Raspberry Pi 4B Case

InternalError33

VIEW IN BROWSER

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Summary

Case for a Raspberry Pi 4B

Gadgets > Computers

Tags: case octoprint octopi petg raspberrypi raspberrypicase raspberrypi4 raspberrypi4b raspberrypi4bcase 40mmfan 4010fan

This case is designed for a Raspberry Pi 4B. Integrated into the design is a 5V 4010 fan for cooling.

I added a second version with the GPIO pins exposed by user request. I haven't tested this version myself, but it shouldn't have any problems.

Printing:

I designed these with a .02 layer height in mind, and printed them in PETG with no supports. If your printer struggles with bridging you could probably add supports or just trim away the excess with an X-acto knife or razor blade.

Parts List:

Case top and Case Bottom (printed)

5V 40mm (4010) fan (I installed a 2 pin Dupont connector on my fan)

2X M3x10 SHCS or Button Head screws (fan mounting screws. I used 2 but there's space for 4 if you want that extra security)

4X M3x10 Flat head screws (M3x12 will also work)

Assembly Instructions:

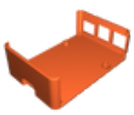
Start by installing the fan on the case top. The counterbored holes should mount over the fan stubs. Use at least 2 M3x10 SHCS/Button Head screws to hold the fan in place. *Take note of the length of your fan cable. You may want to adjust the orientation of the fan to get the best location for wire management while ensuring the connector can reach the IO pins on the board.

Taking the board and case bottom, feed the board into the case bottom USB end first. There may be some interference, but the board should slide into place without much force. *Ensure that the SD card is not installed for this step*

-Then plug the fan's dupont connector in to the 4th (VCC-5V) and 6th (GND) pins and You can then feed the top into the case bottom. Watching for alignment on the USB end of the case will help when assembling. There will be an interference with the audio port. You will need to flex the side of the case over the port. The audio port will pop into its opening when the top is in its final position.

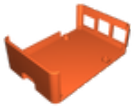
Use the 4 M3x10 Flat head screws to secure the top and bottom halves and complete the assembly.

Model files



case_bottom.stl

case_top.stl



case_bottom_exposed_gpio_pins.stl

case_top_exposed_gpio_pins.stl

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