

CM4-IO-CARRIER-CASE



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Summary

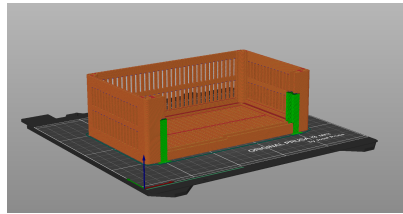
Case for Raspberry PI CM4 IO Board.

[Hobby & Makers](#) > [Electronics](#)

Tags: [case](#) [enclosure](#) [raspberrypi](#) [enclosure](#) [cm4](#) [cm4io](#)
[cm4case](#)

Notes:

- This design is made using FreeCAD
- The case is designed to maximize convection around the carrier PCB.
- By design, there are no screws inside the case. Consequently, the insert and the IO Carrier can dislodge if dropped.
- Before printing, it is recommended that you verify that the dimensions are suited for your purpose.
- The case is designed to fit an M2 adapter and NVME drive.
- Print using Prusa i3 MK3S+ or later.
- Print in PETG with a 0.4 nozzle.
- Print inside an enclosure.
- When printing the BODY, you will need to use paint on supports for the overhangs in the front.



- Honest feedback encouraged

To assemble the case:

1. Insert 4 M3 Threaded Inserts into the Body.
2. Attach CM4 with the IO Carrier to the Insert.
3. Guide the Insert into the Body; press hard to ensure the Insert is level and firmly secured into the case.
4. Attach the fan (AF-A9) so air blows onto the CM4 IO Carrier.
5. Connect the fan
6. Use 4 M3 screws to secure the lid.

Settings:

- Perimeters=4
- Infill=Gyroid, 20%
- Layer Height=0.3

BOM

- [SC0326 Raspberry Pi | Embedded Computers | DigiKey](#)
- [SC0678 Raspberry Pi | Embedded Computers | DigiKey](#)
- Noctua NF-A9 PWM, Premium Quiet Fan, 4-Pin (92mm, Brown)
<https://a.co/d/bLH9zsw>
- M3 Threaded Insert Knurled Brass Nuts Female Thread
<https://a.co/d/5BKYaaO>
- 25mm M3 Screw
<https://a.co/d/7WfWmY9>
- 3d Printed Parts
- Passive Heatsink for CM4

Credits:

Thank you, “Number One” for posting STEP files for the Compute Module 4 IO Board.

- [Raspberry Pi Compute Module 4 IO Board | 3D CAD Model Library | GrabCAD](#)

Thank you to the FreeCAD development team.

- [FreeCAD: Your own 3D parametric modeler](#)

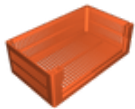
Future Improvements

- Remove the need for screws.
- Recenter the front plate.

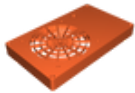
Model files



cm4-io-carrier-case-front.stl



cm4-io-carrier-case-body.stl



cm4-io-carrier-case-top.stl



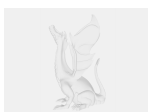
cm4-io-carrier-case-insert.stl



cm4-io-carrier-case-body-front.3mf

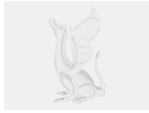


cm4-io-carrier-case-top-insert.3mf



cm4-io-carrier-case.fcstd

Other files



cm4-case-instructions.pdf

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