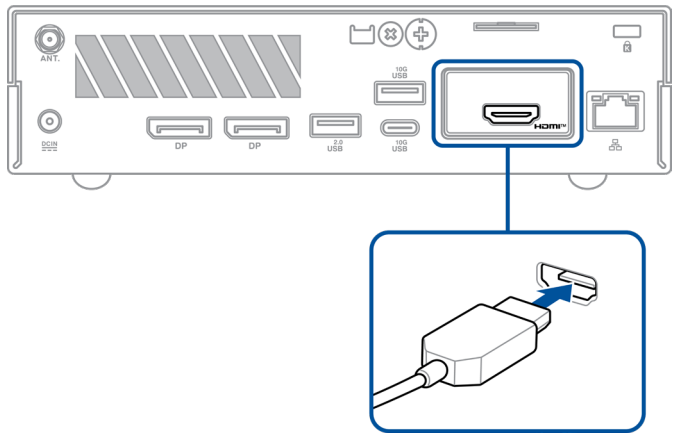


USB Type-C® port

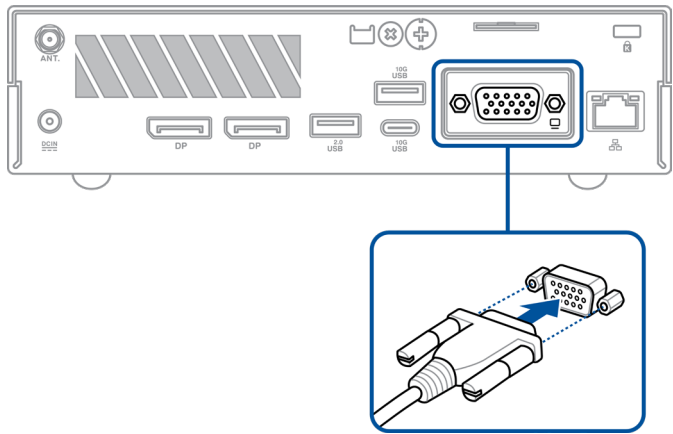


For selected models

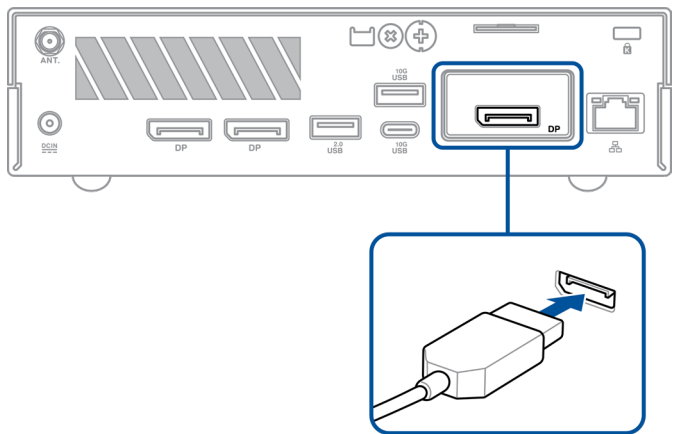
HDMI port



VGA port



DisplayPort



USB Type-C® specifications:

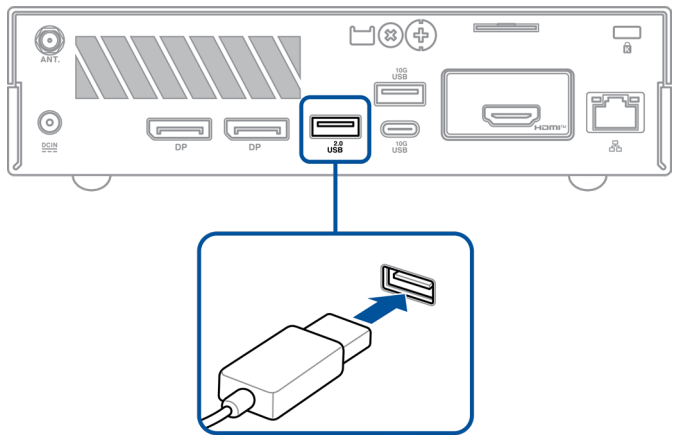
Port	Details	
USB 20Gbps	Type-C® output support	DP2.1 (UHBR10)
	Power over Type-C®	15W (output)
	Power profile support	5V @ 3A (output)
USB 10Gbps	Power over Type-C®	15W (output)
	Power profile support	5V @ 3A (output)
	Power delivery input*	100W (20V @ 5A) (input)

*** IMPORTANT!** To prevent any damage, use only power sources rated 20V/5A to charge your Mini PC with the USB Power Delivery combo port. For more information, consult an ASUS service center for assistance.

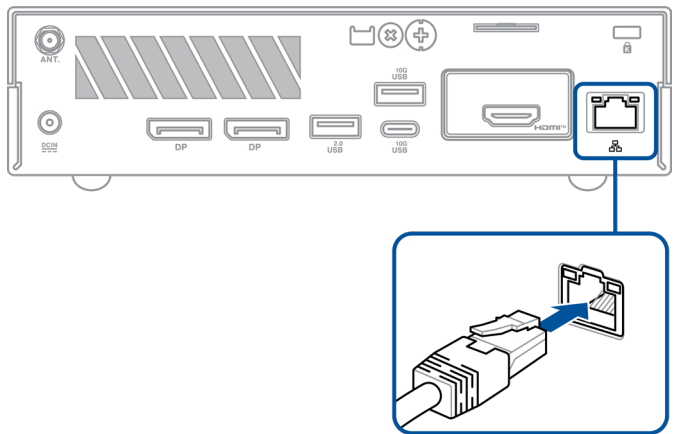
Display resolution table:

Port		Video Output	Max. Resolution
14.	DisplayPort	DisplayPort 1.4 (HBR3)	4K (3840 x 2160) @ 120Hz
3.	USB 20Gbps Type-C®	DisplayPort 2.1 (UHBR10)	4K (3840 x 2160) @ 144Hz
17.	VGA	N/A	4K (1920 x 1080) @ 60Hz
	HDMI	HDMI 2.1 (FRL8)	4K (3840 x 2160) @ 60Hz
	DisplayPort	DisplayPort 1.4 (HBR3)	4K (3840 x 2160) @ 60Hz

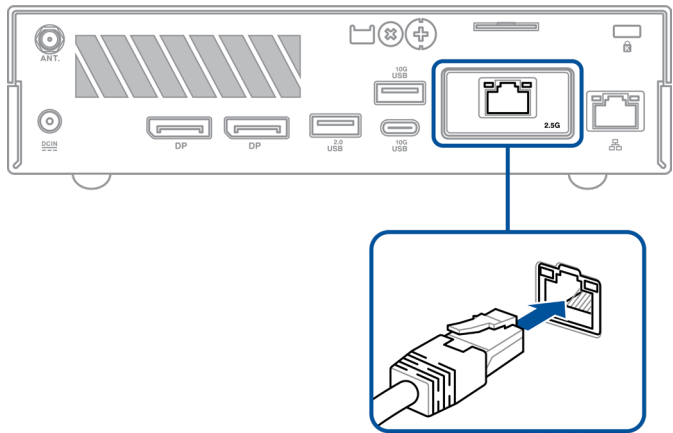
Connecting the keyboard and mouse



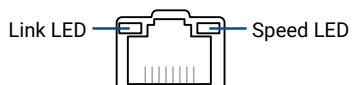
Connecting the LAN cable



For selected models



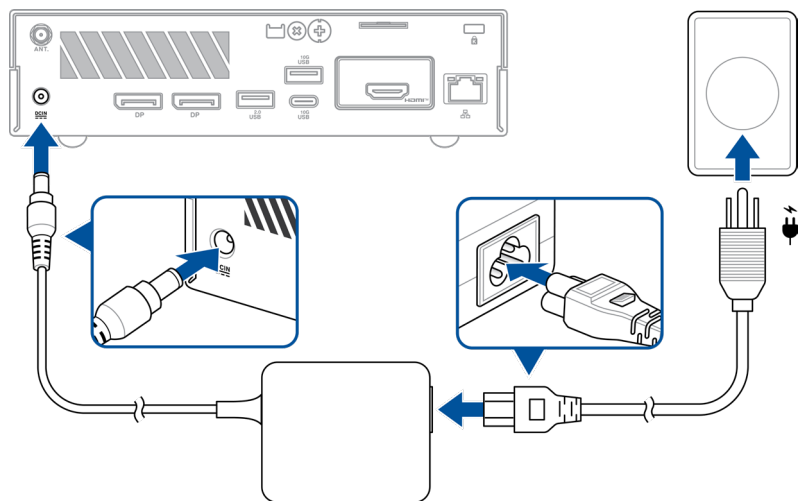
LAN port LED indications:



Link LED	
Status	Description
OFF	No link
GREEN	Linked
BLINKING	Data activity

Speed LED	
Status	Description
OFF	100 Mbps / 10 Mbps connection
YELLOW	1 Gbps connection
GREEN	2.5 Gbps connection

Connecting the power adapter



NOTE:

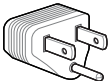
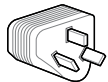
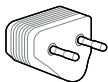
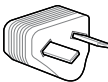
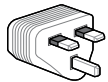
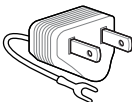
- Please refer to the following for more information on the adapter and the system:

Power adapter

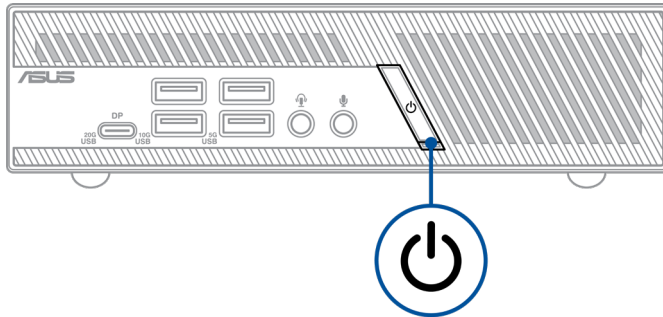
Specifications	120W	90W
Input voltage	90-264 Vac	100-240 Vac
Input frequency	50-60 Hz	50-60 Hz
Output current	6 A (120.0 W)	4.62 A (90.0 W)
Output voltage	20 Vdc	19.5 Vdc
Rated for use	0°C and 35°C (32°F and 95°F)	

System

- Rated input current: 6 A; rated input voltage: 20 Vdc
 - Rated input current: 4.62 A; rated input voltage: 19.5 Vdc
 - Operating temperature: 0°C to 35°C (32°F to 95°F)
- Operating this system in an environment that exceeds 50°C (122°F) may cause the system time shown in the BIOS to deviate by more than 3 seconds.

Plug	Code	Country
	US	United States
	CN	China
	EU	European Union
	AU	Australia
	UK	United Kingdom
	JP	Japan (Type-A)
	IN	India

Powering on the system



NOTE: To view the current power management settings in Windows® 11, click the **Start** button. Type *Power Management*, then press <Enter>.

Default settings on a new system, as received, has the recommended settings (below) applied.

NOTE: This section only applies to the Mini PC, and is not applicable to the Kit.

BIOS settings

NOTE: Enter BIOS Setup by pressing <F2> during startup. If you're using this system at home, it is unlikely you will need to alter these settings.

- CPU Fan Detection and Speed - Set to automatic.
- After Power Failure - System stays off; press the power button to restart.
- S3 State Indicator - Power light on the front of the system will blink on and off. (This is sleep mode)
- Wake-on-LAN S4/S5 - System will power up to a normal boot. (This is for IT departments)

Operating System Settings (Windows® 11)

- Turn Off the Display - 5 Minutes. (Your monitor will go blank)
- Put the Computer to Sleep - Within 5 minutes of user inactivity.

To Wake Your Computer

- To wake your system up from display sleep or HDD power off
- Put the Computer to Sleep - Within 5 minutes of user inactivity.

Managing power modes

Putting your Mini PC system to the Off mode with fast startup enabled

You can put your Mini PC system to the Off mode with fast startup enabled:

Enter **Control Panel** in the search bar and open it (**View by: Category**), select **Hardware and Sound > Power Options > Choose what the power button does**, click **Change settings that are currently unavailable**, select **Turn on fast startup (recommended)** and click **Save changes**.

- Launch the Start menu, select the power icon then select **Shut down** to do a normal shutdown.
From the log-in screen, select the power icon then select **Shut down**.
- Press <Alt> + <F4> to launch Shut Down Windows. Select **Shut down** from the drop-down list then select **OK**.
If your Mini PC system is unresponsive, press and hold the power button for at least four (4) seconds until your Mini PC system turns off.

Putting your Mini PC system to sleep

You can put your Mini PC system to Sleep mode in two ways:

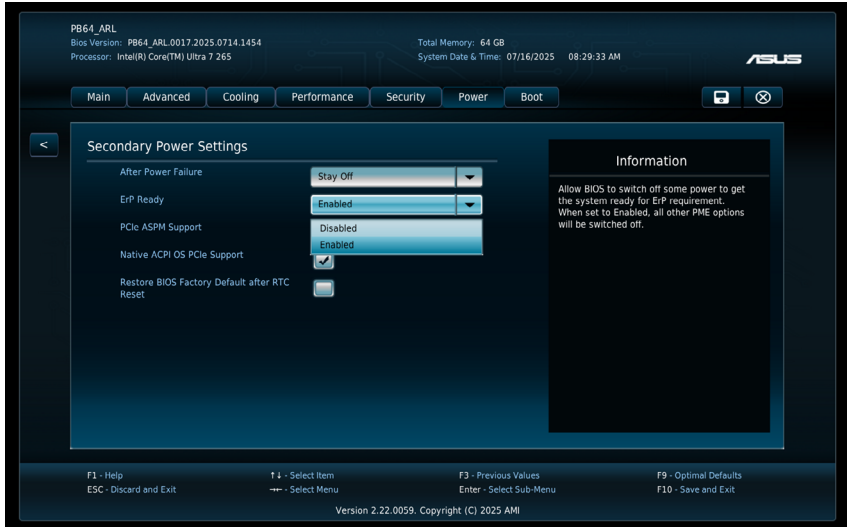
- Launch the Start menu, select the power icon then select **Sleep** to put your Mini PC system to sleep.
From the log-in screen, select the power icon then select **Sleep**.
- Press <Alt> + <F4> to launch Shut Down Windows. Select **Sleep** from the drop-down list then select **OK**.

NOTE: You can also put your Mini PC system to Sleep mode by pressing the power button once.

Putting your Mini PC system to the lowest power mode

You can put your Mini PC system to the lowest power mode by following the steps below:

1. Enter BIOS setup by pressing <F2> or during the boot process.
2. Go to **Power > Secondary Power Settings > ErP Ready**, and select **Enabled**.



3. Enter **Control Panel** in the search bar and open it (**View by: Category**), select **Hardware and Sound > Power Options > Choose what the power button does**, click **Change settings that are currently unavailable**, clear **Turn on fast startup (recommended)** and click **Save changes**.
4. Launch the Start menu, select the power icon then select **Shut down** to do a normal shutdown.
From the log-in screen, select the power icon then select **Shut down**.
5. Press <Alt> + <F4> to launch Shut Down Windows. Select **Shut down** from the drop-down list then select **OK**.

If your Mini PC system is unresponsive, press and hold the power button for at least four (4) seconds until your Mini PC system turns off.

Enabling fast startup

You can shut down the your Mini PC system with fast startup enabled.

To enable fast startup in Shutdown settings:

Enter **Control Panel** in the search bar and open it (**View by: Category**), select **Hardware and Sound > Power Options > Choose what the power button does**, click **Change settings that are currently unavailable**, select **Turn on fast startup (recommended)** and click **Save changes**.

NOTE: If fast startup is disabled, when you shut down the your Mini PC system, it shuts down to the S5 power state.

Component integration guide

IMPORTANT! ASUS is not responsible for direct, indirect, intentional or unintentional damages resulting from improper installation and operation.

Safety precautions

- This device is intended for use in ambient temperatures between 0°C and 35°C (32°F and 95°F). Avoid using or storing next to heat sources, in direct sunlight, or outside the intended temperature ranges.
- Do not use this product near water or a heated source.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0°C and 35°C.
- Failure to use the included power adapter shall violate regulatory compliance requirements and may expose the user to safety hazards.
- Risk of electric shock, fire, or burn if using an AC adapter other than the one provided with this device. Indoor use only and in dry locations. The adapter is rated for use between 0°C and 35°C (32°F and 95°F).
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.
- The power supply cord must be plugged into a socket or outlet that is provided with a suitable earth ground.
- This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.
- Do not install this equipment at a height exceeding 2 meters.

Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned off, a small amount of electrical current still flows. Always unplug the power cord from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
 - The power cord or plug is damaged.
 - Liquid has spilled into the system.
 - The system does not function properly even if you follow the operating instructions.
 - The system was dropped, or the cabinet is damaged.
 - The system performance changes.
- Avoid contact with hot components inside the Mini PC. During operation, some components become hot enough to burn the skin. Before you open the computer cover, turn off the computer, disconnect the power, and wait approximately 30 minutes for the components to cool.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

Before you begin

1. Read the entire manual before starting any service procedures and follow all instructions.
2. Back up your Mini PC system.
3. Turn off your Mini PC system.
4. Place your Mini PC system on a stable surface.
5. Disconnect all connected peripherals and cables.

IMPORTANT!

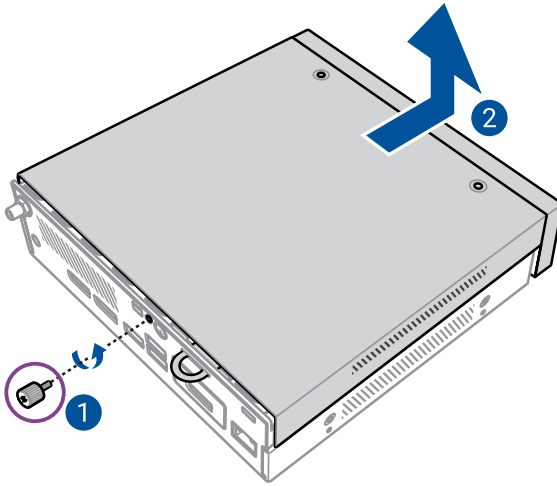
- Purchase replacement components from an authorized retailer of this Mini PC system to ensure maximum compatibility and reliability.
 - Refer to <https://www.asus.com> for a list of compatible components.
-

NOTE:

- The illustrations are for reference only.
 - Product and component images are for illustrative purposes only. The actual appearance and specifications may vary depending on the model.
 - Keep all adhesive tape, insulating materials, screws, and other removable items in a safe place until the service procedure is completed, as they may be needed during installation.
-

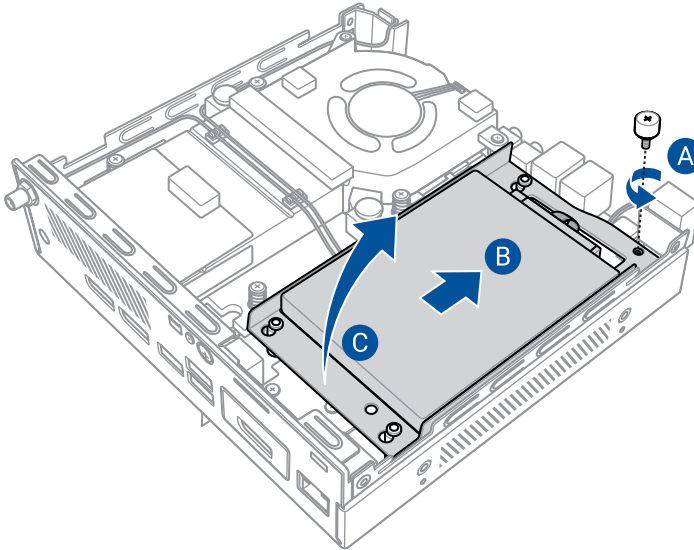
Opening system

1. Remove the thumbscrew from the rear panel.
2. Push the top cover towards the front to remove the top cover.

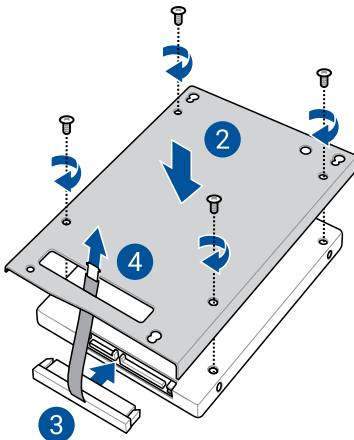


HDD/SSD installation

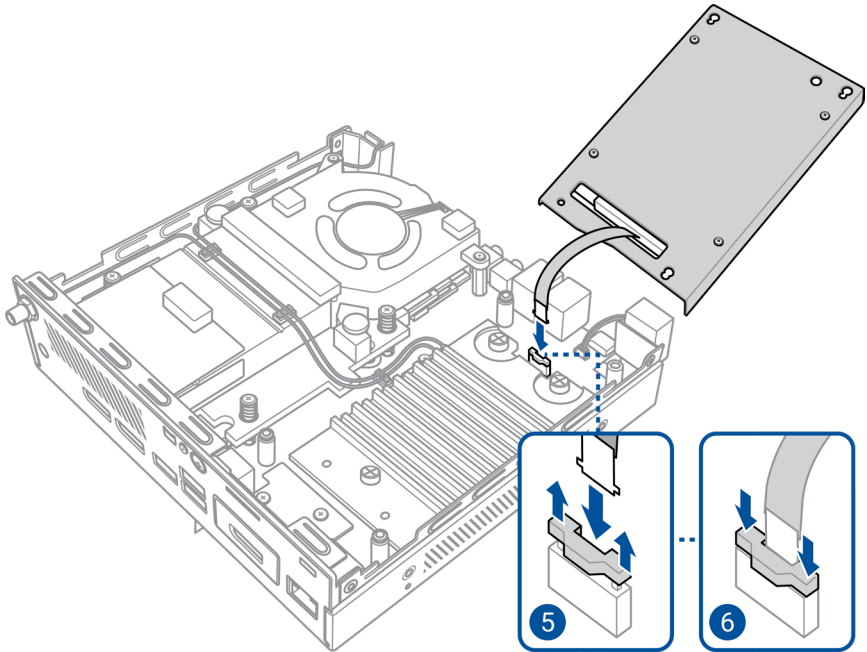
1. Remove the thumbscrew securing the storage bay (A), push the storage bay towards the front of the chassis (B) then lift it to remove it from the chassis (C).



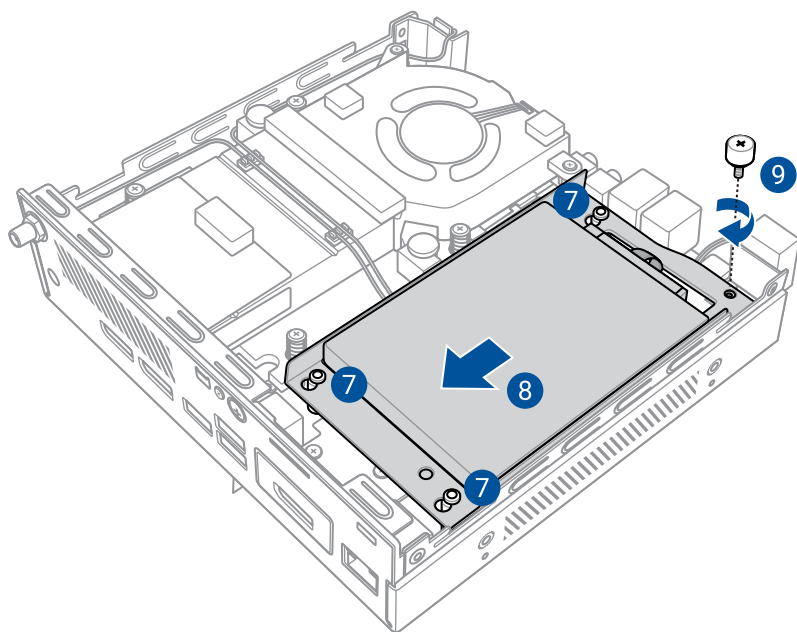
2. Insert your HDD or SSD into the storage bay, then secure it with four (4) screws.
3. Connect the SATA cable to the HDD or SSD.
4. Route the SATA cable through the storage bay slot as shown.



5. Lift the clip on the SATA connector, and connect the SATA cable to the SATA connector.
6. Push the clip down to secure the cable.



7. Align the storage bay's three (3) slotted holes with the standoffs in the chassis, and place the storage bay into the chassis.
8. Slide the storage bay towards the rear of the chassis until it is securely seated in place.
9. Secure the storage bay to the chassis using the thumbscrew removed earlier.



M.2 installation

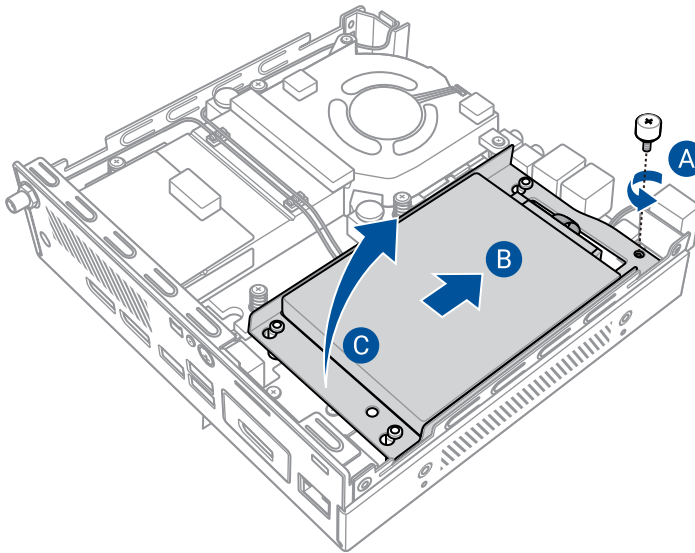
This system supports the following:

- Two M.2 PCIe Gen4x4 slots supporting M.2 22x80 (key type M) for NVMe SSDs
- One M.2 slot supporting M.2 22x30 (key type E) for Wi-Fi modules

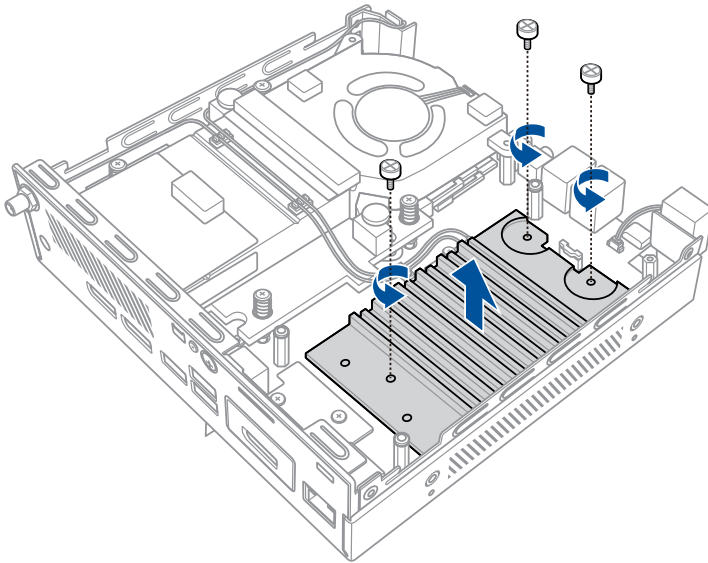
Find compatible and validated M.2 modules in the ASUS Qualified Vendor List at www.asus.com/support.

2280 M.2

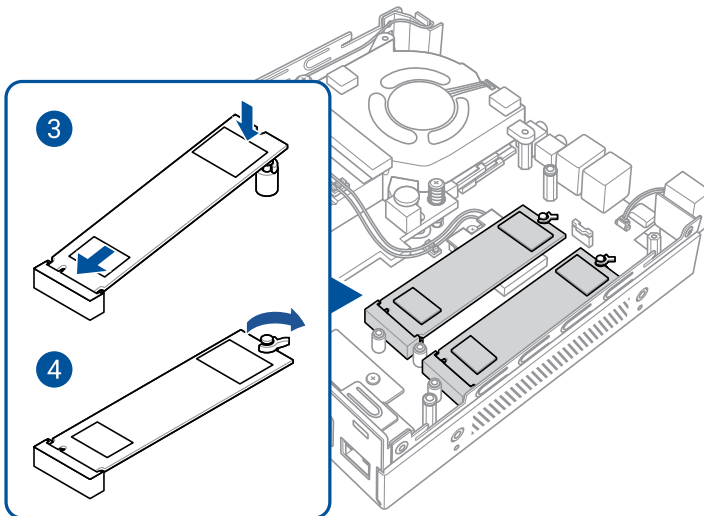
1. Remove the thumbscrew securing the storage bay (A), push the storage bay towards the front of the chassis (B) then lift it to remove it from the chassis (C).



2. Remove the three (3) screws securing the heatsink to the chassis, and remove the heatsink.

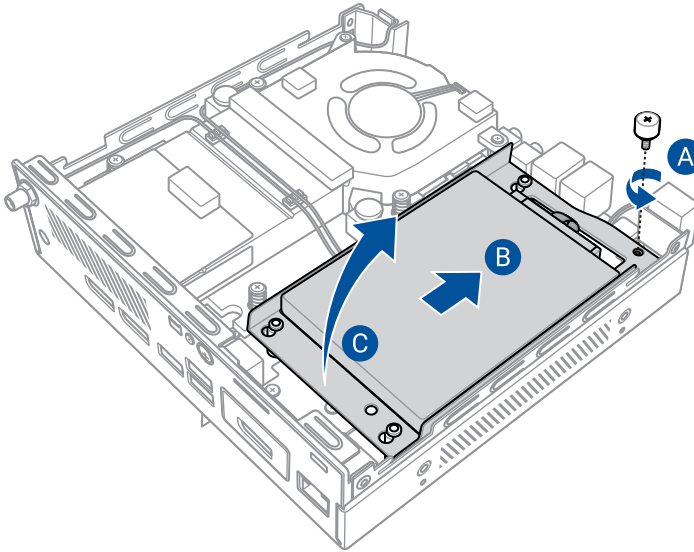


3. Insert an M.2 module into one of the two 2280 M.2 slots on the system board.
4. Rotate the Q-Latch counterclockwise to secure the M.2 module in place.

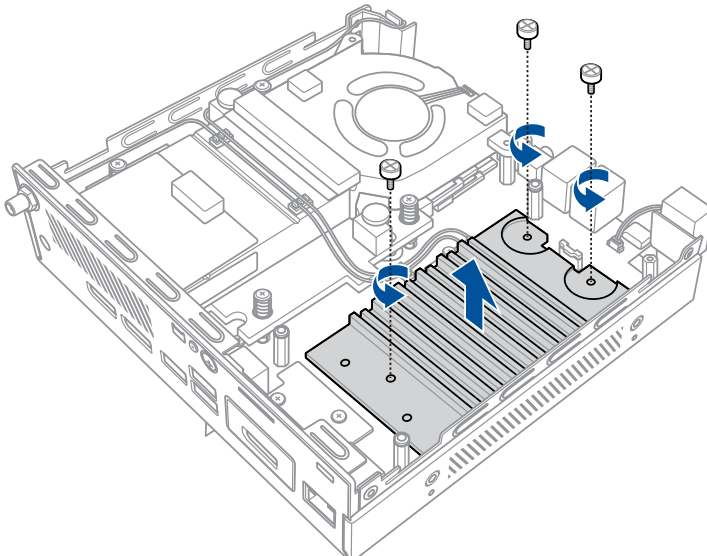


2230 M.2

1. Remove the thumbscrew securing the storage bay (A), push the storage bay towards the front of the chassis (B) then lift it to remove it from the chassis (C).



2. Remove the three (3) screws securing the heatsink to the chassis, and remove the heatsink.



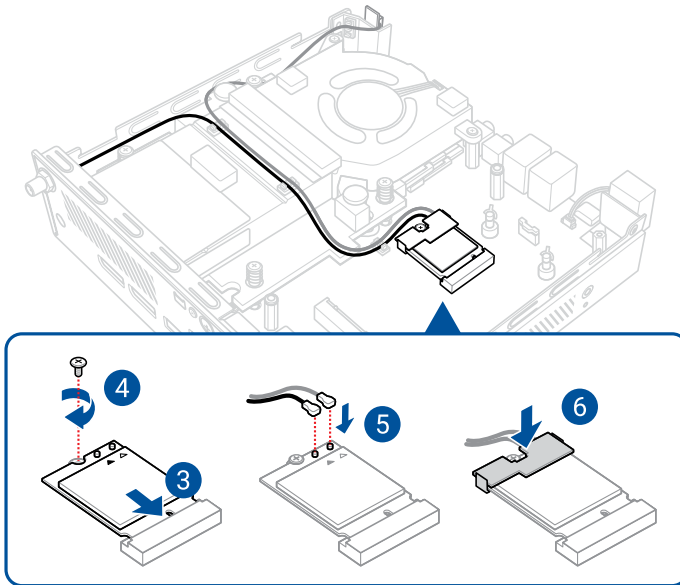
3. Insert an M.2 module into the 2230 M.2 slot on the system board.

4. Secure the M.2 module with a screw.
 5. (Optional) Connect the antennas to your M.2 module.
-

NOTE:

- Connecting antennas to your M.2 module may strengthen the wireless signal.
 - A soft clicking sound indicates that the antenna has been securely attached on the module.
-

6. (Optional) Align the protective cover as shown and carefully slide it over the RF cables.

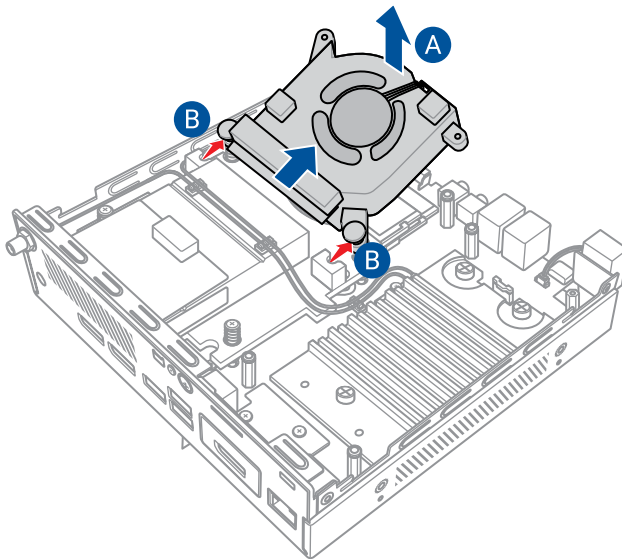


Memory module installation

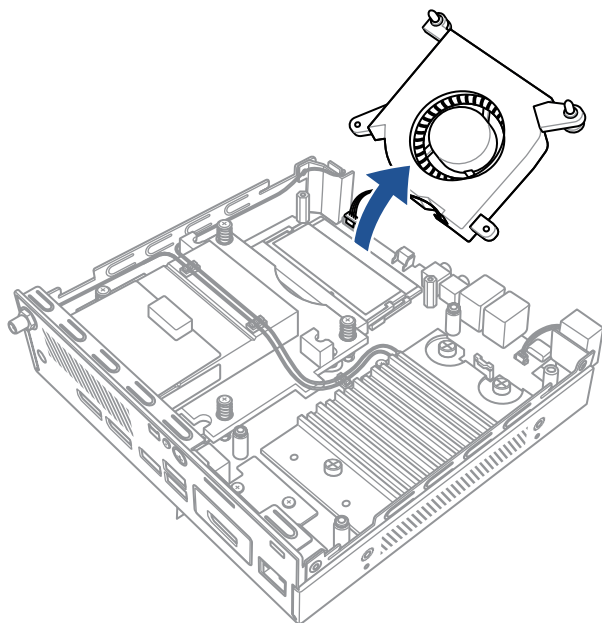
To install memory, be sure to select memory modules that meet these requirements:

- 1.1V low voltage memory
 - DDR5 4800/5600 MHz SO-DIMMs
DDR5 4800/5600/6400 MHz CSO-DIMMs
 - Non-ECC
 - Up to 64 GB of system memory with two 32 GB memory modules
- Find compatible and validated memory modules in the ASUS Qualified Vendor List at www.asus.com/support.

1. Lift the edge of the fan that is close to the front of the chassis (A), and slide the two (2) anti-vibration grommets on the fan out from the grommet slots (B).

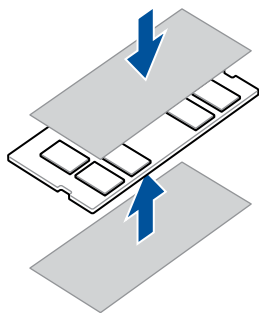


2. Flip the fan over towards the rear of the chassis, but do not remove the fan completely.

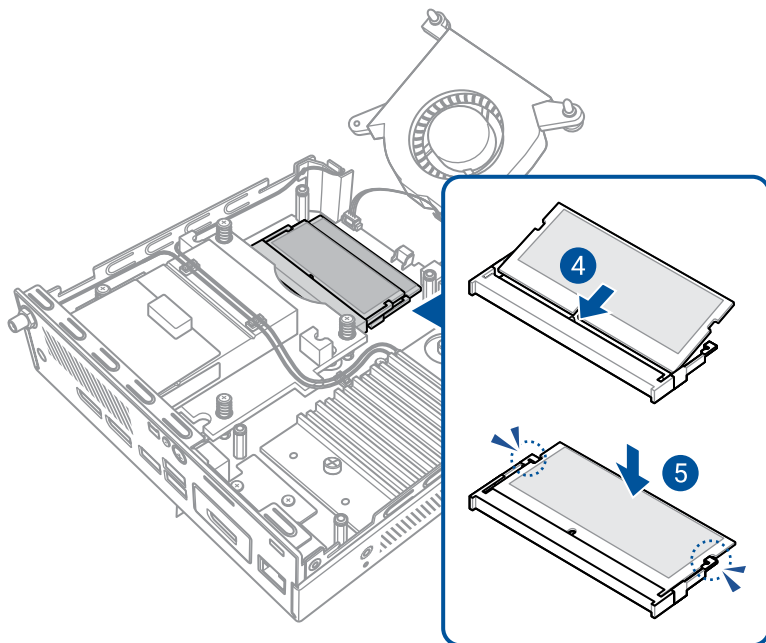


3. Prepare the memory module by applying the bundled EMI shielding tape to both sides, ensuring complete coverage of all RAM chips as shown.

NOTE: To improve bond strength, ensure that you apply firm pressure along the tape on both sides of the memory module, in particular to the corners and edges to prevent lifting or peeling.

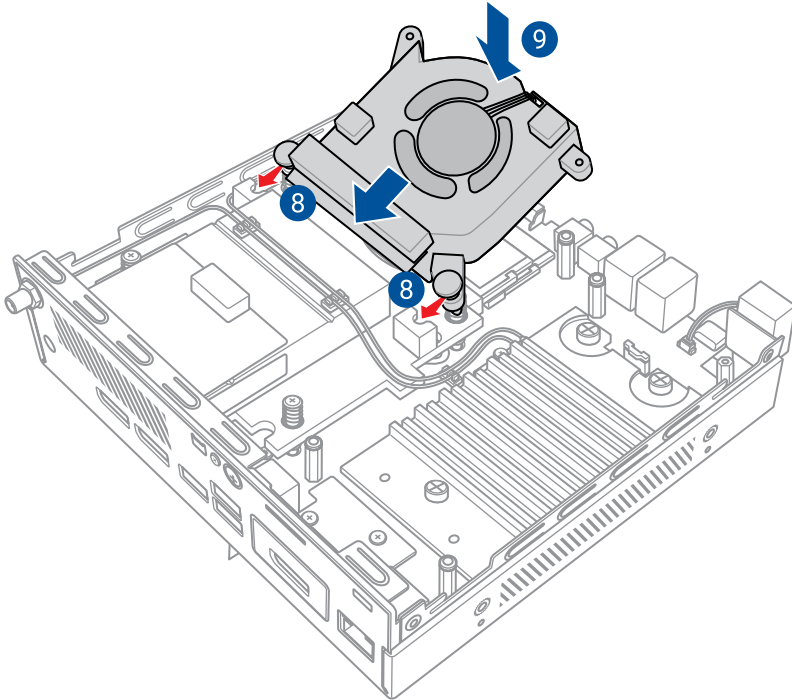


4. Align the small space at the bottom edge of the memory module with the key on the SO-DIMM/CSO-DIMM slot, then insert the memory module into the slot.
5. Push the memory module down until the retaining clips click into place.



6. Repeat the same steps to install a second module.
7. Flip the fan over towards the front of the chassis.

8. Align and then slide the two anti-vibration grommets on the fan into the grommet slots.
9. Press the fan down firmly until the two protruding tabs lock securely onto the two standoffs on the system board.

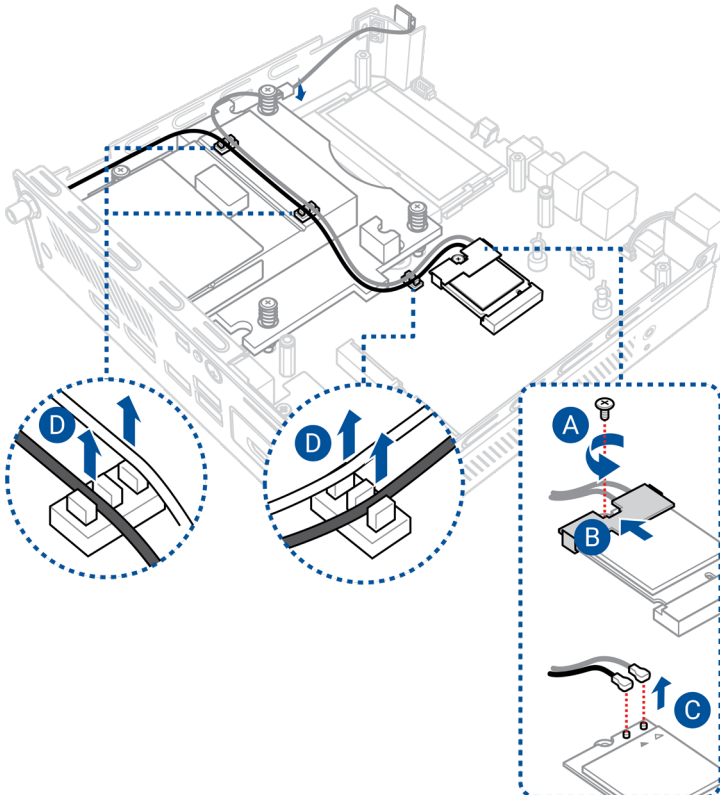


CPU installation

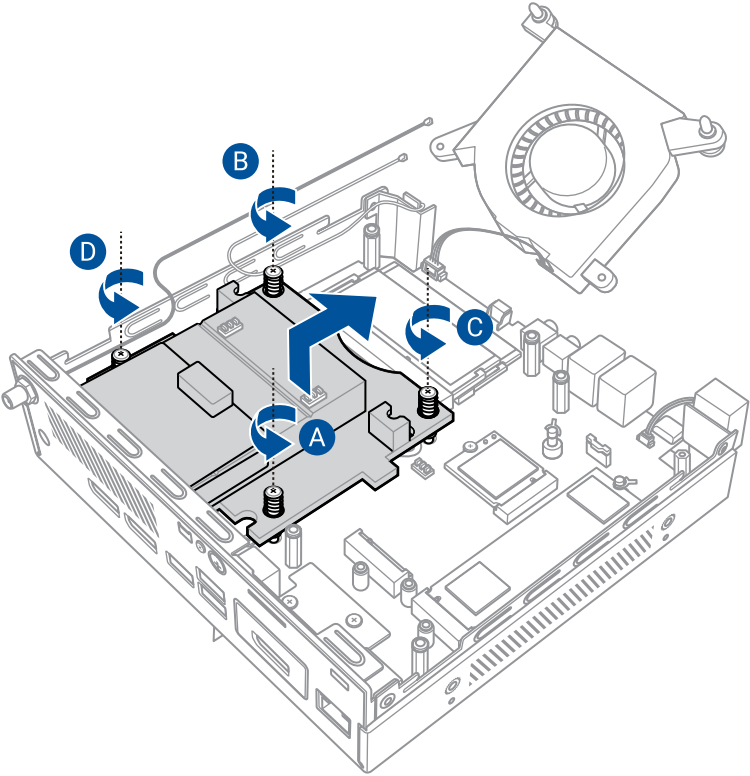
IMPORTANT!

- Only ASUS-authorized technicians should remove and install the system board and mechanical parts inside your Mini PC. Please refer to the terms and conditions in the warranty card.
- Visit an authorized ASUS service center or retailer for information on CPU upgrades for your Mini PC.
- Find compatible and validated CPUs in the ASUS Qualified Vendor List at www.asus.com/support.

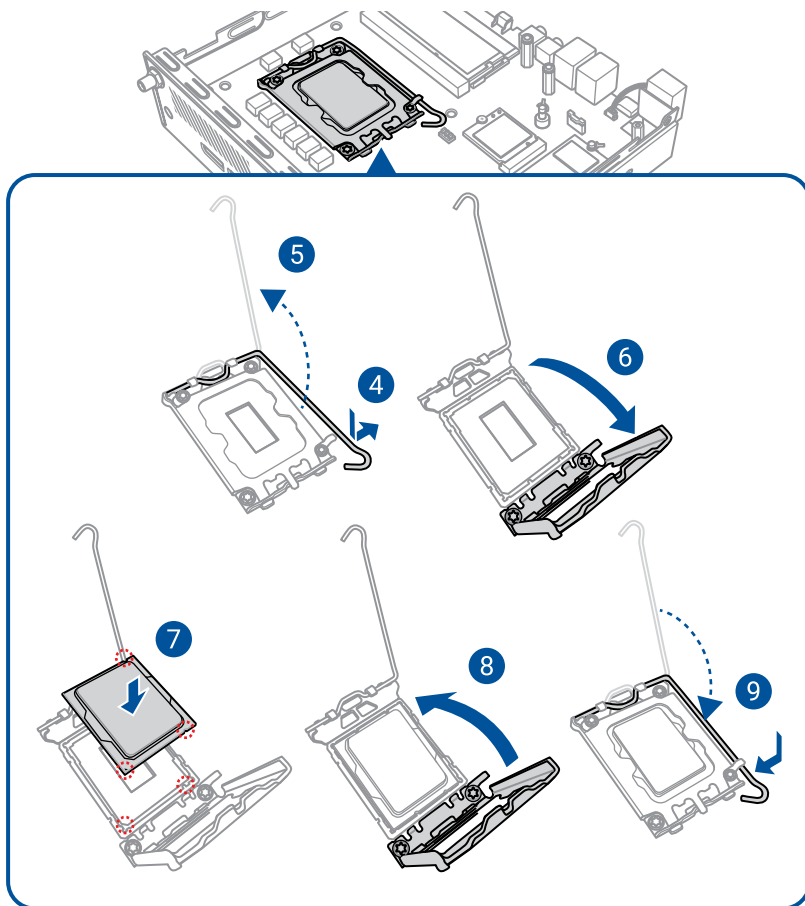
1. Follow steps 1 - 3 in the *Memory module installation* section to move the fan module out of the way.
2. (Optional) If a wireless card is installed, remove the screw securing the wireless card (A), remove the wireless card protective cover (B), disconnect the antenna cables from the wireless card (C), and remove the antenna cables from the cable holder clips (D).



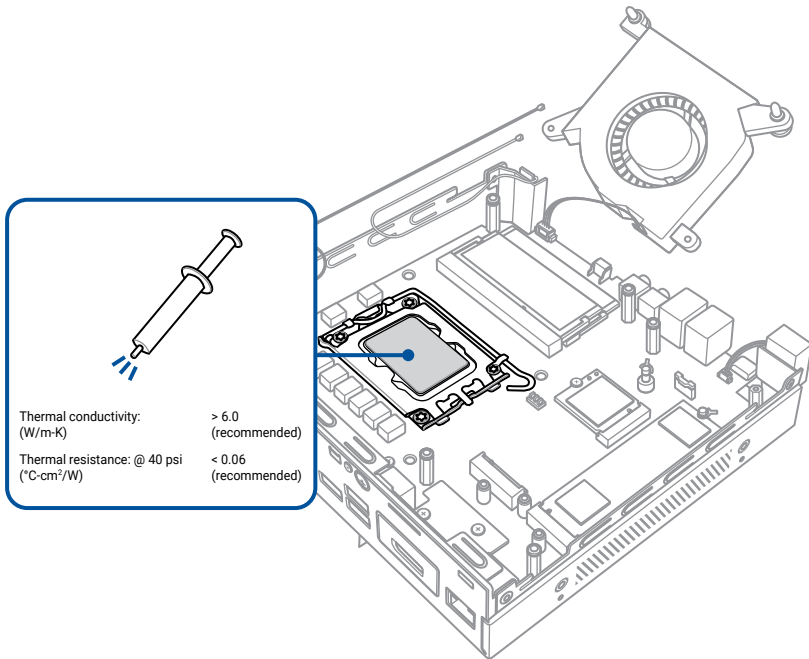
3. Loosen the four (4) captive screws securing the CPU backplate one by one in the reverse numerical order etched on the backplate.



4. Press the load lever on the CPU socket down and to the right with your thumb until it is released from the retention tab.
5. Lift the load lever all the way up.
6. Rotate the load plate open as shown.
7. Position the CPU above the socket, ensuring that the gold triangle mark is on the bottom-left corner of the socket, then fit the CPU notches to the socket's alignment keys.
8. Close the load plate.
9. Push down the load lever, and secure it in place with the retention tab.



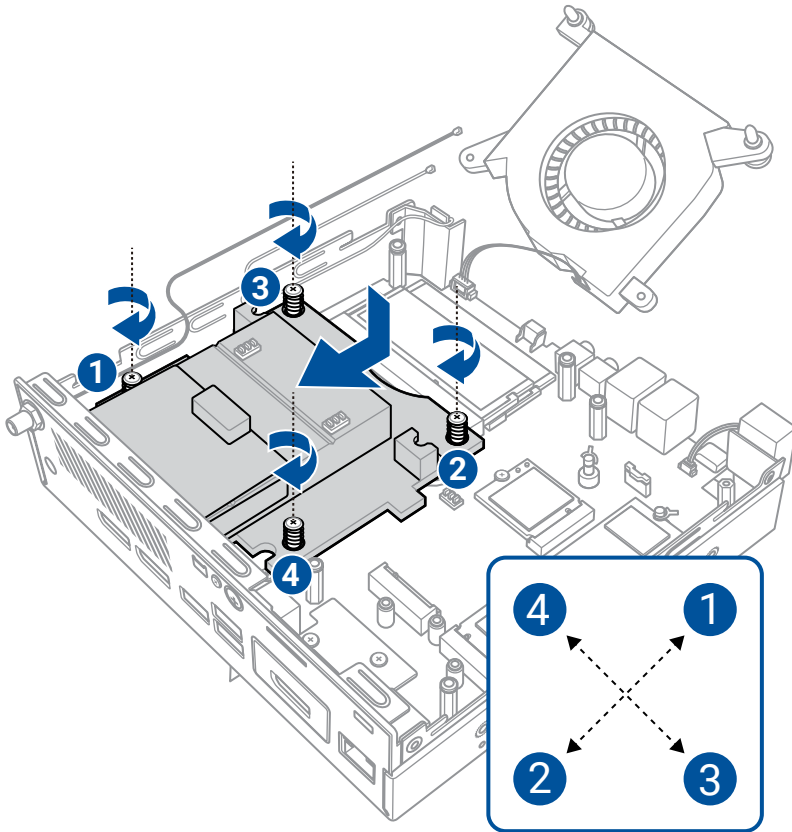
10. Wipe the CPU surface clean with an anti-static cloth. Apply several drops of Thermal Interface Material (TIM) to the exposed area of the CPU that will be in contact with the heatsink. Ensure that it is spread in an even thin layer.



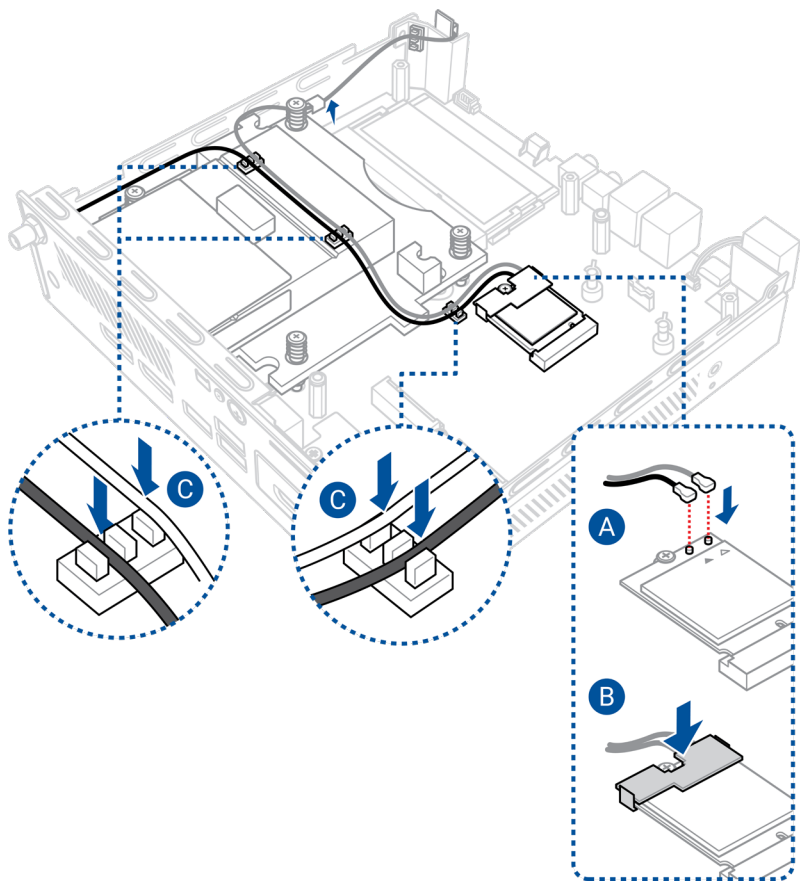
WARNING! The TIM is toxic and inedible. DO NOT eat it. If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help.

IMPORTANT! To prevent contaminating the TIM, DO NOT spread it with your finger.

11. Align and place the CPU backplate over the screw holes.
12. Secure the CPU backplate by tightening the four (4) captive screws one by one following the numerical order etched on the CPU backplate.



13. (Optional) Reconnect the antenna cables to your wireless card (A), carefully slide the protective cover over the RF cables (B), and organize your antenna cables with the cable holder clips (C).



Closing system

1. Replace the top cover and push it towards the rear.
2. Once in place, secure it with the thumbscrew removed earlier.

