



AYANEO

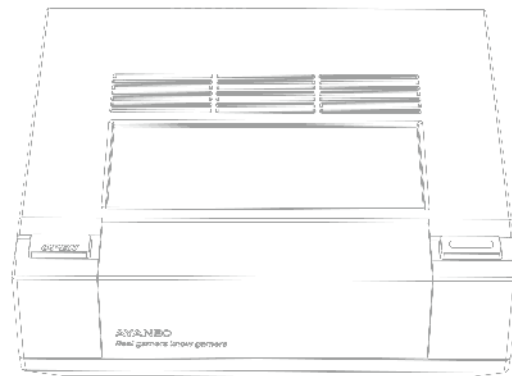
AM02

RETRO MINI PC

User Manual

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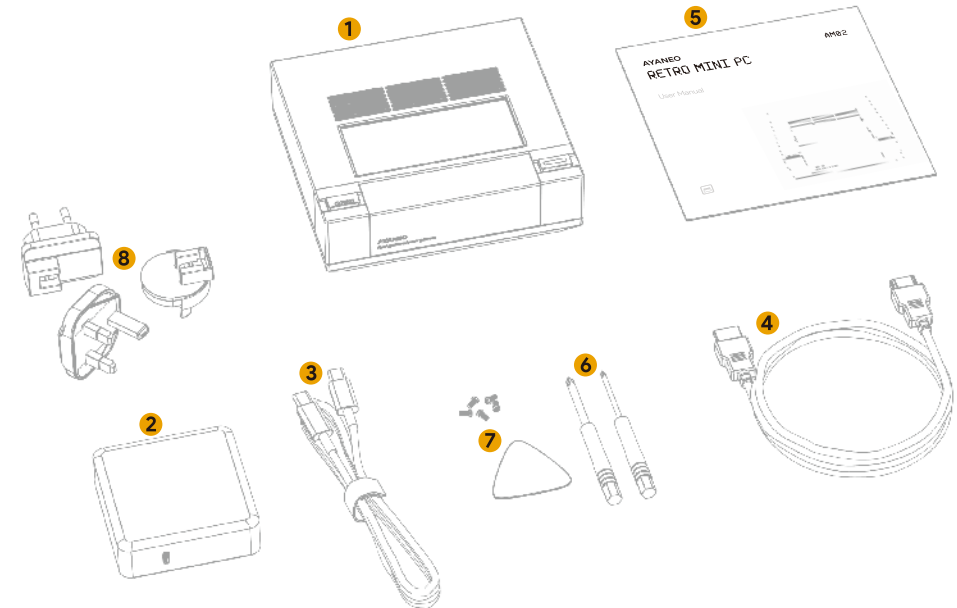
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Your AYANEO Retro Mini PC AM02 package should include the following items:

Note: The illustrations below are for reference only, and some accessories may vary depending on the purchased model configuration and the country or region.

1. AYANEO Retro Mini PC AM02 device
2. GaN 100W PD power adapter
3. USB-C power cable
4. HDMI high-definition connection cable
5. User manual
6. Screwdriver (for upgrade and disassembly) x 2
7. SSD and network card fixing screws, M2*3 specification screws x 5
8. AC power converter (may vary depending on the purchased model configuration and country or region)



Front View

*Panel Open State

1 Full-function USB4 Type-C Port

This port is a full-function interface, providing up to 40Gbps transfer rate, suitable for devices with high bandwidth requirements. You can connect USB flash drives, mobile storage devices, or other devices equipped with a USB-C interface.

Supports video casting; requires the display device to support USB-C video input and a dedicated full-function USB-C cable.

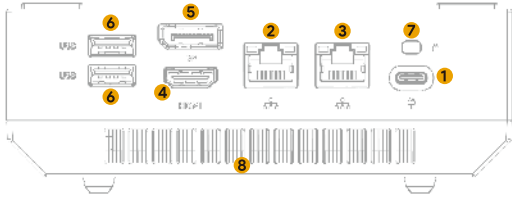
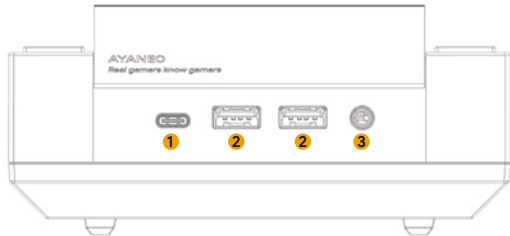
Supports 4K (3840×2160@144Hz).

2 USB 3.2 Gen 2 Ports

2 * USB 3.2 Gen 2 Type-A ports, providing up to 10Gbps transfer rate.

3 3.5mm Headphone/Audio Jack

Outputs audio signals for connecting headphones or speakers, and is also compatible with an external microphone.



Rear View

1 USB-C Power Input Port

The adapter powers the AYANEO Retro Mini PC AM02 through the USB-C power input port.

Note: The power adapter may vary depending on the specific model and country or region. Be sure to use the included power adapter.

2 RJ45 Network Ports

Standard Ethernet port, supporting 10/100/1000Mbps.

3 RJ45 Network Port (2.5G)

High-speed Ethernet port, supporting 10/100/1000/2500Mbps.

4 HDMI 2.0 Port

High-definition video output port; connect your AYANEO Retro Mini PC AM02 to an HD display, supporting up to 4K resolution (3840×2160@60Hz).

Note: 1 * HDMI high-definition cable is included in the package.

5 DP 1.4 (DisplayPort) Port

High-definition digital video output port, supporting 4K resolution (3840×2160@144Hz).

6 USB 2.0 Ports

2 * USB 2.0 Type-A ports, providing a transfer rate of 480Mbps.

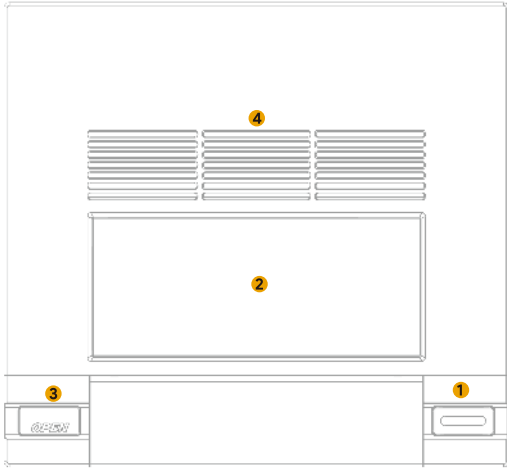
7 Lock Hole

Secure the AYANEO Retro Mini PC AM02 to a desk or other fixed object using the appropriate lock and cable to prevent theft.

8 Active Cooling Exhaust Vent

The cooling fan expels the heat generated by the AYANEO Retro Mini PC AM02 processor during operation through the exhaust vent.

Caution: Do not block the cooling vents during operation to avoid overheating and impact on cooling efficiency.



Top View

1 Power Button/Power Indicator Light

Press the top power button to turn on the AYANEO Retro Mini PC AM02; the indicator light turns white during normal operation.

Press the power button during normal operation to put the AYANEO Retro Mini PC AM02 into sleep mode; the cooling fan stops rotating, and the power indicator light turns off during sleep.

Long press for about 8 seconds to force shut down the AYANEO Retro Mini PC AM02. Force shutdown is not recommended in normal usage scenarios as it may cause irreversible risks such as data corruption.

2 Information Display Screen

Displays information about the AYANEO Retro Mini PC AM02, such as processor and system status. Supports single-tap and swipe touch interactions.

Specific display configuration parameters and interface interactions are subject to the latest software version.

3 OPEN Button

Press this button to open the front panel, allowing access to the front panel's expansion ports.

4 Top Passive Cooling Vents

During operation, the AYANEO Retro Mini PC AM02 expels internal heat through these vents via air circulation.

Caution: Do not block the cooling vents during operation to avoid overheating and impact on cooling efficiency.

Bottom View

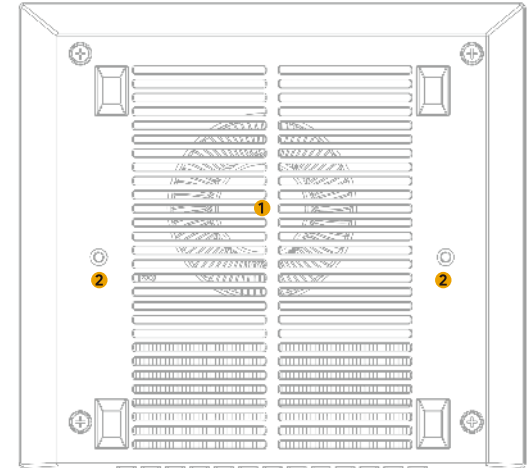
1 Active Cooling Intake Vent

During operation, the cooling fan draws in cold air through the intake vents, and the air flow carries away the heat generated by the processor, transferring it to the external environment.

Caution: Different fan rotation strategies may result in different noise levels. Do not block the intake vents during operation to avoid impacting the overall cooling efficiency.

2 Wall Mount Screw Hole

Used to install brackets or mounts on a monitor. The hole is compatible with M3 screws and has a spacing of 100mm.

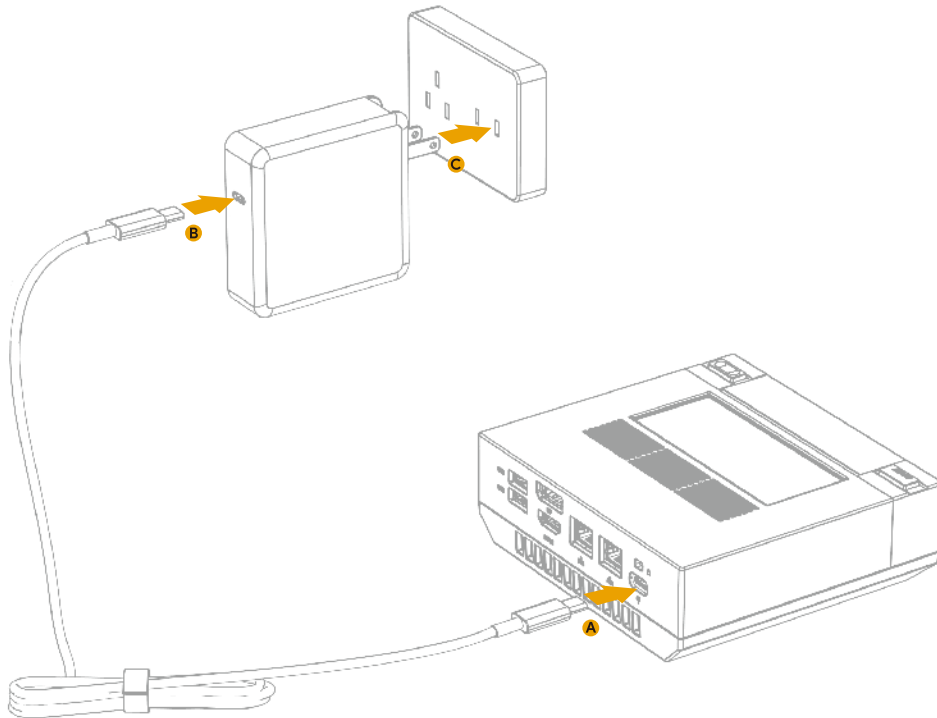


Use Your AYANEO Retro Mini PC AM02

Power Supply

- A** Connect one end of the USB-C power cable to your AYANEO Retro Mini PC AM02.
- B** Connect the other end of the USB-C power cable to the power adapter.
- C** Connect the power adapter to an AC 100~240V power outlet.

*In order to provide a more stable using experience, please be sure to use the original adapter and cable included in the package to supply power to the AYANEO Retro Mini PC AM02, it is not recommended to use third-party adapters and power supply cables, or compatibility problems will occur.



Connecting the Screen

AYANEO Retro Mini PC AM02 has the following interfaces to connect to a screen or projector.

1 * HDMI 2.0 4K@60Hz
1 * DP 1.4 (DisplayPort) 4K@144Hz
1 * USB-C 4K@144Hz

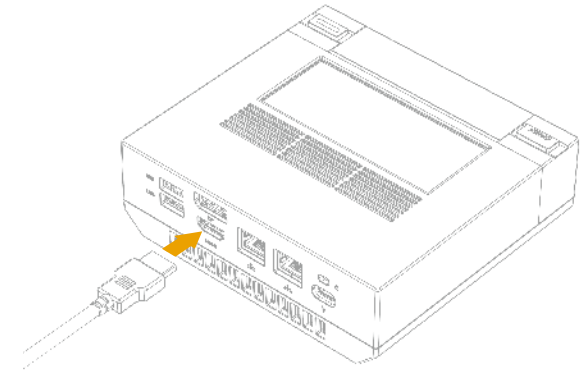
Note:

When HDMI, DisplayPort, and USB-C interfaces are connected simultaneously, up to 3 monitors can display simultaneously.

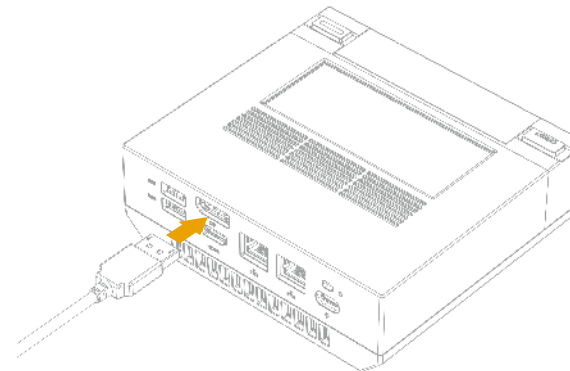
*The maximum resolution depends on the optional resolutions provided by different monitors, and it may be affected by cables or software. Please refer to the actual situation.

Connecting the Screen via the HDMI Interface

1 * HDMI high-definition cable is included in the package

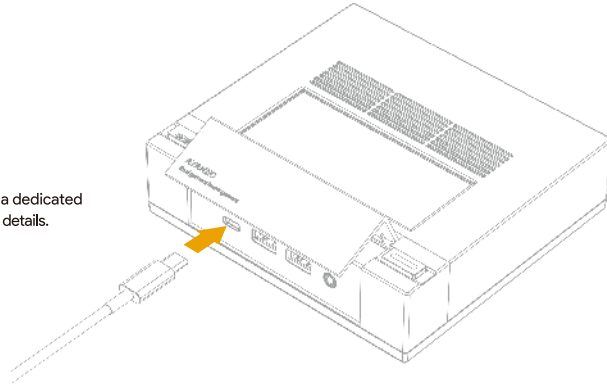


Connecting the Screen via the DisplayPort



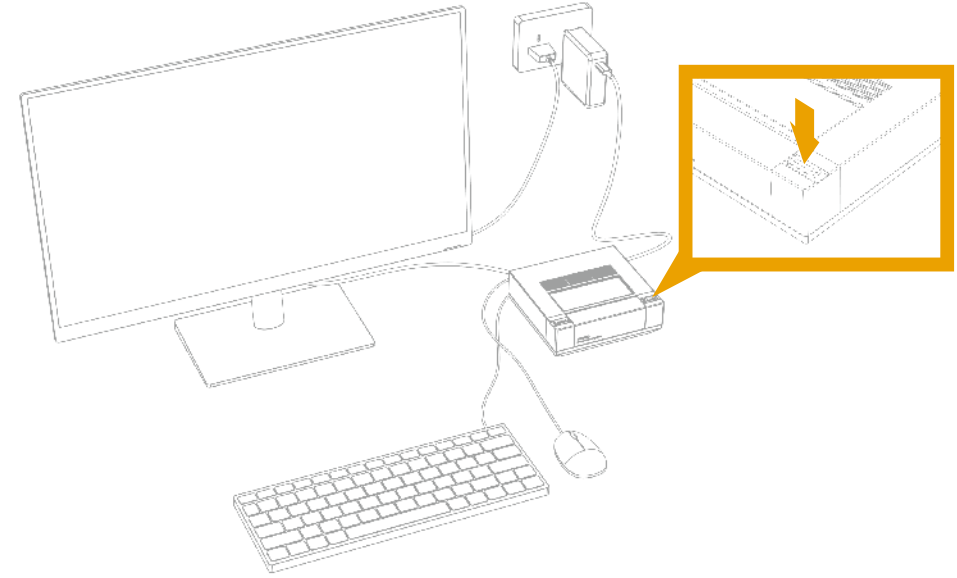
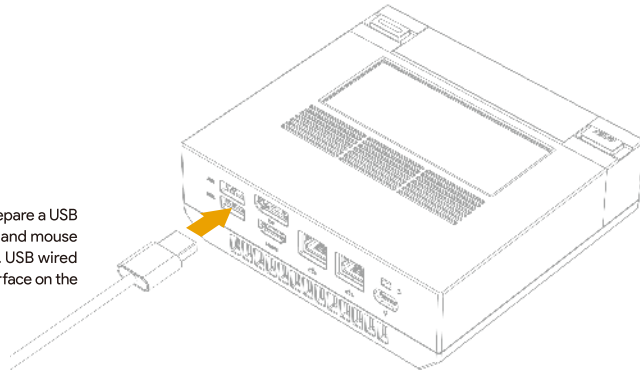
Connecting the Screen via USB-C Interface

Requires the display device to support USB-C video input and a dedicated full-function USB-C cable. Refer to the monitor specifications for details.



Connecting Keyboard and Mouse via USB

Before using AYANEO Retro Mini PC AM02, you need to prepare a USB wired or wireless keyboard and mouse. Wireless keyboard and mouse kits work through Bluetooth connection or USB receivers. USB wired keyboard and mouse kits connect directly to the USB-A interface on the rear or front panel of AYANEO Retro Mini PC AM02.



Start your AYANEO Retro Mini PC AM02

After correctly connecting the power, display, keyboard, and mouse, press the power button to start your AYANEO Retro Mini PC AM02.

Update Your AYANEO Retro Mini PC AM02

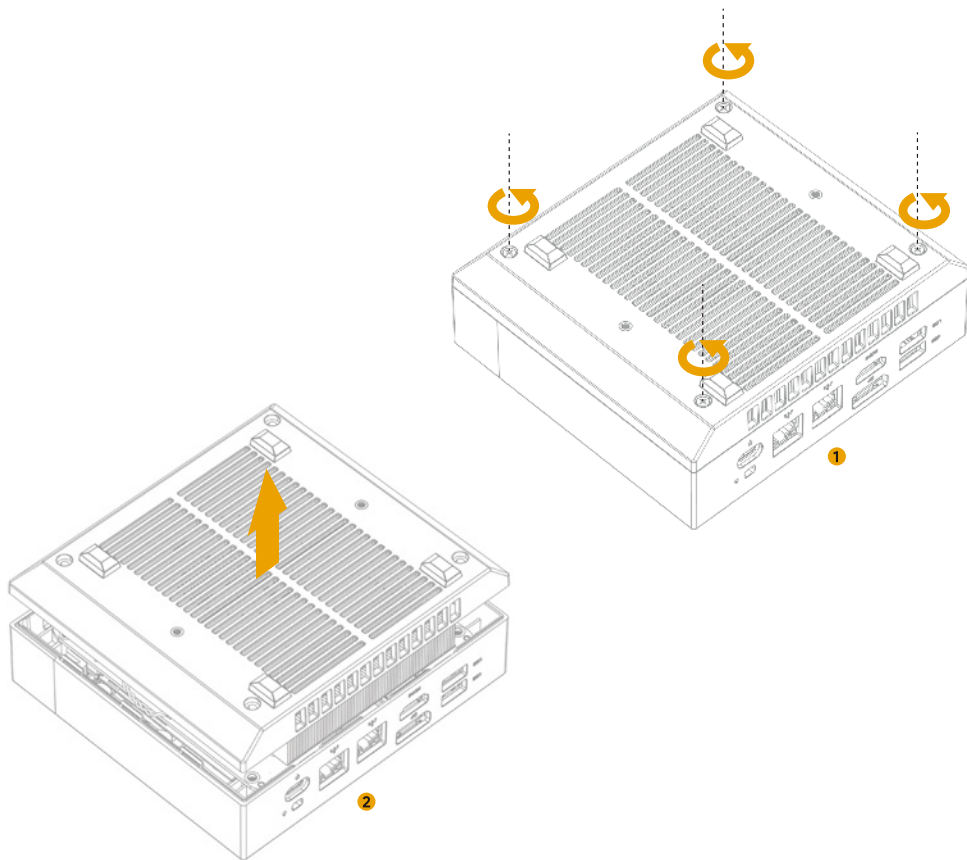
AYANEO Retro Mini PC AM02 supports upgrading the memory, SSD, and wireless network card.

If you purchase a Barebone configuration, it does not include memory and SSD, so you'll need to purchase and install them separately. Before performing any upgrades, make sure to disconnect the power to your AYANEO Retro Mini PC AM02 and unplug all connected devices. We recommend having a professional guide you through the installation or upgrades. If you encounter any issues, please contact AYANEO for further assistance and support.

Note: Please note that the following illustrations are for reference, and the interface configuration and some details may vary depending on the specific model's configuration.

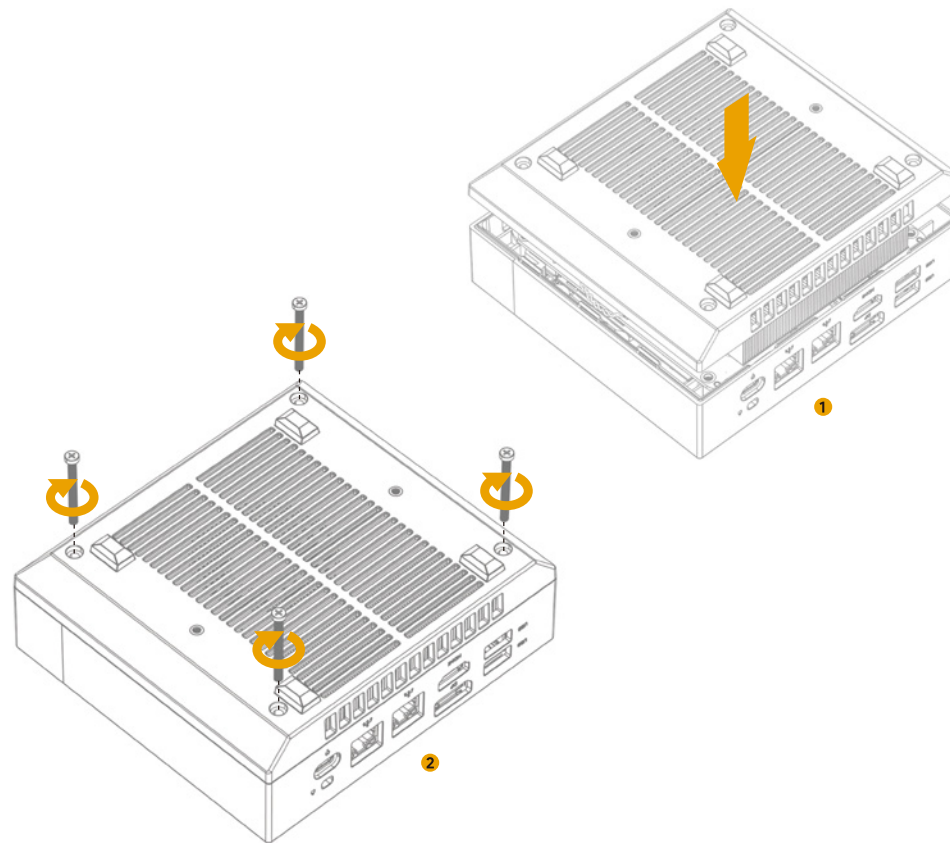
Disassembling the Bottom Cover

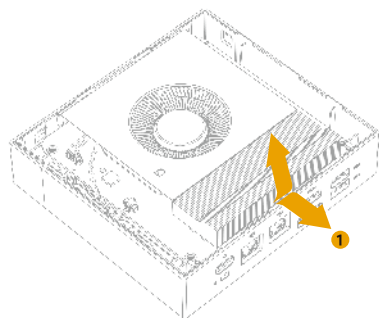
- 1 Place the AYANEO Retro Mini PC AM02 with the top side facing down and steadily remove the four screws from the bottom cover.
- 2 Take out the cover.



Reassembling the Bottom Cover

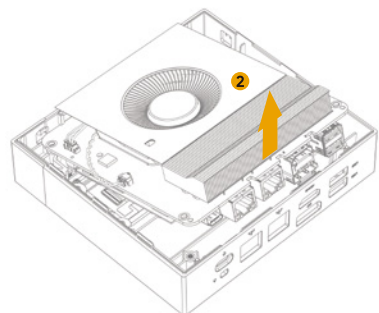
- 1 Pay attention to the orientation of the cover, align it with the outer shell, and press the edges of the cover around to assemble it into place.
- 2 Tighten the four screws on the cover.





Removing the AYANEO Retro Mini PC AM02 Motherboard

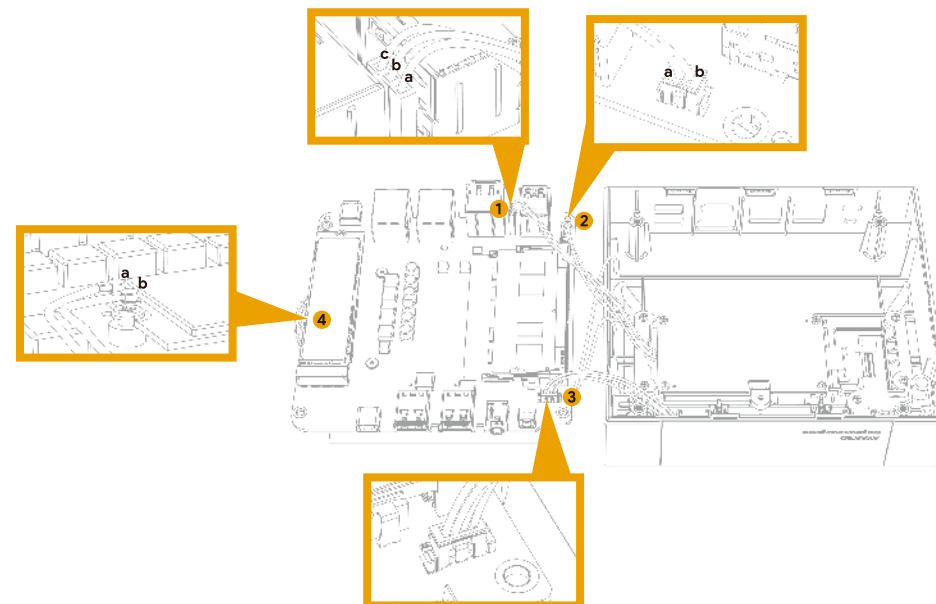
- ① Pull the edge of the rear interface baffle to separate it from the motherboard interface, and lift the motherboard upward from the fin area.
- ② Lift and remove the motherboard, taking care not to pull or damage the cables connecting the motherboard to the chassis.
- ③ When upgrading or replacing the SSD and memory card, there is no need to disconnect the cables between the motherboard and the chassis. You can perform the upgrade or replacement operation with the motherboard placed flat.



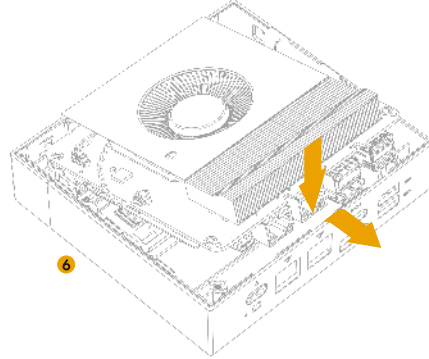
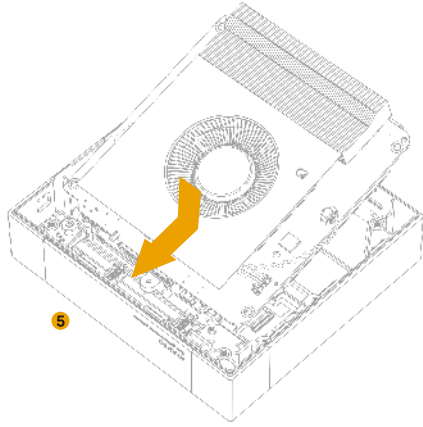
Removing the AYANEO Retro Mini PC AM02 Motherboard

Before reinstalling the motherboard, please check the connection of the motherboard to the chassis. Poor cable installation may affect normal functionality or prevent the system from booting properly.

- ① Information display screen communication cable - Incorrect or loose connection may affect display functionality.
 - a. Cable corresponding color - Yellow
 - b. Cable corresponding color - Black
 - c. Cable corresponding color - Red
- ② Information display screen power supply cable - Incorrect or loose connection may affect display functionality.
 - a. Cable corresponding color - Red
 - b. Cable corresponding color - Black
- ③ Power button/power indicator cable - Incorrect or loose connection may prevent the system from turning on.
- ④ Wireless network card coaxial cable - Not connecting may affect signal reception and directly impact network transmission performance.
 - a. Cable corresponding color - Gray
 - b. Cable corresponding color - Black



- 5 Tilt the motherboard to align with the front interface, then gently place it flat.
- 6 Pull the edge of the rear interface baffle and simultaneously press down on the fin area of the motherboard to align and secure the motherboard in place. Be careful not to press on the cables connecting the motherboard to the chassis during assembly.

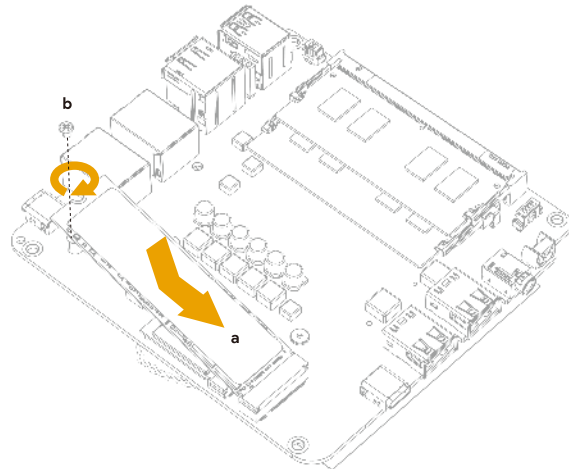


Upgrading or Installing M.2 SSD

Your AYANEO Retro Mini PC AM02 has an NVMe M.2 PCIe 4.0 *4 slot, supporting the installation or upgrade of SSDs with a 2280 specification.

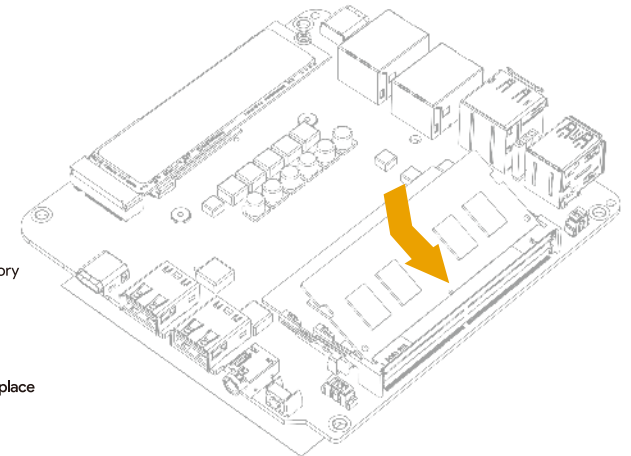
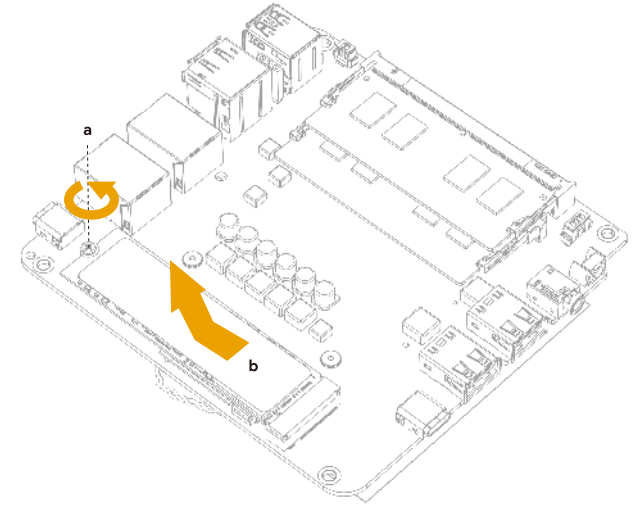
Note: Before installing or upgrading the M.2 SSD, it's necessary to remove the motherboard from the AYANEO Retro Mini PC AM02.

- a. Tilt the SSD to align it with the M.2 slot on the motherboard.
- b. Once aligned and secured with the notches and screws, use screws to tighten the SSD in place, completing the installation.



Removing the M.2 SSD

- a. Remove the locking screws securing the SSD.
- b. Tilt and remove the SSD.



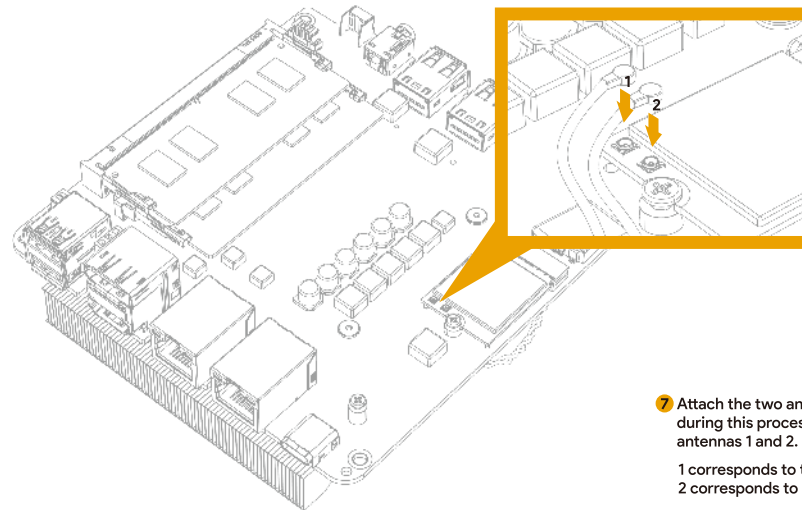
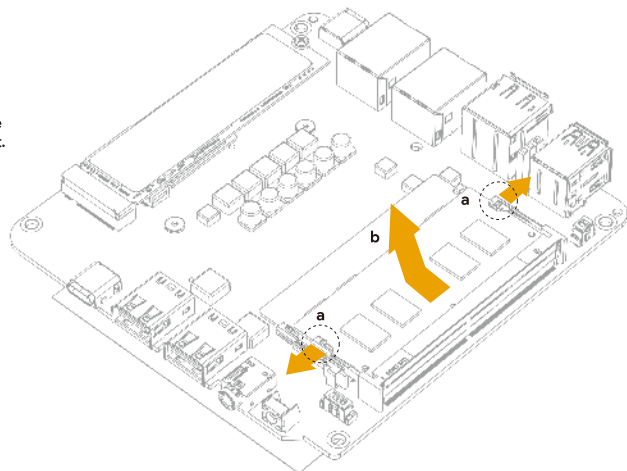
Upgrading or Installing Memory

Your AYANEO Retro Mini PC AM02 has two DDR5 SO-DIMM memory slots, supporting a single or dual memory module configuration. It is recommended to use two memory modules for significant performance improvements in certain applications and scenarios.

- Tilt the memory module to align it with the SO-DIMM slot on the motherboard, then press down on the memory module to lock it in place with the retention clips.

Removing Memory

- a. Push outward on the locking clips on both sides to release the memory module, allowing it to tilt and be removed from the slot.
- b. Remove the memory module.



- 7 Attach the two antennas to the network card; be cautious during this process to avoid damage. Differentiate between antennas 1 and 2.

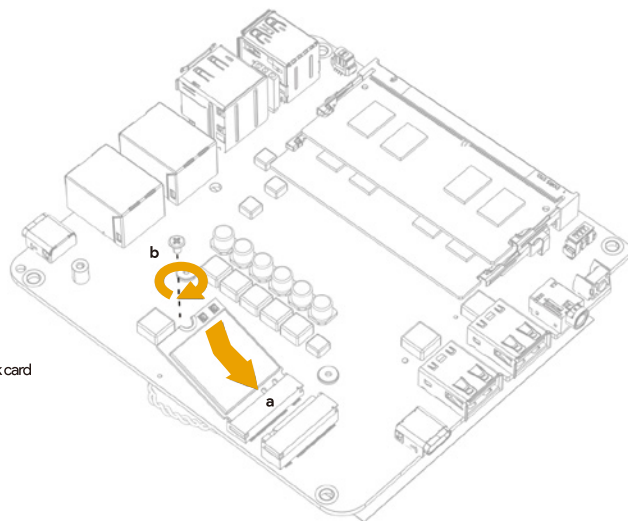
1 corresponds to the gray cable antenna
2 corresponds to the black cable antenna

Upgrading or Installing Wireless Network Card

Your AYANEO Retro Mini PC AM02 supports upgrading to an M.2 2230 specification wireless network card.

Before upgrading, confirm the compatibility of the selected wireless network card with the AMD platform; consult the network card supplier for details.

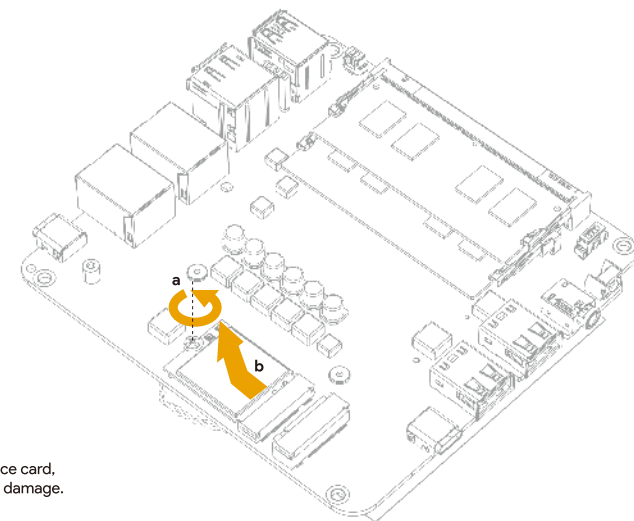
- a. Tilt the wireless network card to align it with the M.2 slot on the motherboard.
- b. Once aligned and secured with the notches and screws, use screws to tighten the network card in place.



Removing the Network Card

- a. Remove the locking screws securing the network card.
- b. Tilt and remove the network card.

Disconnect the antenna before removing the network interface card, and pay attention to the strength during the process to avoid damage.



Power On/Off

- Press the top power button to turn on your AYANEO Retro Mini PC AM02. Once in normal operation, the indicator light will be white, and the screen on the top of the device will display the startup screen.
- For shutdown, left-click the "Start" button on the mouse, select the "Power" icon in the pop-up window, and choose "Shut Down" from the menu. This action will prompt your AYANEO Retro Mini PC AM02 to power off.
- In the event of unresponsiveness, if your AYANEO Retro Mini PC AM02 is not responding, you can force a shutdown by long-pressing for approximately 8 seconds. It is not recommended to force a shutdown during normal use, as this action may pose irreversible risks such as data corruption.

Sleep/Wake

- While in normal operation, pressing the power button on your AYANEO Retro Mini PC AM02 will put it into sleep mode. In this state, the cooling fan stops spinning, and the power indicator light goes off.
- To wake up your AYANEO Retro Mini PC AM02 from sleep, simply press the power button. The power indicator light will be steady, and the cooling fan will resume its normal operation.

Accessing BIOS Settings

- To modify the BIOS settings of your AYANEO Retro Mini PC AM02, press the Delete key repeatedly during startup. Pressing the F7 key repeatedly will open the quick boot menu for selecting startup options.
- It is not recommended to modify BIOS settings unless necessary, as the default factory settings are optimized for optimal performance under normal usage conditions.

Please be cautious, as improper BIOS settings can affect system stability or lead to startup failures. If needed, it is advisable to seek assistance from a qualified professional when making BIOS adjustments.

Notes

This product runs on a 64-bit Windows 11 Home edition produced by Microsoft. In desktop mode, you can perform basic Windows operations using a keyboard and mouse.

If applications become unresponsive and can't be closed normally, you can right-click the "Start" button and select "Task Manager" from the pop-up menu. In the Task Manager, you can choose the unresponsive process and select "End Task" to terminate it.

Note: If you purchase a base system configuration without memory or hard drive and it doesn't include an operating system, you will need to install the operating system yourself. The specific installation process will depend on the version of the operating system you choose.

Power Supply

Please use the provided power adapter to power your AYANEO Retro Mini PC AM02. Do not use uncertified power adapters, as this can lead to damage to internal components and unforeseen risks. When the power adapter is plugged into an AC 100-240V power source, avoid prolonged skin contact with the USB-C output plug to prevent discomfort or injury.

Medical Device Interference

Some internal components of AYANEO contain magnets and emit electromagnetic fields. These electromagnetic fields may interfere with medical devices, pacemakers, defibrillators, or other medical equipment. Please maintain a safe distance between medical devices and the AYANEO Retro Mini PC AM02.

Consult with your physician and the manufacturer of your medical device for specific information. If you suspect that the AYANEO Retro Mini PC AM02 is interfering with your pacemaker, defibrillator, or other medical equipment, discontinue use promptly.

AYANEO guarantees its hardware products and accessories for one year from the original retail purchase date. AYANEO does not provide warranties for normal wear and tear or damages caused by accidents or misuse. To obtain service, visit the AYANEO store or an authorized service provider. Available service options depend on the country or region where the service is requested and may be limited to the original country or region of sale. Call charges and international shipping fees may apply, depending on your location.

When you submit a valid claim under the warranty service policy, AYANEO will, at its discretion, provide repair, replacement, or refund services for your AYANEO Retro Mini PC AM02. Your warranty rights are additional to the rights provided by local consumer laws. Detailed information on the purchase receipt may be required when making a warranty claim under this policy.

Support

You may consult with your local dealer for warranty and support service, and you can get online support from our website (www.ayaneo.com). Or you can contact us by service@ayaneo.com if you have any inquiries.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices). This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:
The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

