



# DC-ROMA RISC-V Mainboard I with Cooler Master Mainboard Case Quick Start Guide

| Document attribute       |  |
|--------------------------|--|
| Document Version         | V1.0   |
| Latest Release Date      | April 11, 2025   |
| Applicable Product Model | DC-ROMA RISC-V Mainboard I with Cooler Master Case                     |
| Operating System Version | Ubuntu 24.04 or Fedora 41  |
| Document Target Audience | DC-ROMA RISC-V Mainboard I with Cooler Master Case Users               |
| Hardware Description     | The mainboard used in this documentation is DC-ROMA RISC-V Mainboard I |

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## Abstract

This document provides instructions on how to install and remove the mainboard in the Cooler Master Case, using the DC-ROMA RISC-V Mainboard as an example. Step 11 specifically applies to the RISC-V Standard Tier Mainboard purchased from DeepComputing's official website.

Mainboard purchase link:

<https://store.deepcomputing.io/products/dc-roma-risc-v-mainboard-for-framework-laptop-13>

## Tools

Framework Screwdriver



## Dismantling detailed steps

### Step 1 What's in the box?

In the box you will find the following items:

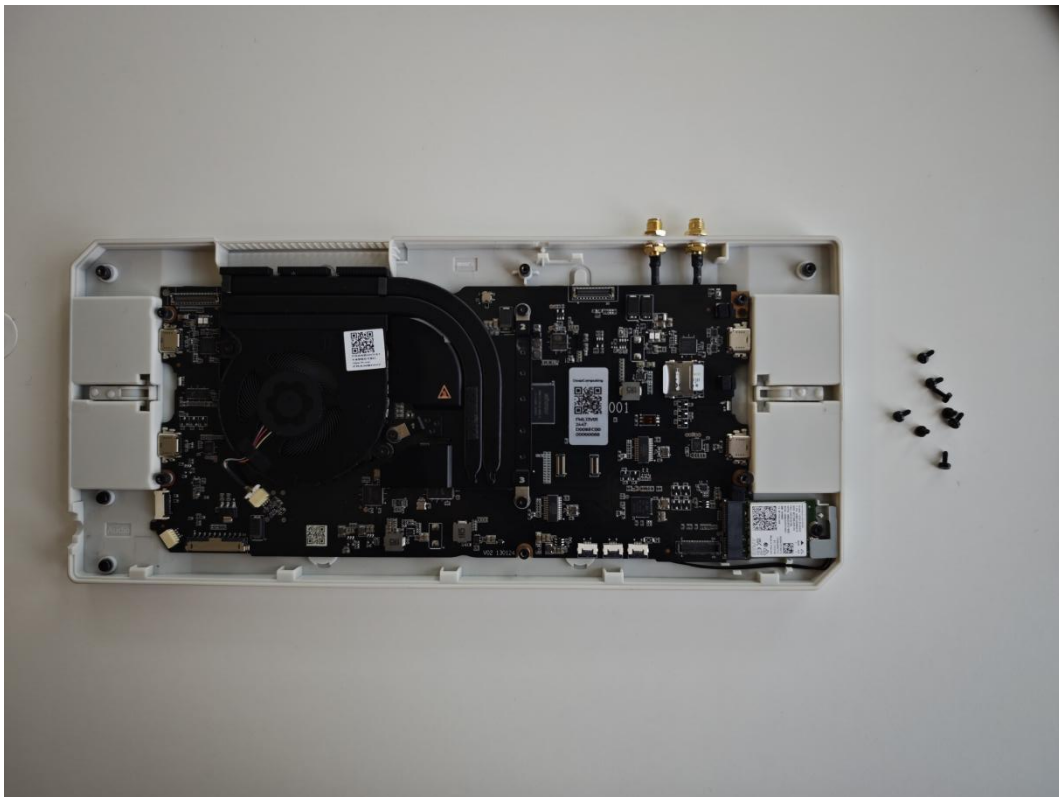
- 1 DC-ROMA RISC-V Mainboard
- 2 WiFi Antennas (for RISC-V Mainboards (Standard Edition) purchased from DeepComputing)
- Rubber Stand for placing the case upright on a desk
- 8 pre-installed T5 screws
- Mounting clip for for securing the Wi-Fi module and audio board
- 4 VESA screws for mounting the Case on a 100mm x 100mm VESA bracket (screws are inside the rubber stand as shown in the photo)





## Step 2 Open the case

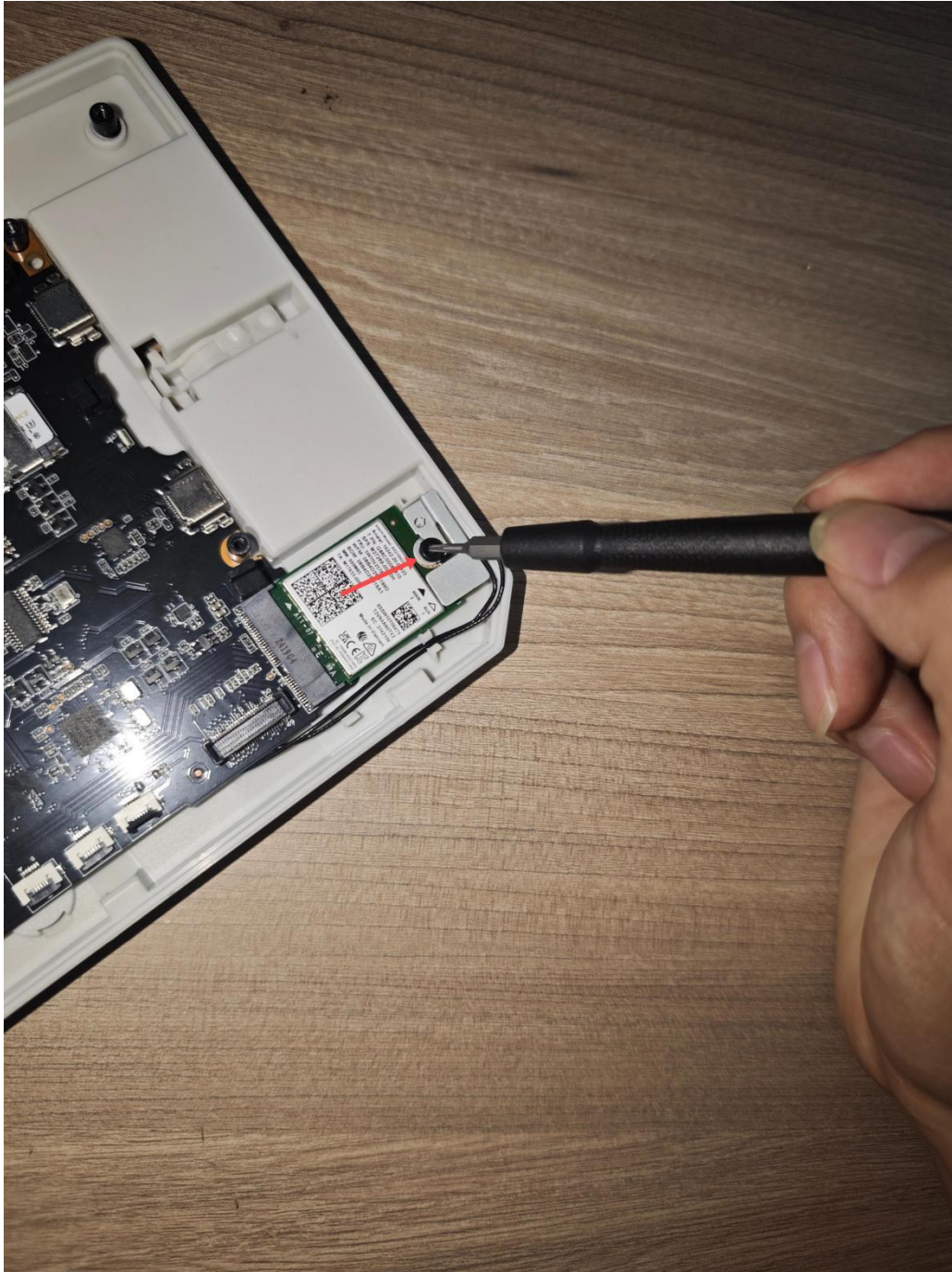
- Remove the expansion cards and put them aside.
- Remove all 8 screws and keep them safely.
- After removing the screws, gently separate the front case.
- If the front case cannot be separated, please ensure that all 8 screws and all expansion cards are removed.

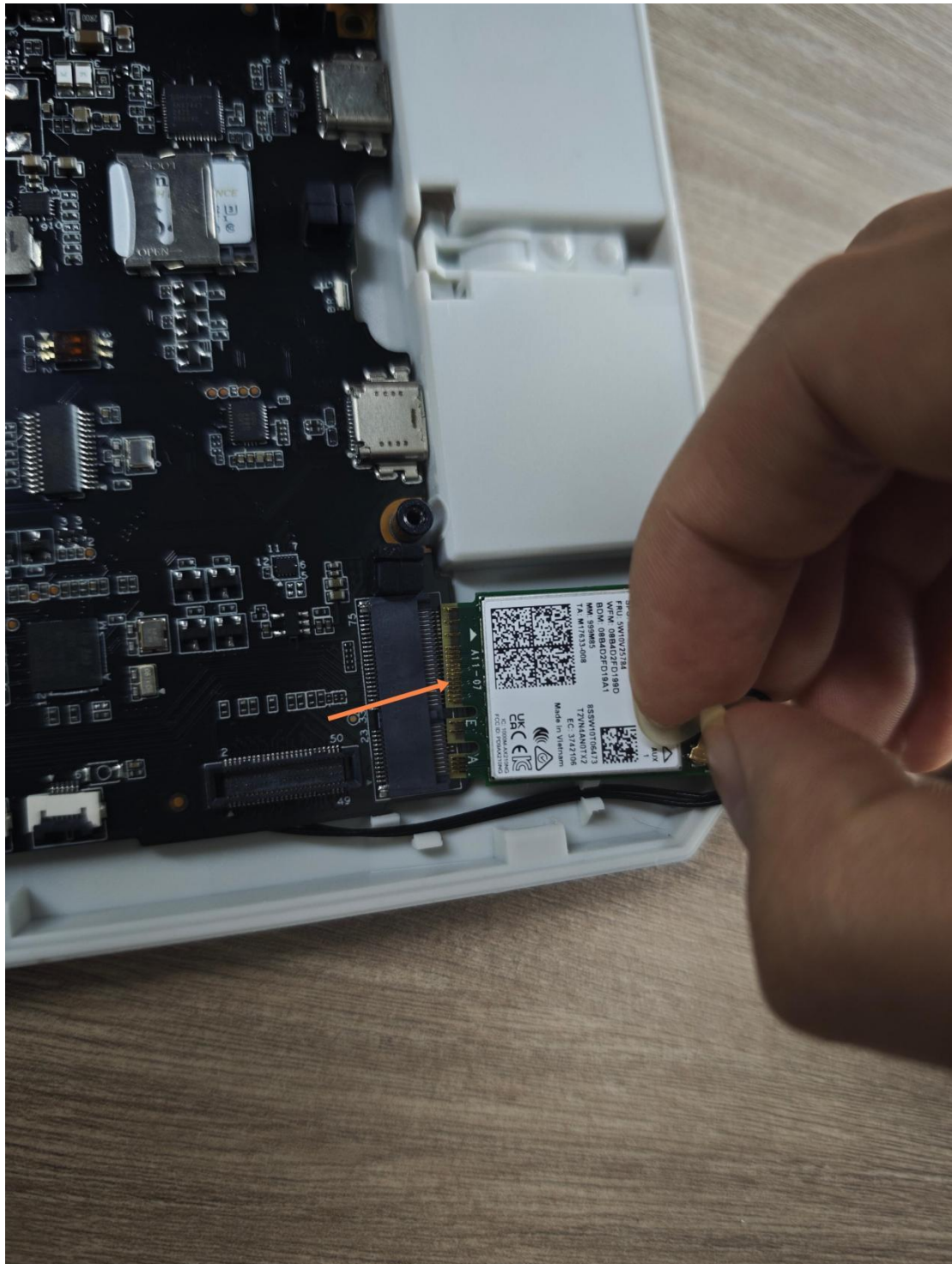




## Step 3 Remove the WiFi Module

- Unscrew the fastener on the mounting clip securing the WiFi module.
- Remove the mounting clip and gently pull the WiFi module out of the socket as shown in the photo.
- No need to disconnect the black and white WiFi Antenna cables-keeping them connected makes reinstallation easier.







## Step 4 Remove the Mainboard

- Hold down the back case and gently lift the mainboard upward to remove it from the case.





## Step 5 Place Mainboard into the case

- Lifting the mainboard carefully, Align the holes on the motherboard with the standoffs on the case (marked with red circles below), and secure it inside the case.
- No fasteners are needed in this step.



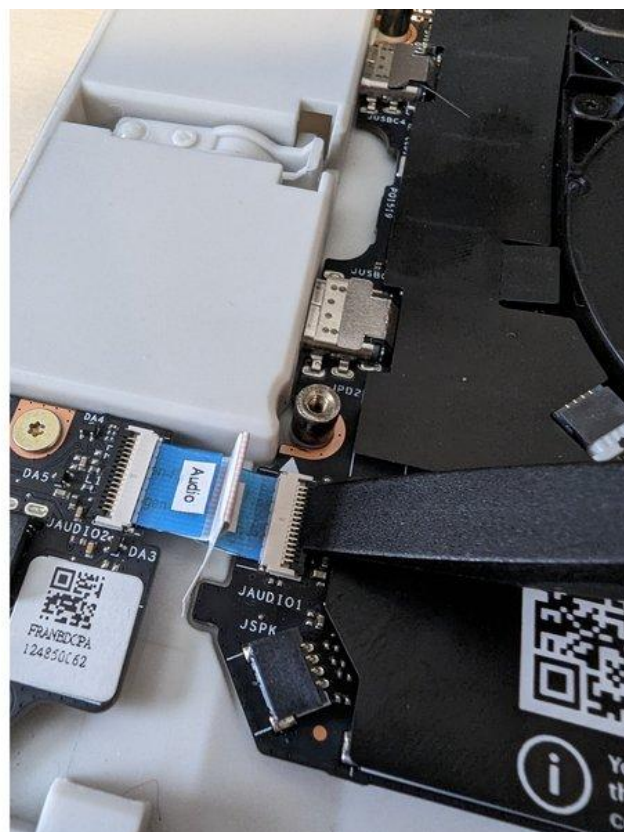
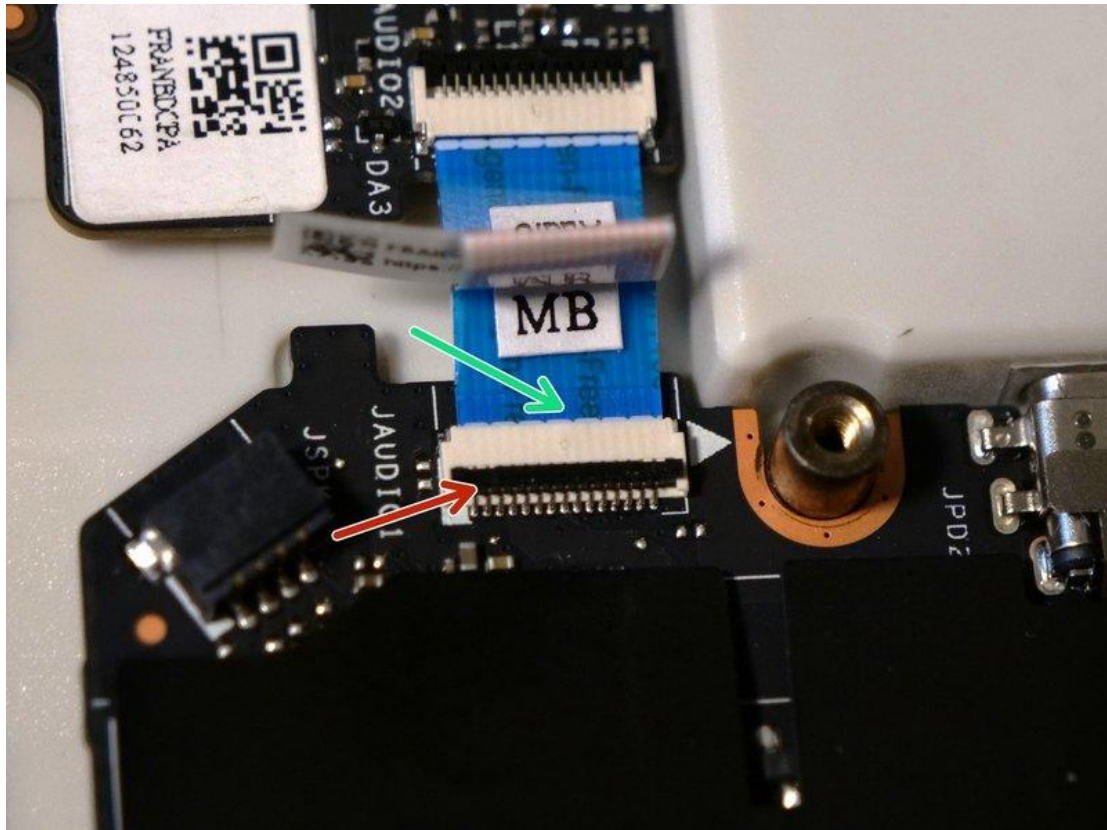
## Step 6 Install WiFi Module

- Insert the WiFi module into the WiFi socket on the mainboard and use the mounting clip to secure it.
- If you are using the metal mounting clip that came with the case, you can align it with the standoffs marked with orange circle below. Use the three smaller fasteners that are included with the case to secure the WiFi Module.



## Step 7 Connect the Audio Cable (This step is optional, need to buy it seperately)

- Using your fingernail or the flat side of the Framework Screwdriver, flip up the black latch on the connector.
- Insert the cable until the white line is almost aligned with the edge of the connector.
- Flip the black latch down to secure the cable.

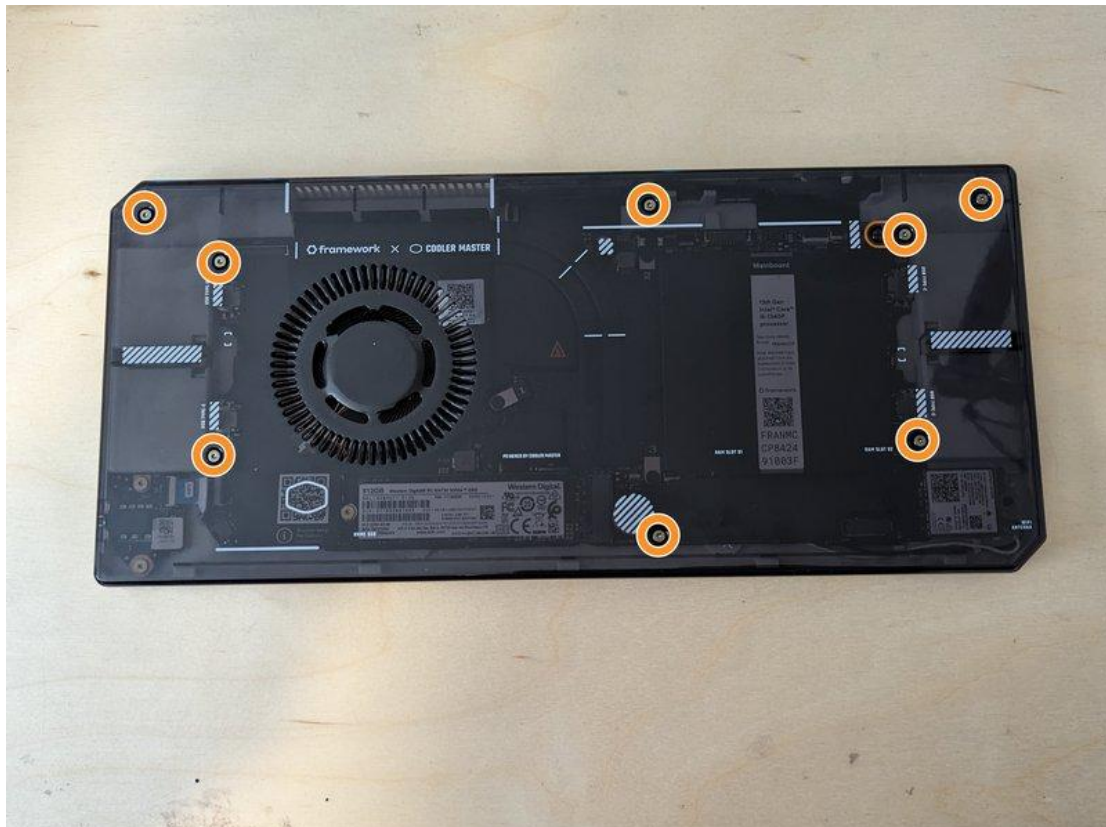






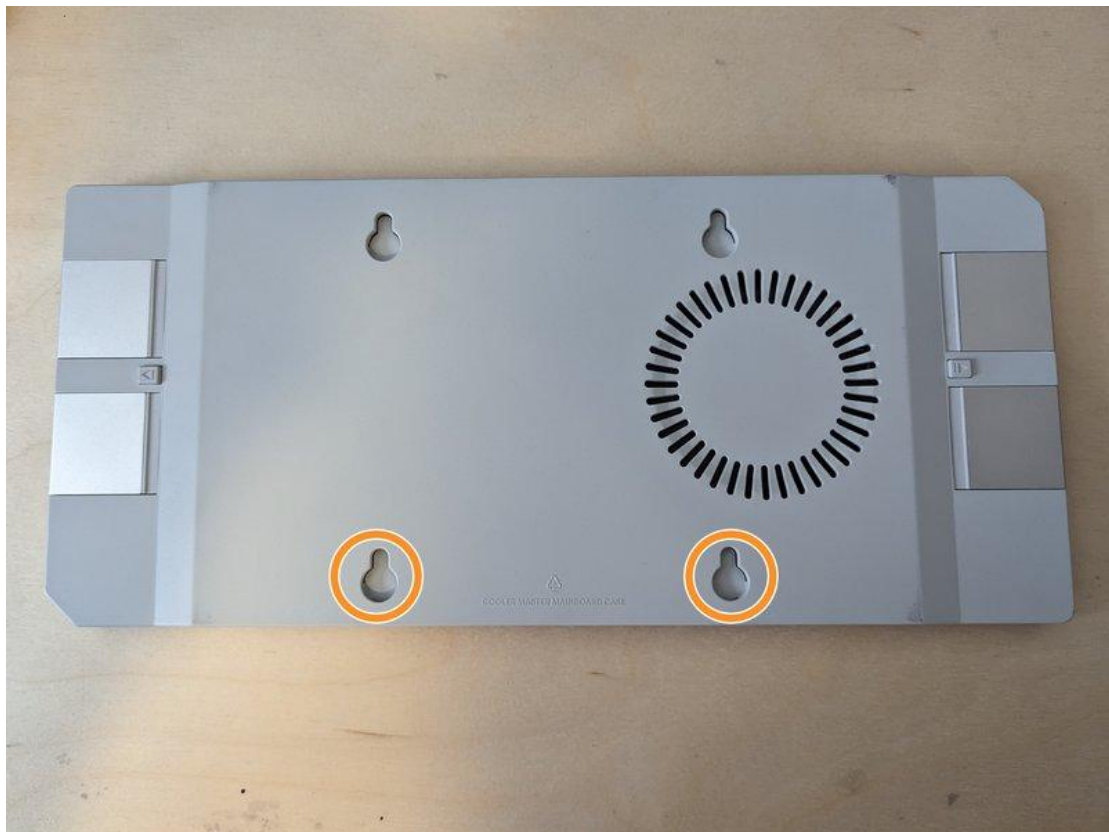
## Step 8 Close the case

- Before installing the front case, ensure that the mainboard is installed.
- If the mainboard and all internal components are installed, you can now close the case by tightening these 8 fasteners.
- Do not over tighten these fasteners.



## Step 9 Install the rubber stand

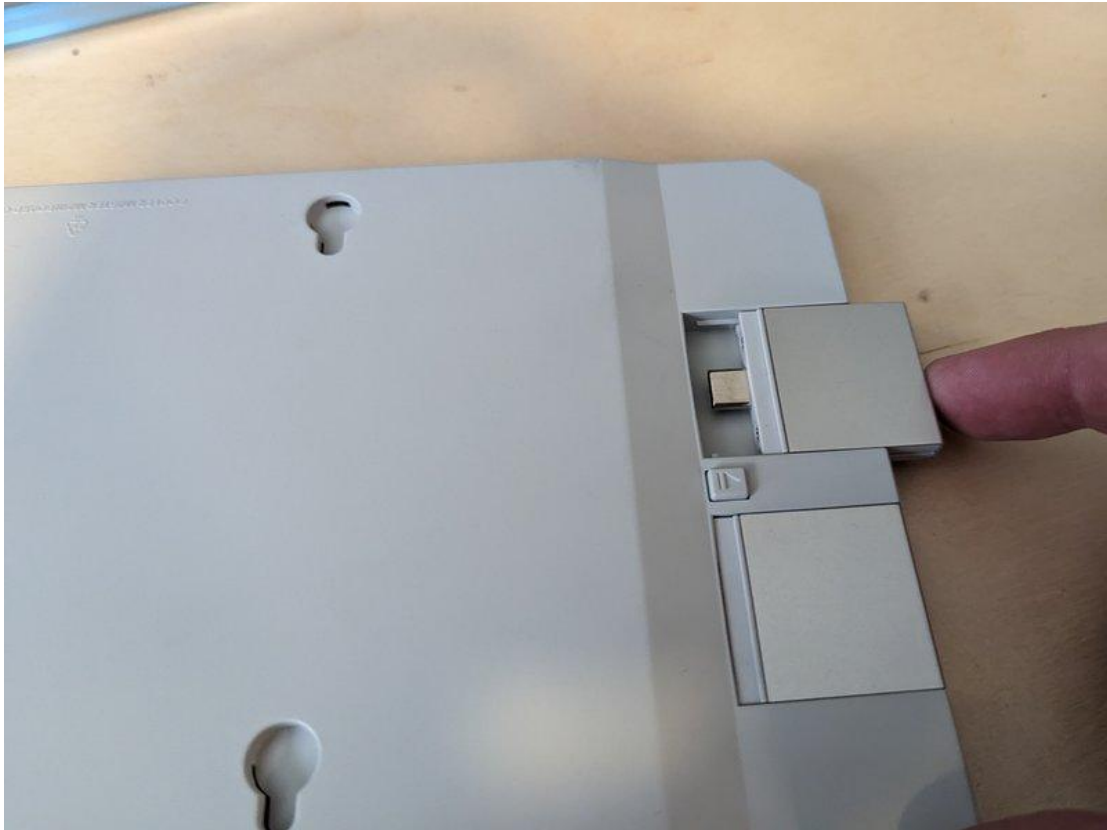
- Inside the box, there is an rubber stand which can be installed by just pushing it into the bottom two holes on the back of the case.
- In the bottom of this rubber stand you can find 4 VESA screws which can be connected to a VESA 100mm x 100mm bracket (for example on the back of your monitor)





## Step 10 Install the expansion cards

- The installation and removal of expansion cards are the same way as the [Framework Laptop](#).
- We recommend you to install at least one USB-C expansion card for power charging (on the top left or right)



**Step 11 Install the WiFi antenna (This step applies to the standard edition DC-ROMA RISC-V mainboard) purchased from DeepComputing website**

- In this box you can find two WiFi antennas, to install them, simply mount them on the top of the case.
- Fasten the two antennas clockwise.







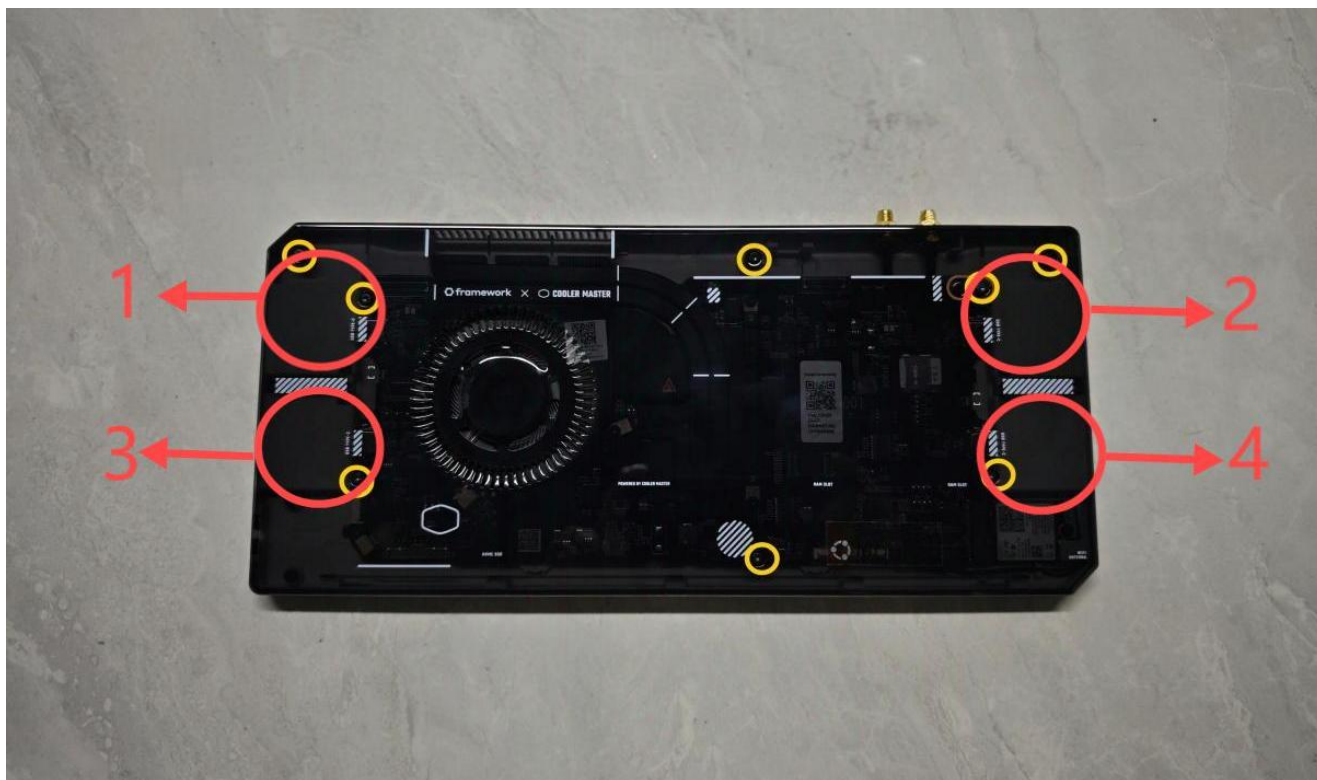
## Step 12 Power on

- The Framework Laptop typically uses its battery to supplement the power adapter for higher power demands. Since the Cooler Master Case does not include a battery, you can maximize performance by using a higher-wattage power adapter that supports up to 100W. We recommend using an adapter with at least 60W output, such as the Framework Laptop Power Adapter.
- After connecting power and any peripherals, you can power on by pressing this button which is indicated in the photo below.





## Description of the expansion port function



| NO. | Interface | Supported features                                       |
|-----|-----------|--|
| 1   | USB-C     | PD3.0, USB3.2 GEN1, USB2.0, HDMI, Charging port          |
| 2   | USB-C     | USB3.2 GEN1, USB2.0, UART, Charging port                 |
| 3   | USB-C     | USB3.2 GEN1, USB2.0, ST LINK                             |
| 4   | USB-C     | PD3.0, USB3.2 GEN1, USB2.0, DP1.4 , Serial port function |