JITENG 极腾科技

Mini PC

IT/XT/GT - Mega Series

Applicable model: IT1 Mega   XT1 Mega   GT1 Mega

User Manual

Revision History

Revised Version	Revision History	Date
1.0	Initial release of GEEKOM Mini PC IT/XT/GT-Mega series user manual	September 2024

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Contents

Chapter 1: Getting to Know Your Mini PC

Chapter 2: Using Your Mini PC

Chapter 3: Upgrading Your Mini PC

Chapter 4: TPM

Appendix

About This User Manual

This user manual provides an overview of the hardware settings and software features of the Mini PC. It is organized into the following chapters:

Chapter 1: Getting to Know Your Mini PC

This chapter introduces the hardware components of the Mini PC.

Chapter 2: Using Your Mini PC

This chapter covers the basic operations of the Mini PC.

Chapter 3: Upgrading Your Mini PC

This chapter provides information on upgrading the memory module, wireless module, and hard drive/solid-state drive of your Mini PC.

Chapter 4: TPM

This chapter explains the relevant information about TPM.

Appendix

This chapter includes the statements and safety instructions of the Mini PC.

Prompt Description

The instructions for use of specific icons and information in the manual are as follows:

Important! This information contains important information that must be followed to complete the task.

Note: This information contains additional tips and helpful information to assist in completing the task.

Warning! This information contains vital information that must be followed to ensure user safety and avoid damage to the Mini PC's data or components.

Package Box Contents

Your Mini PC package box should include the following items:

Product packaging box

GEEKOM Mini PC

IT/XT/GT - Mega Series Products

Product

Power adapter*

AC power cable*

HDMI cable*

VESA bracket

Notes:

● Please visit https://www.geekompc.com to download the latest and most accurate product specifications.

● Images are for reference only. The actual product may vary by region.Please refer to the product you purchased.

● *The included power adapter may vary depending on the model and region.

● Accessories included with your Mini PC may differ based on the model. For detailed accessory information, please refer to the user manual of the specific model.

● During the warranty period, if the product or its accessories experience any fault under normal usage conditions, please contact a GEEKOM-authorized service center with your warranty card and the faulty product.

1

Getting to Know Your Mini PC

Appearance Overview

Front View
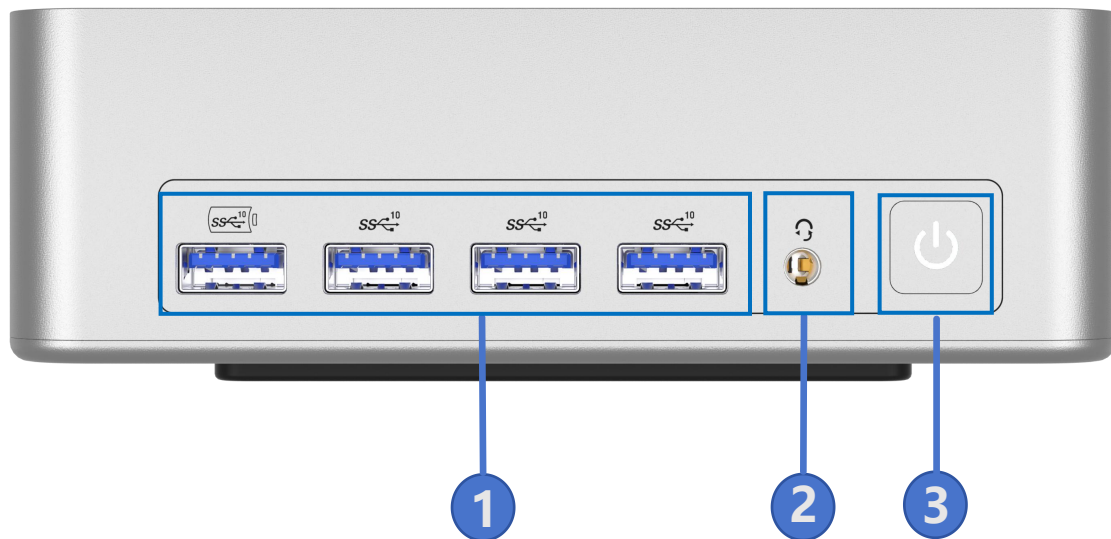
1 **USB 3.2 Gen2 Type-A Port**

This USB 3.2 Gen2 (Universal Serial Bus) port provides a transfer speed of up to 10Gbit/s.

2 **Headphone/Headset/Microphone Output Port (Optional)**

This port is used to connect audio output devices such as speakers or headphones. It can also be used to connect external microphones or other audio output devices.
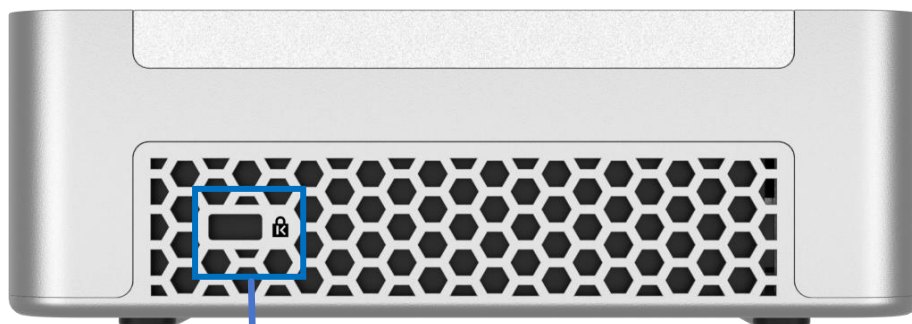
3 **Power Button**

This power button is used to turn the Mini PC on or off. You can also use it to put the Mini PC into sleep mode or press and hold it for approximately four seconds to force the Mini PC off.

Left View

Note: The left view of IT1/XT1/GT1 - Mega series products may vary with different models. Please distinguish according to the model.

IT1 Mega
GT1 Mega
Left view

XT1 Mega
Left view

1   **SD Card Slot**

This slot is designed to accommodate an SD card.

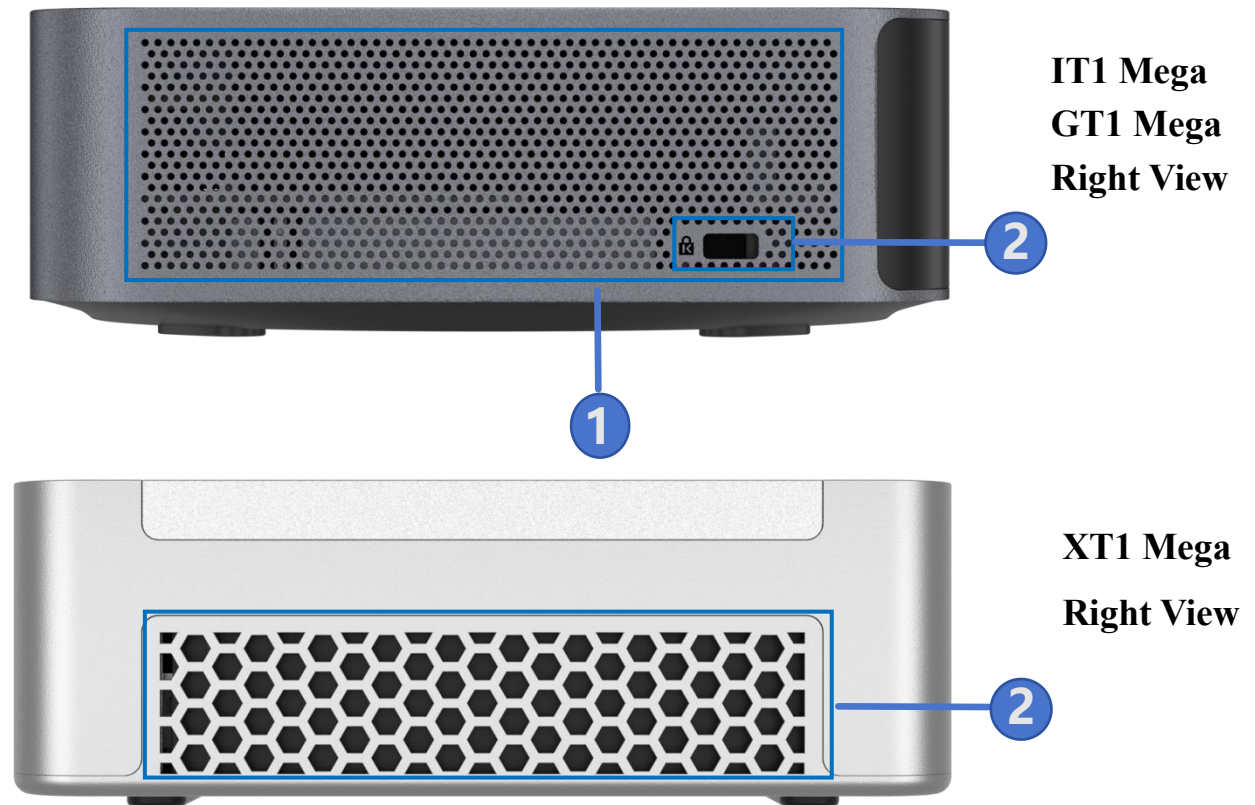Note: The SD card is optional and must be purchased separately.

2   **Kensington Security Slot**

The Kensington security slot allows you to secure your Mini PC with a compatible anti-theft lock.

Right View

Note: The right view of IT1/XT1/GT1 - Mega series products may vary with different models. Please distinguish according to the model.

IT1 Mega
GT1 Mega
Right View

XT1 Mega
**Right View**

1 Kensington Security Slot

The Kensington security slot allows you to secure your Mini PC with a compatible anti-theft lock.

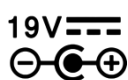**2 Ventilation Holes (Air Inlet)**

These ventilation holes allow cool air to enter the Mini PC.

Important! Do not block the ventilation holes with paper, books, clothing, cables, or any other objects to avoid overheating the device.

Rear View

1 Power Input Port

19V⎓
⊖-ⓒ-⊕
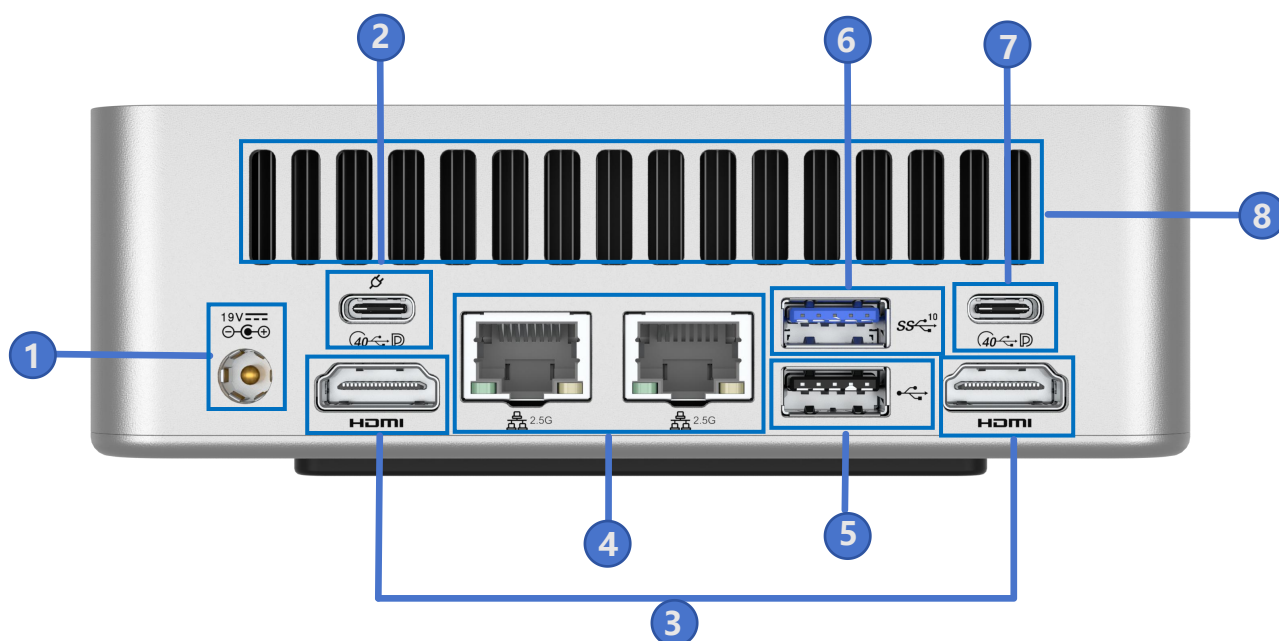
The power adapter converts AC power to DC power, which is supplied to your Mini PC via this port. To avoid damaging your Mini PC, always use the included power adapter.
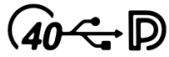
Important! The power adapter may heat up during operation. Please ensure it is not covered by any objects and keep it away from your body.

Note:
The power adapter may vary depending on the model and region. Refer to the following information for details:
120 W power adapter: +19V DC – 6.32A, 120W

2 USB4 + DP Port

This USB4 (Universal Serial Bus4) port provides the following features:

• Transfer speeds of up to 40 Gbit/s for USB4 devices.
• Supports DisplayPort 1.4 (resolution up to 7680x4320@60 Hz)
• Backward compatible with USB 3.2
• USB fast charging with an output of up to 5V/3A
• Supports connection to external devices that comply with the PD (Power Delivery) standard and provide a 20V/5A current output, offering power (DC) input.

Warning!
To avoid issues when powering on the Mini PC, do not connect the USB4 port to PD devices rated below 20V/5A when using it as a power (DC) input. Ensure the power cable is disconnected from the power input port when using the USB4 port for power (DC) input. When switching between the USB4 port and the power input port, make sure your Mini PC is turned off.
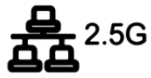
3 HDMI Port

The HDMI (High-Definition Multimedia Interface) port can connect to Full-HD display devices for an enhanced viewing experience, such as LCD monitors or screens.

Note: The maximum resolution for this port, when used as a display output source, supports up to 4096x2304@60 Hz. Resolution may vary depending on the cable and output device.

4   **Ethernet Port**

2.5G

This 8-pin network port supports a standard Ethernet cable to connect to a LAN. It also supports Wi-Fi 7 (up to 2500 Mbps) and Bluetooth 5.4 pairing.

5   **USB 2.0 Port**

This USB (Universal Serial Bus) port is compatible with USB 2.0 devices, such as keyboards, pointing devices, USB drives, external hard drives, speakers, cameras, and printers.

6   **USB3.2 Gen2**

SS 10

This USB 3.2 Gen2 (Universal Serial Bus) port provides a transfer speed of up to 10Gbit/s.

7   **USB4 + DP Port**

40 D

This USB4 (Universal Serial Bus4) port provides the following features:
• Transfer speeds of up to 40 Gbit/s for USB4 devices.
• Supports DisplayPort 1.4 (resolution up to 7680x4320@60 Hz)
• Backward compatible with USB 3.2
• USB fast charging with an output of up to 5V/3A

8   **Ventilation Holes (Air Outlet)**

These ventilation holes allow warm air to exit the Mini PC.

Important! Do not block the ventilation holes with paper, books, clothing, cables, or any other objects to avoid overheating the device.

2

Using Your Mini PC

Before You Start

Connecting the Power Adapter to Your Mini PC

Follow the steps below to connect the power adapter to your Mini PC:

A. Insert the DC power plug into the DC power jack on the Mini PC.

B. Connect the power cable to the AC power adapter.

C. Plug the AC power adapter into a 100V~240V power outlet.

Note: The appearance of the adapter may vary depending on the model and region.
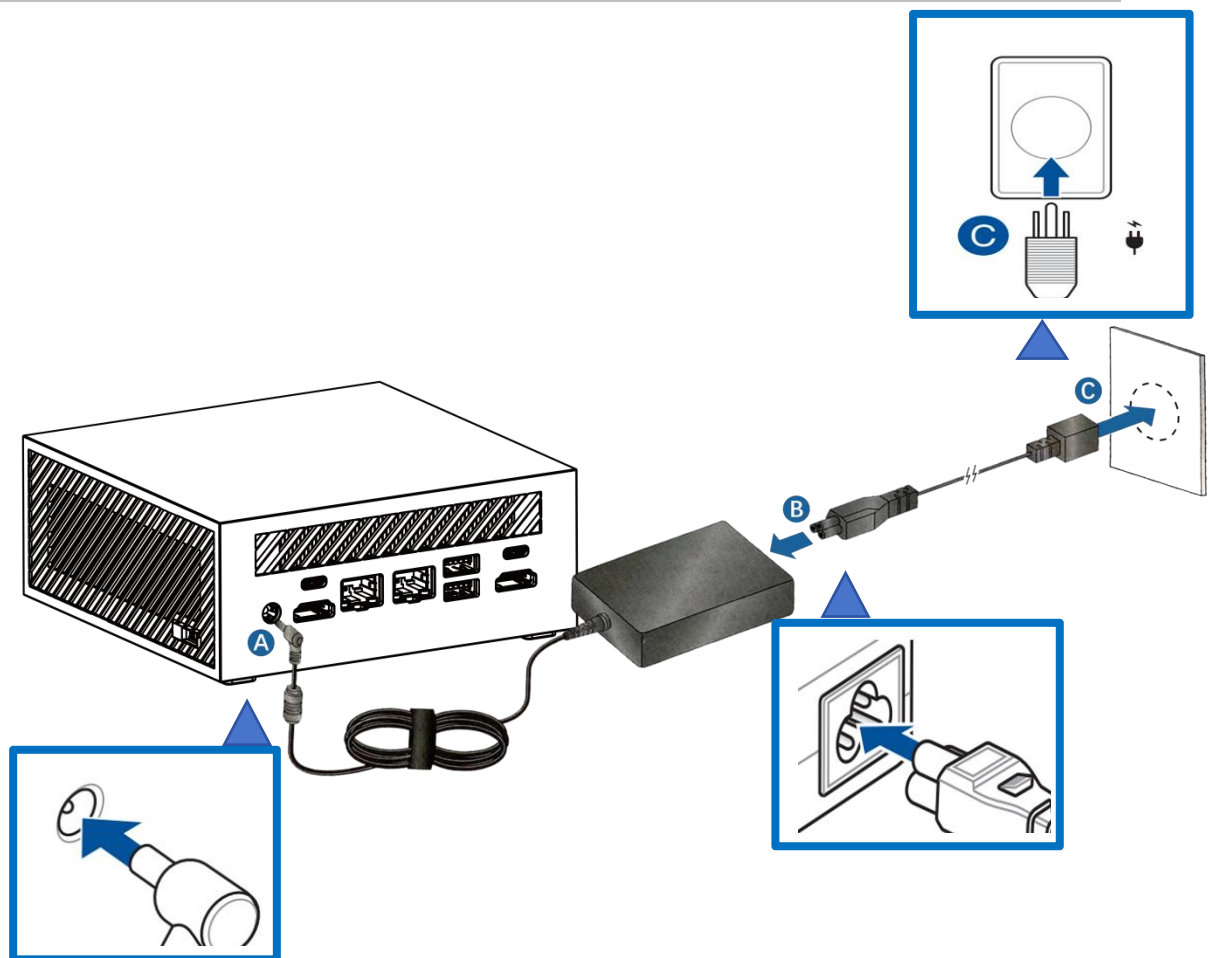
Note:

The power adapter may vary depending on the model and region. Refer to the following information for details:

<u>120 W power adapter</u>

- Input voltage: 100-240V AC
- Input frequency: 50-60Hz
- Output current (power): 6.32A (120W)
- Output voltage: 19V

Connecting a Screen to Your Mini PC

Your Mini PC features the following ports for connecting screens or projectors:

● 2×HDMI ports

● 2× USB4 multipurpose input/output ports

Notes:

● Depending on the model and optional configurations, you can connect and display up to 4 monitors simultaneously*.

● When the following ports are used exclusively for display output, the maximum supported resolutions are as follows:**

  - HDMI port

  Resolution up to 4096x2304@60Hz°

  - USB4 multi-purpose input/output ports

 Resolution up to 7680x4320@60Hz°.

* The product ports may vary by model. Please refer to the chapter Appearance Overview for port details.

** Maximum resolution may vary depending on the cable and output device.
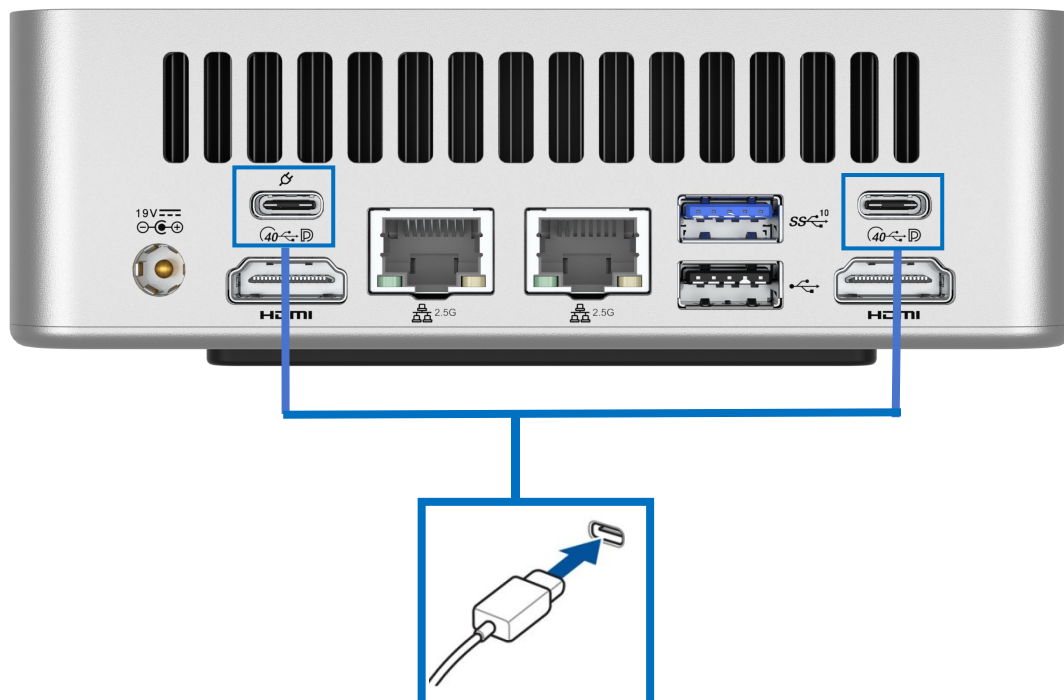

Please follow the instructions below to connect the screen to your **Mini PC**:

Connect one end of the HDMI cable or USB4 cable to the screen and the other end to the corresponding port on your Mini PC.

Connect a screen via HDMI port
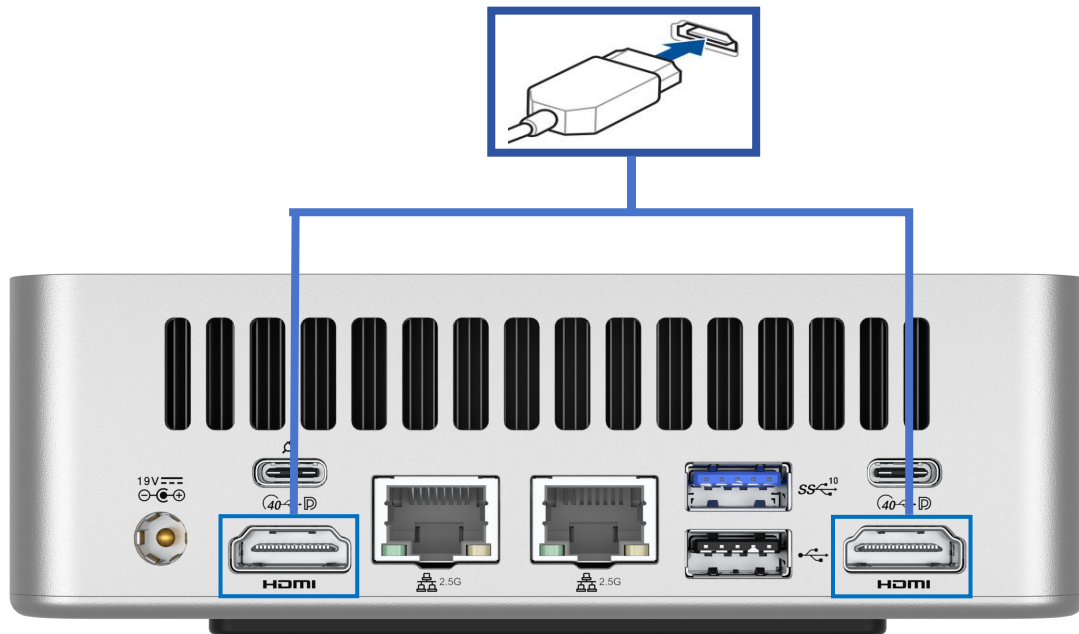
Connect a screen via USB4 multi-purpose input/output port

Connecting a USB Keyboard or Mouse

You can connect any USB keyboard or mouse to your Mini PC. Alternatively, you can connect a USB receiver to a wireless keyboard and mouse set.

Please connect the keyboard and mouse to your **Mini PC** according to the following instructions:

Connect the USB flat cable of the keyboard and mouse to any USB port on your Mini PC.

Note: Keyboard designs may vary depending on the region. Refer to the product you purchased.
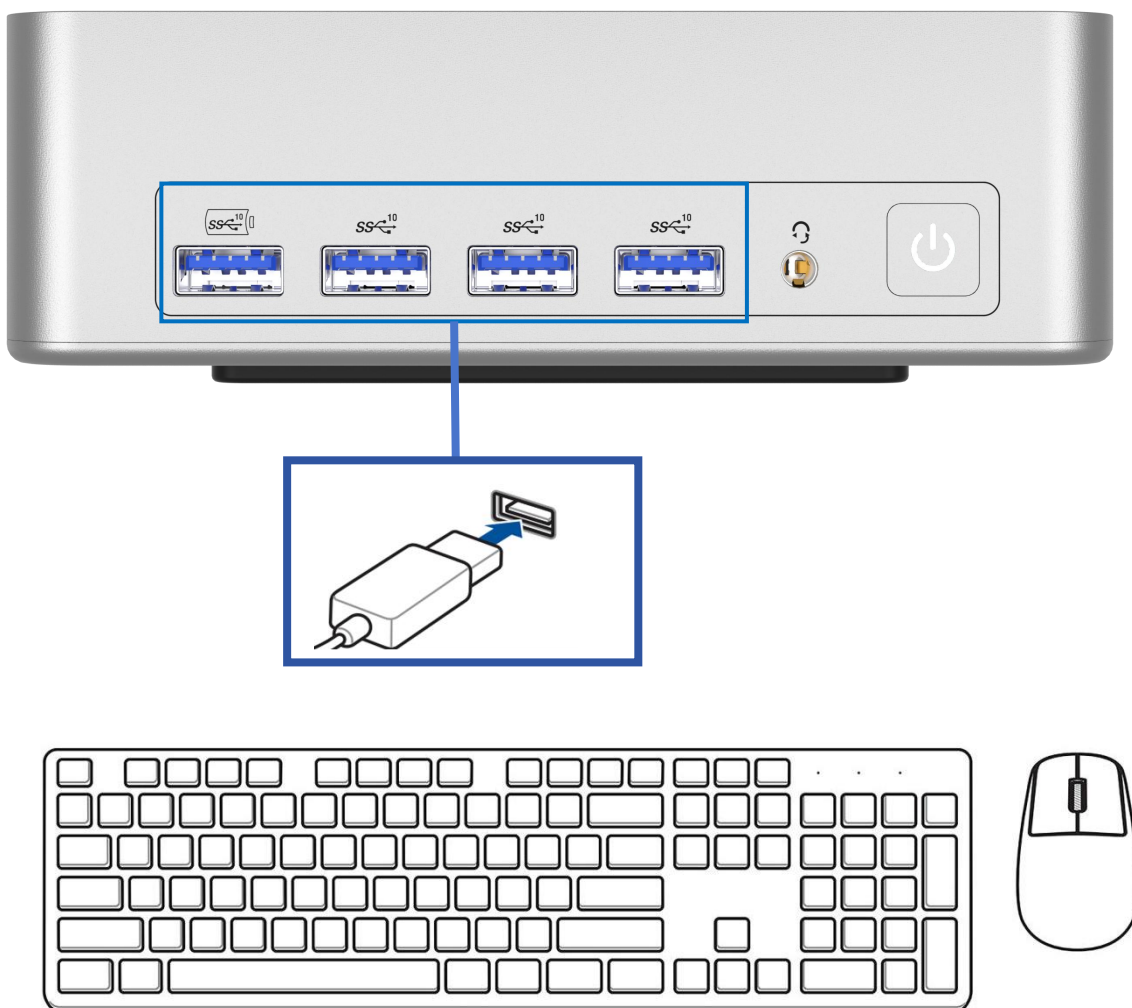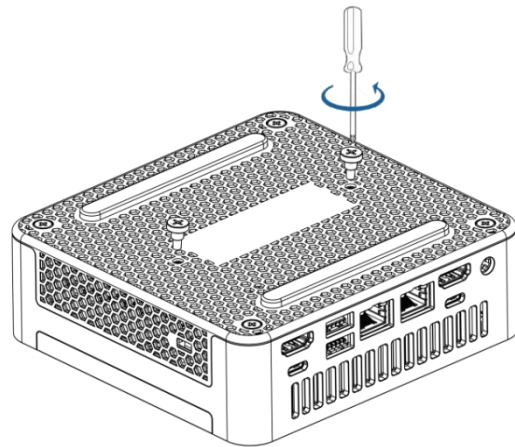
Attached VESA Installation

Attach the VESA bracket (included in the package box) to the back of a monitor. This allows you to securely hang the Mini PC on the back of the monitor, keeping your workspace tidy.
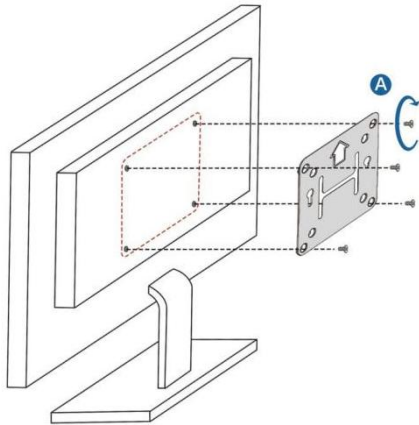
A. Install the VESA mount bracket on the back of the monitor with a VESA hole
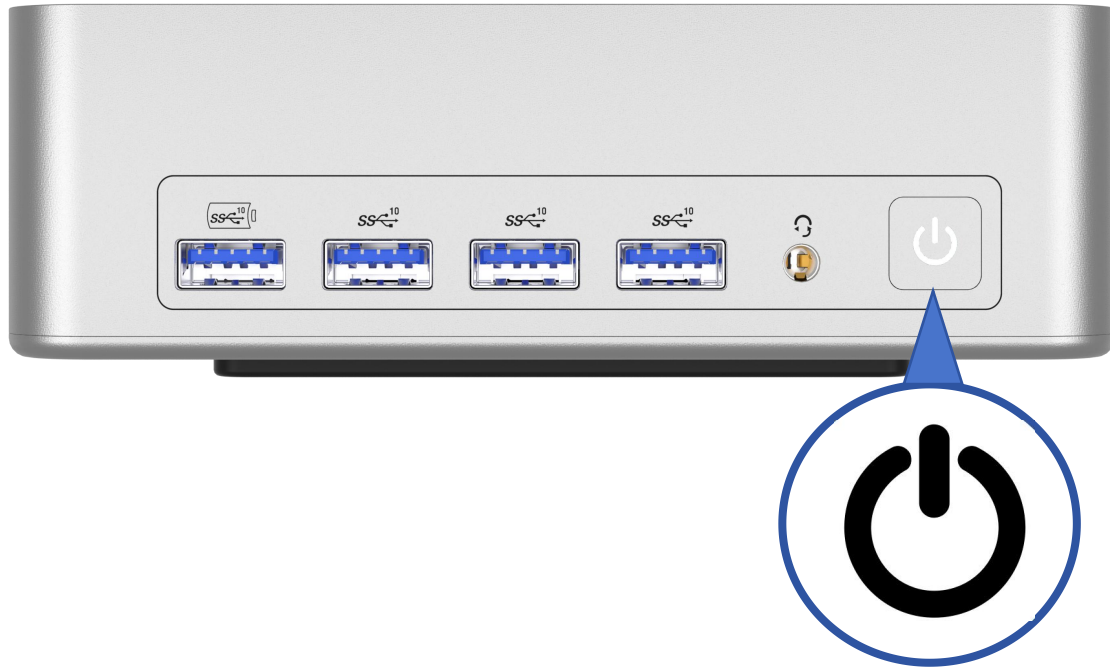
B. Screw the attached fixing screws into the corresponding holes of the bottom cover
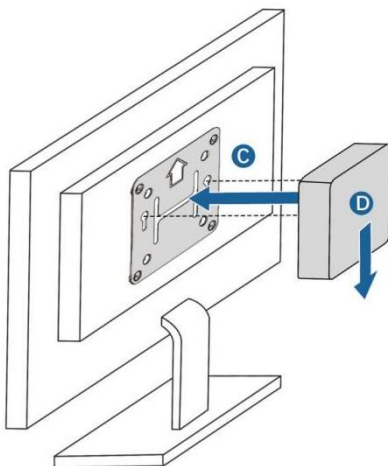
C. Hang the product into the cut-out in the middle of the VESA mount bracket

Powering On

Press the power button to start your Mini PC

Turning off Your Mini PC

If your Mini PC becomes unresponsive, press and hold the power button for at least 4 seconds to force a shutdown.

Putting Your Mini PC into Sleep Mode

Please enter Control Panel in the Windows search bar, then click Hardware and Sound > Power Options > Choose what the power button does. Select When I press the power button to Sleep to set the Mini PC to enter sleep mode with a single press of the power button.

Entering the BIOS Settings

The BIOS (Basic Input/Output System) contains the hardware configuration settings necessary for starting your Mini PC.

Under normal circumstances, the default BIOS settings can be applied to most situations to ensure optimal system performance. You should only modify the default BIOS settings in the following scenarios:

● An error message appears during startup, prompting you to access the BIOS settings.

● Further BIOS settings or updates are required when you install new system components.

Warning! Improper BIOS settings may result in system instability or failure to boot. It is strongly recommended to make changes to BIOS settings only under the guidance of trained professionals.

Loading Default BIOS Settings

Please follow the instructions below to load the default BIOS setting values;

1. During startup, keep pressing <Del> or <ESC> on the keyboard to enter BIOS settings.

2. When options are prompted, select <NO> option, and navigate to Exit menu.

3. Select Load Optimized Defaults option or press <F3> on your keyboard.

4. Select OK to load the default BIOS settings.

**3**

Upgrading Your Mini PC

Important!

- It is recommended that you install or upgrade memory modules, wireless network cards, and solid-state drives (SSD) under professional supervision. Visit a GEEKOM-authorized service center for further assistance.

- Before starting any installation, ensure your hands are dry. Before installation, wear an anti-static wrist strap or touch a grounded object or metal surface to prevent static damage to components.
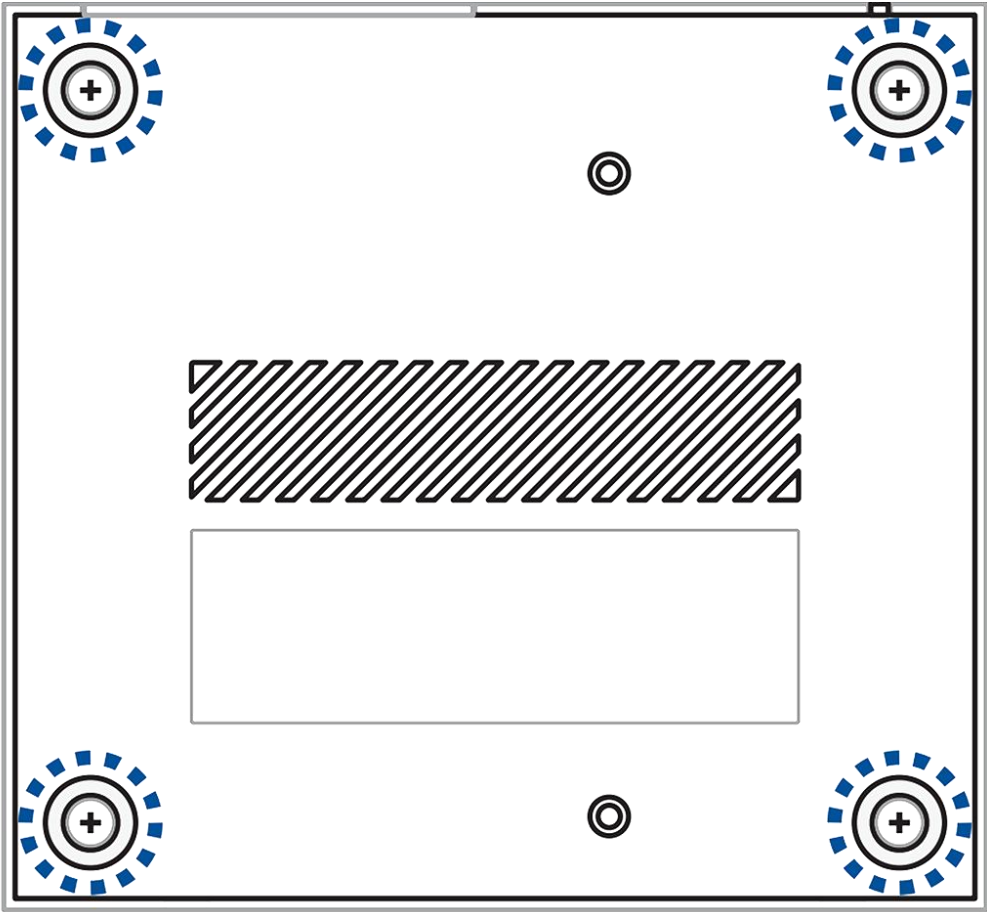
Note: The illustrations in this chapter are for reference only. The appearance of slots may vary model.
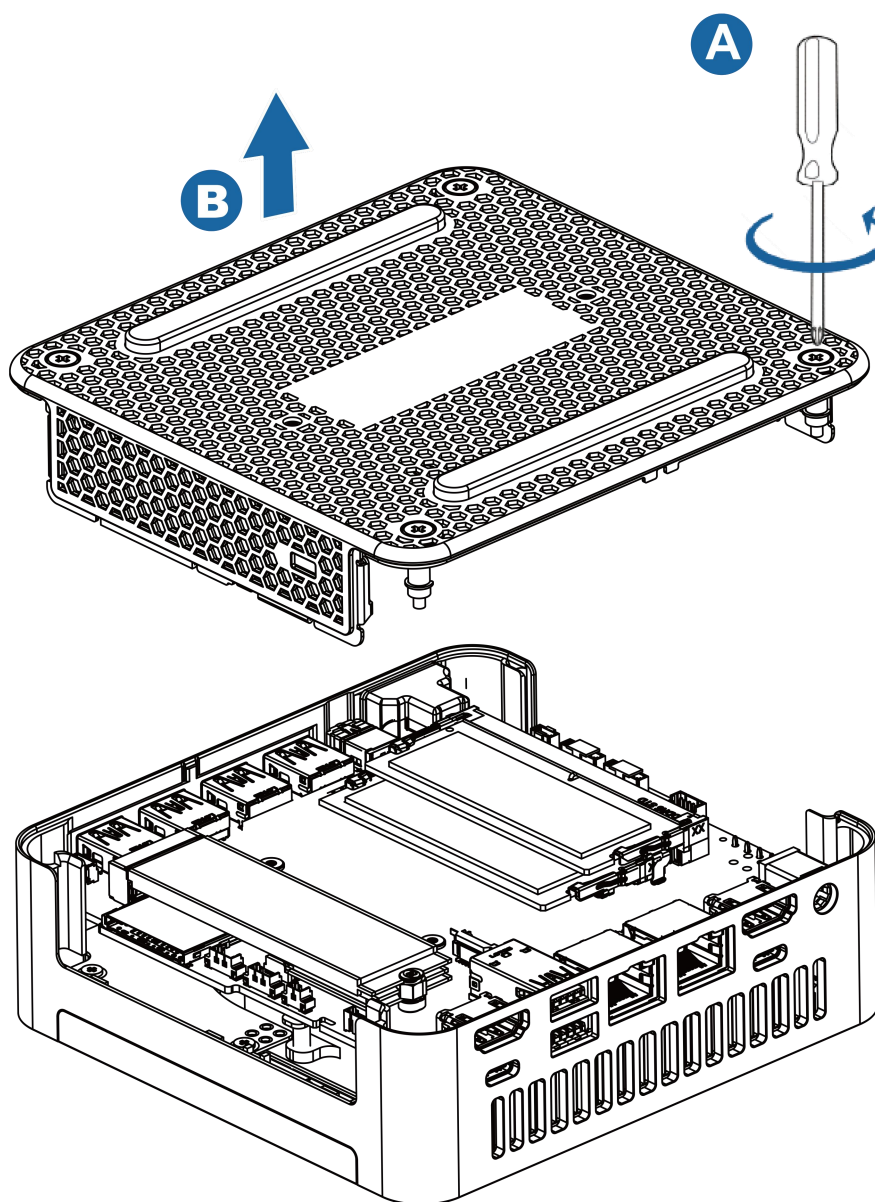
Removing the Bottom Cover

1. Turn off your Mini PC and disconnect all cables and devices.

2. Place the Mini PC on a stable and flat surface with the top of the device
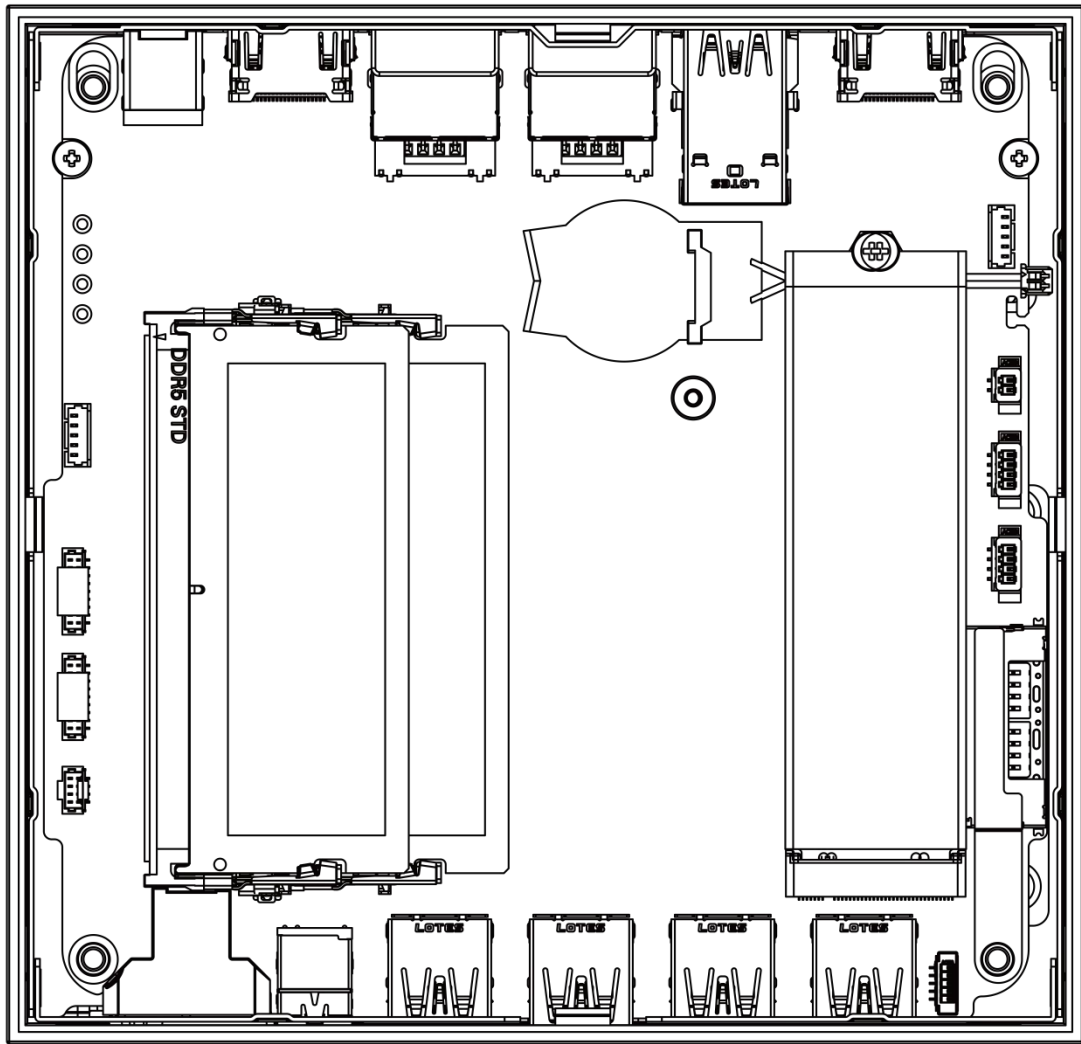
    facing downward.
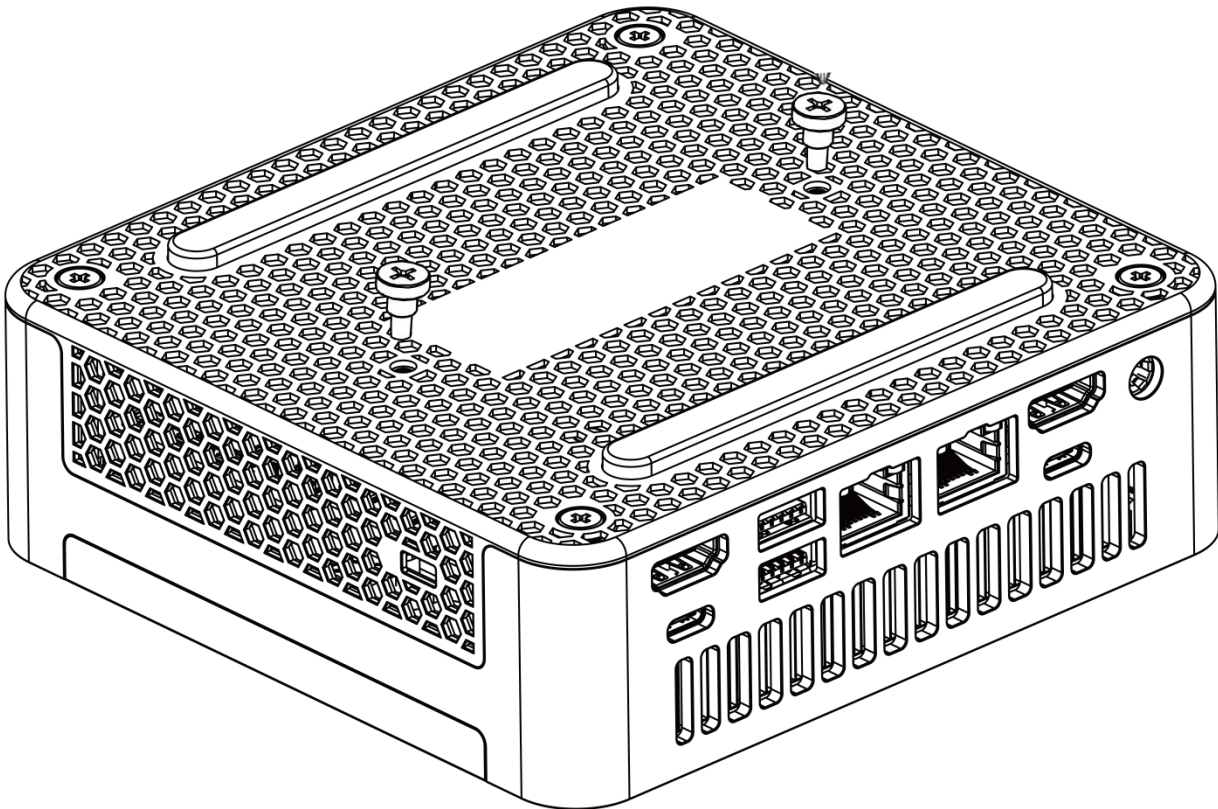
3. Loosen the four screws on the bottom cover.

4. Please hold two captive screws firmly and gently lift the bottom cover upward until it separates from the chassis.
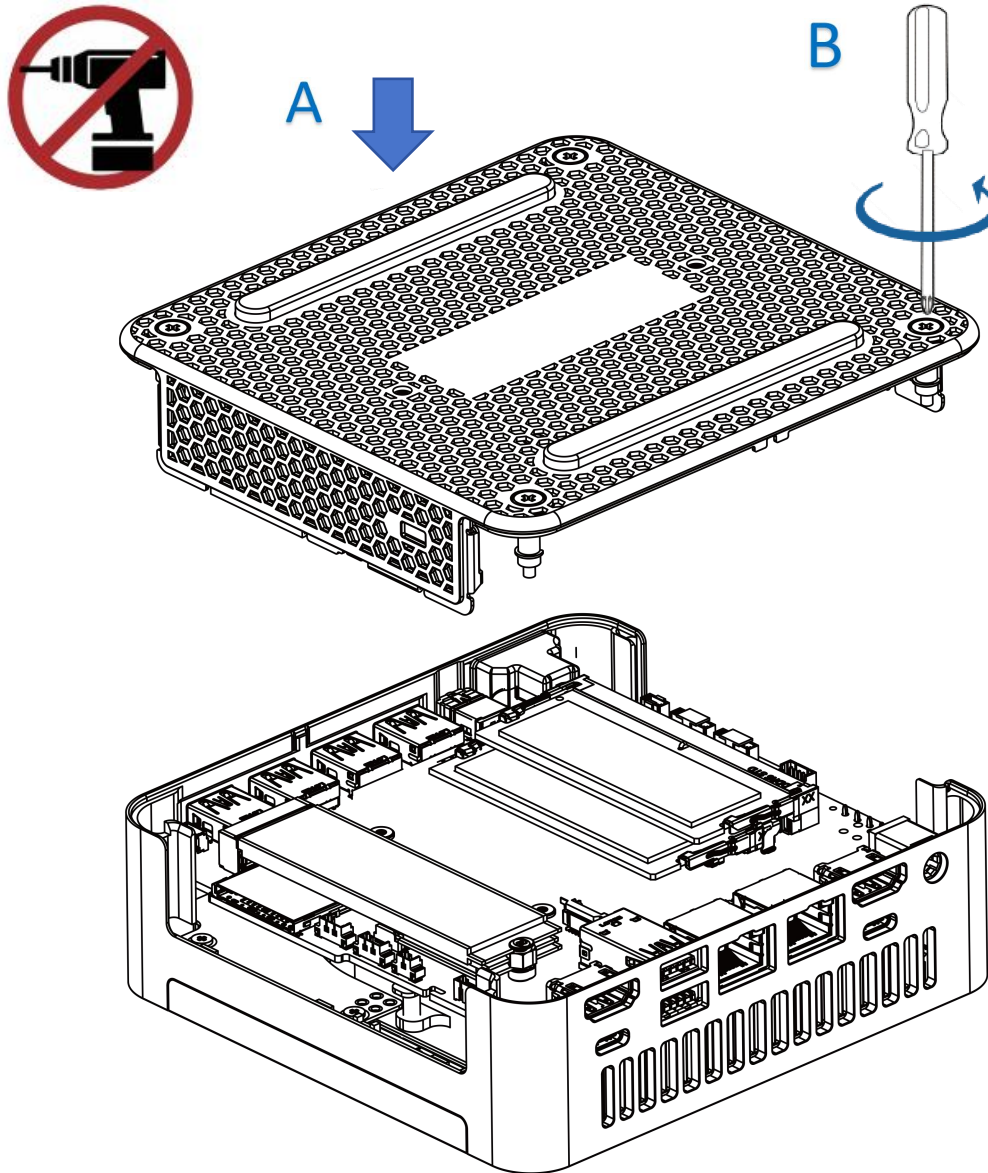
5. Remove the bottom cover, the internal product components are as shown in the figure below.
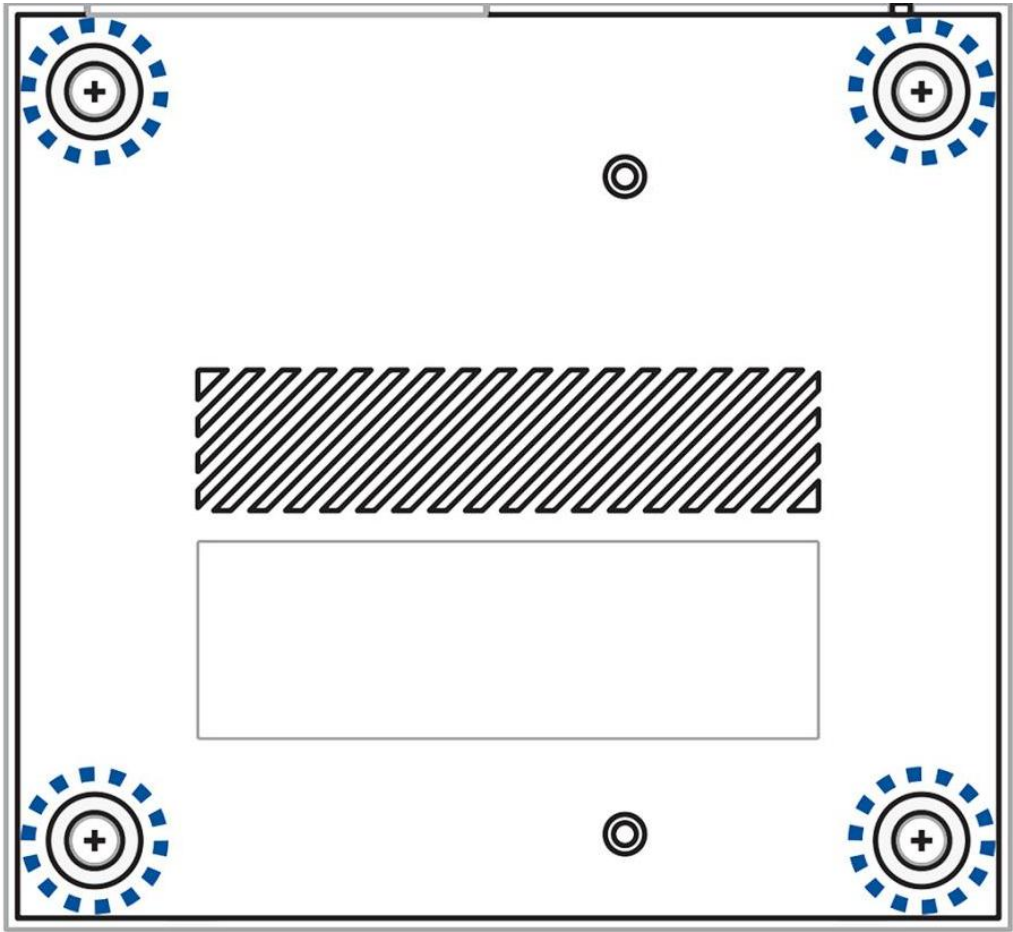
Restoring the Bottom Cover

1. Place the bottom cover back on the chassis.

2. Tighten the four captive screws to secure the bottom cover in place.

Installing Memory Modules

Your Mini PC is equipped with two SO-DIMM slots, allowing the installation of up to two DDR5 SO-DIMM memory modules.

1. Peel back the protective film covering the memory slots. Align the memory module with the slot and insert it.

2. Press the memory module down gently until it clicks into place, then replace the protective film to its original position.

3. Repeat the same steps to install additional memory modules.
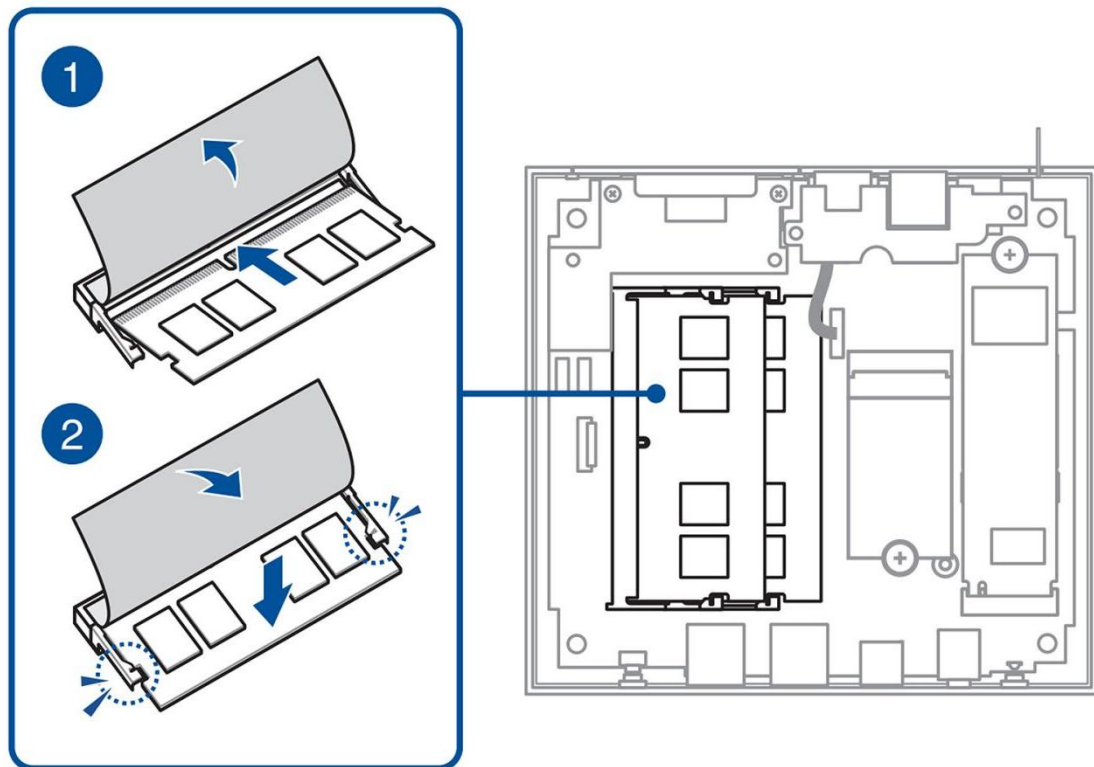
Installing M.2 SSDs

Your Mini PC features two specifications M.2 slots inside the chassis.

Install the M.2 SSD to the chassis:
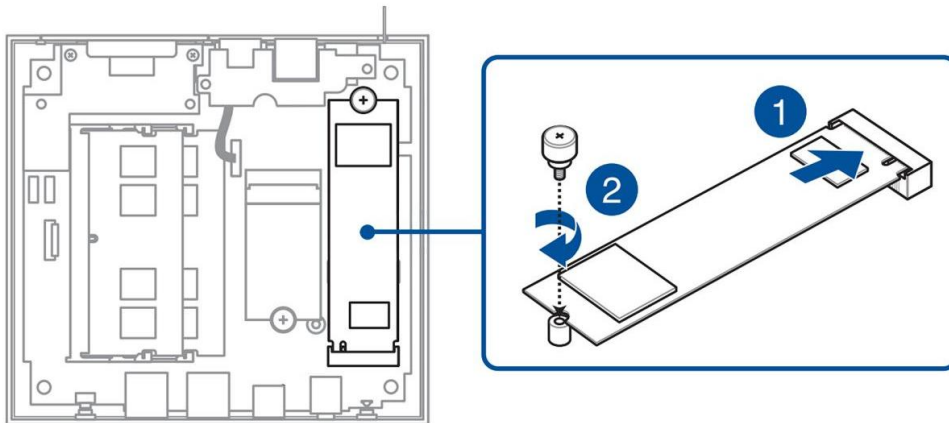
Note:M.2 SSD specifications that can be Supported:

1 x M.2 2280 PCIe Gen4*4 SSD

1 x M.2 2242 SATAIII SSD

1. Align the corresponding specifications M.2 SSD with one of the two M.2 slots and insert it.

2. Gently push the M.2 SSD downward onto the standoff, then use one of the included thumb screws to secure it.

3. Repeat the same steps to install another specifications M.2 SSD if needed.
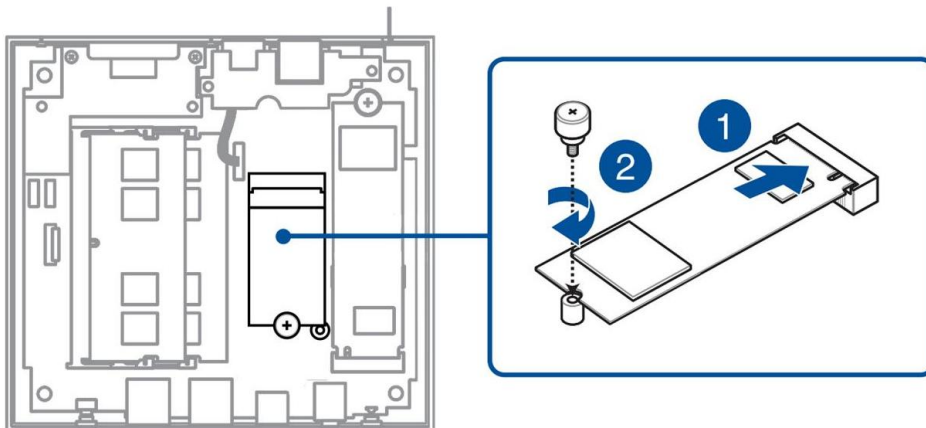
Installing a Wireless Network Card

Note: Your Mini PC includes an M.2 slot designed for installing a 2230 wireless network and Bluetooth adapter.

1. (Optional) Remove any pre-installed M.2 SSD if necessary. To remove the M.2 SSD, first remove the screws (A) from the studs and then remove the M.2SSD (B).

2. Align the wireless network card and insert it into the slot in Mini PC.
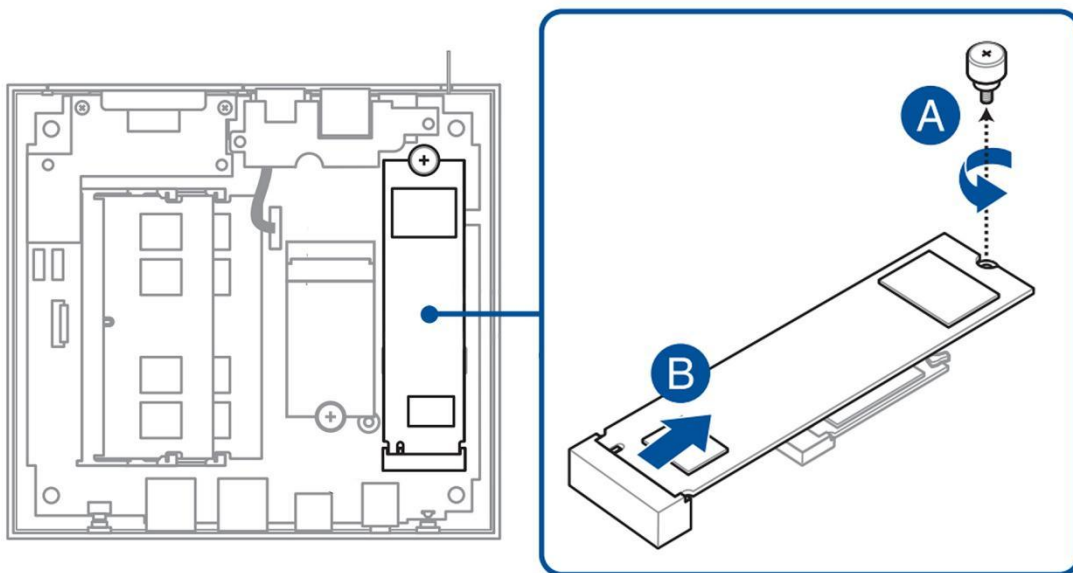
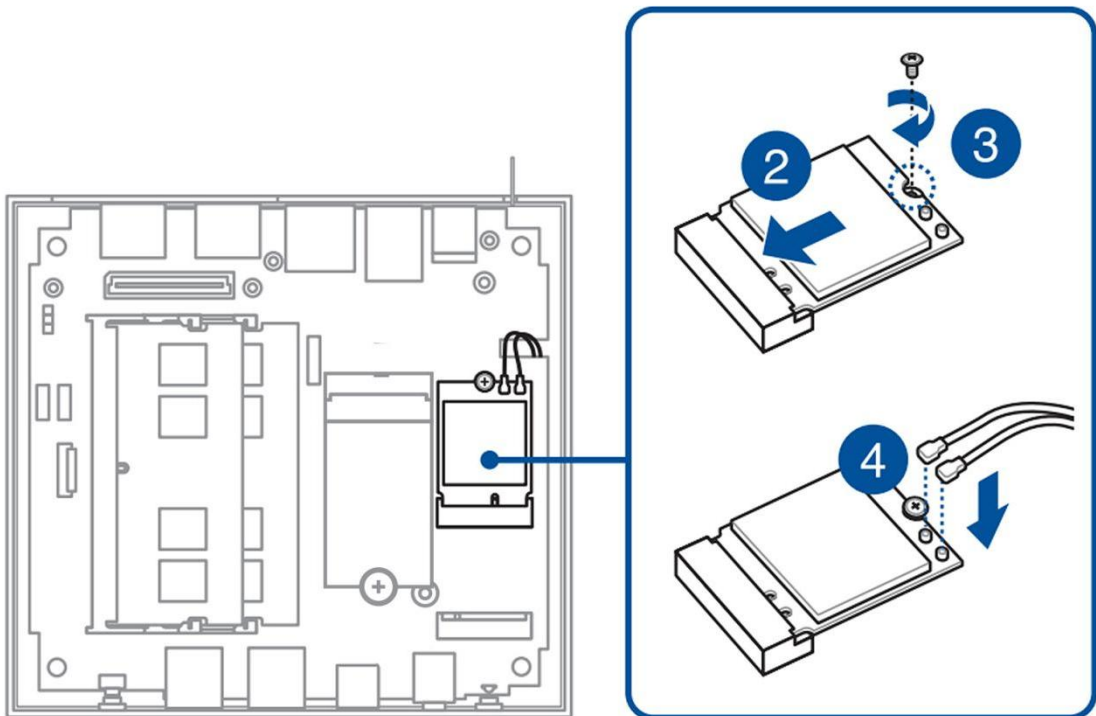3. Gently push the wireless network card downward onto the standoff, then use the included screw to secure it.

4. (Optional) Attach the antenna to your wireless network card.

Notes:

●Connecting an antenna to your wireless network card can

enhance the wireless signal.

●A soft click sound indicates that the antenna is securely

connected to the wireless network card.

4

TPM

About TPM

This system defaults to supporting the fTPM option: Firmware TPM (fTPM)

Notes:

- fTPM is supported by default, but it may not be activated. You can check if your system supports fTPM using the following methods:

- <u>Use the Windows Security App</u>
  a. Click Start > Settings > Update & Security > Windows Security > Device Security.

  b. Verify if there is a Security Processor menu on the screen. If the Security Processor menu is absent, it means the system does not have TPM or the TPM function is disabled.

- <u>Use Microsoft Management Console</u>
a. Click Start > Run or press Windows Key +R.
b. Enter tpm.msc and click OK.
c. If you see a message indicating that TPM is available, it means TPM is enabled and functional. If you see the message Compatible TPM cannot be found, it means the system does not have TPM or the TPM function is disabled.

Appendix

Security Notes

Before you start using this product, please thoroughly read the following operational precautions to avoid potential system damage or personal injury due to human error.

Operational Precautions

- Before using this product, please carefully read the relevant information provided in this manual.
- Dust, moisture, and extreme temperature changes can affect the lifespan of this product, so avoid placing it in such environments.
- Do not place the product on uneven or unstable surfaces. Please use this product with a special footstand.
- When using this product, be sure to maintain adequate clearance around it for proper ventilation to facilitate heat dissipation. Avoid letting small items like paper shreds, screws, or wire ends come near the connectors, slots, or openings, to prevent short circuits or poor connections. Do not insert any objects into the product's internal components to avoid short circuits or damage to the circuits.
- This product should only be used in environments with temperatures between 0°C and 35°C.
- Please use the correct power adapter according to the product's power rating label. Using an incorrect power adapter may damage internal components.
- When installing or operating this product, please maintain a distance of at least 20cm between the heatsink and your body.

Usage Precautions

- Before use, please check that all components are functioning properly and that the power cable is not damaged or improperly connected.
- Keep the product in a dry environment. Rain, moisture, and liquids containing minerals can corrode the electronic circuits.
- To avoid potential electric shock damage, always unplug all power cables from the power socket before cleaning or moving the product.

If you encounter any of the following issues, or any technical problems while using the product, please contact your authorized distributor.

-Damaged power cable or charger.

-The computer or accessories have been exposed to water.

-The computer does not operate normally despite following the instructions.

-The computer has been dropped or the chassis is damaged.

-The computer's performance is abnormal.

Lithium Battery Safety Warning

Replacing the battery incorrectly could cause an explosion. Please follow the manufacturer's instructions and use the same type or model of battery. Also, dispose of used batteries according to the manufacturer's instructions.

Do Not Disassemble or Reassemble Yourself Warning

Do not disassemble or repair the product yourself. Any unauthorized disassembly will void the warranty.

WEEE Mark: The crossed-out bin symbol indicates that this product (electrical/electronic equipment) should not be disposed of as regular waste. Please dispose of it in accordance with local regulations for electronic waste disposal.

Service and Support

Please visit our multilingual websites:

https://service.geekompc.com/