



Raspberry Pi5 + Geekworm X1001 NVMe SSD Case



JetSteam

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Summary

This model contains a case for Raspberry Pi5 with attached Geekworm X1001 PCIe to M.2 Key-M NVMe SSD PIP TOP

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This model was inspired by another model <https://www.printables.com/model/924041-raspberry-pi-5-case-with-pineberry-hatdrive-bottom>, but it's not a remix. The case was designed completely from scratch (no reverse engineering).

The case was designed to fit the Raspberry Pi 5 with the mounted Geekworm X1001 shield for the NVME M2 SSD (<https://wiki.geekworm.com/X1001>). The following features were implemented:

- Simple design with minimal dimensions.
- Minimum supports during the print (could be applied for USB and Ethernet ports, but not required).
- All ports are available.
- The power button is operational.

- Inserting an SD card is possible without unscrewing the board, but with an unscrewed upper cover.

Print Settings

The table below shows the print settings used to print the model.

Property	Value
Filament	PETG, ABS
Infill	20%
Walls	3-4
Top/bottom layers	4
Layer	0.2

Extra BOM

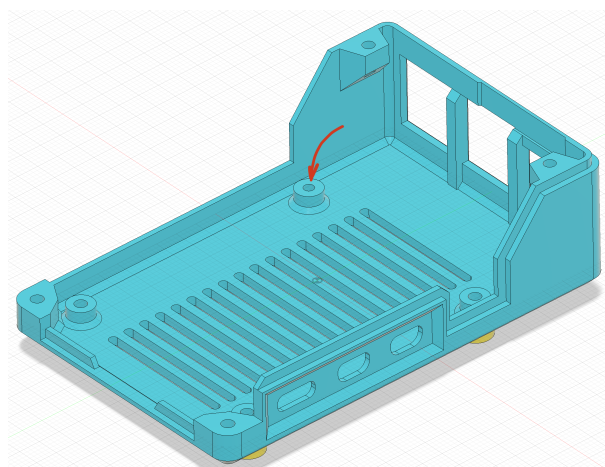
1. Screw M3x20 SHCS - 2
2. Screw M3x8 SHCS - 2
3. Screw M2.5x10 BHCS - 4

Highlights

This section contains some additional information about the design.

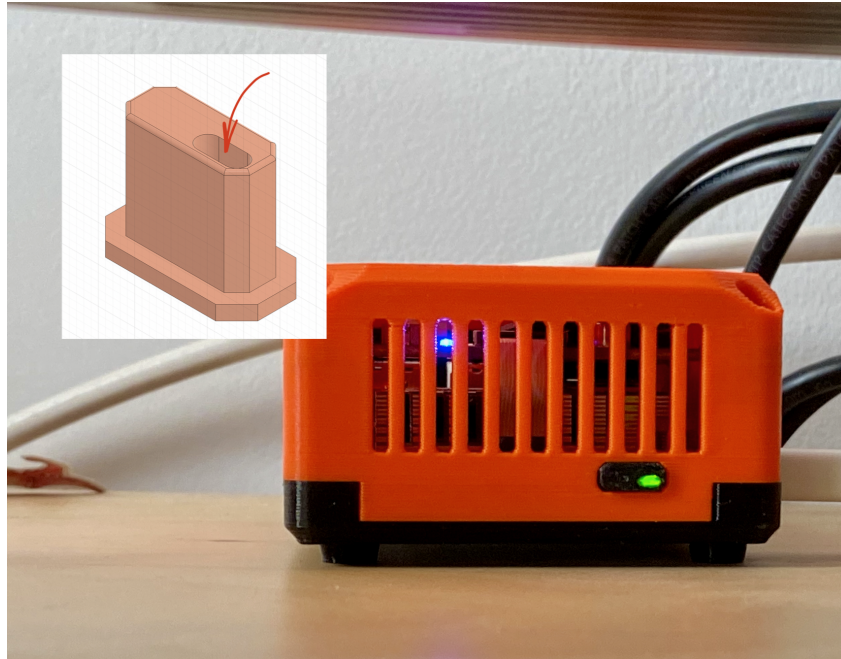
Lower part hole diameter

One of the holes in the lower part (see image below) was intentionally designed with a smaller diameter. It is only used for bottom spacer (stand) mounting and does not participate in board fastening. Because it is screwed into plastic directly, the hole diameter was reduced for improved rigidity of the screw fastening.



The power button status light

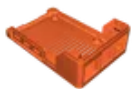
The power button contains a hole that could be filled with hot glue to serve as a light conductor and make the button display the system's current status.



Versions

- v14 - The initial design, version without heat inserts
- v15 - Updated version with modified lower part to assemble with M3 heat inserts

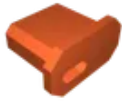
Model files



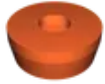
caselower-v14.stl



caseupper-v14.stl



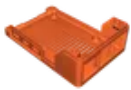
powerbutton-v14.stl



spacer_v14.stl



rpi5-x100-case-v14.step



caselower-v15-heat-inserts.3mf

☐ This version is updated to support heat inserts



rpi5-x1001-case-v15-heat-inserts.step

☐ This version is updated to support heat inserts

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