



ESP32 CAM Case With Tripod Mount



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[VIEW IN BROWSER](#)

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Summary

Remix of the ESP32 Cam case by mojocorp. I really like their design, however I wanted the following.

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Tags: [cameramount](#) [esp32](#) [esp32cam](#) [usb](#)

Remix of the [ESP32 Cam case by mojocorp](#). I really like their design, however I wanted the following.

- Printable without supports
- Room for Dupont connectors
- Tripod mounting hole
- Increased rear rim thickness

The shape of the original looks great but requires supports for printing properly and I wanted to avoid this. This remix does not require supports, though if using the version with the tripod hole on the bottom there is a little bridging but nothing too challenging. Rather than solder the wires to the ESP32-Cam I wanted to use Dupont connectors to make reprogramming easier later outside the case. This required a much deeper case than the original, which is required for the tripod mount in any case. One of my cameras was to be suspended with a tripod mount from the top of an enclosure and the other just installed on a mini tripod so I created one version with the

tripod thread on the top and one with it on the bottom. It is a printed 1/4"-20 standard tripod thread. When I printed the original I found that the rear case was a fairly loose fit for me so I added 0.1mm thickness to the rim in the rear panel to make the fit tighter. Your mileage may vary depending on your printer and tolerances. STEP files are also included in case you want to make further edits. The Blue and Green USB PCB back panels are included however I only had the blue version of the PCB to test. A version with no tripod mount is also included. As with the original, PLA is not recommended due to the temperature the ESP32-Cam can reach when in heavy use. PETG should be perfectly fine or anything with higher temperature resistance such as ABS/ASA. These are the electronics parts I used for my cameras.

- [USB Breakout](#)
- [ESP32-Cam](#)

There are quite a few different versions floating around so if they differ it might not fit this case.

UPDATE 2019-06-23: With the orientation provided by the top and bottom tripod versions of the case the image will be rotated 90 degrees. This isn't an issue if using with [OctoPrint](#) since it has an option to rotate streams for viewing. The left and right tripod versions (and the associated rotated rear panel) put the board in the normal orientation so it can be flipped easily in firmware if needed. Note, only the Blue PCB version is provided for the rotated rear panel.

Print instructions Licence: Creative Commons - Attribution Category: Camera Print Settings

Printer Brand: Prusa

Printer: Mk2.5s

Rafts: No

Supports: No

Resolution: 0.2mm

Infill: 20%

Filament: Prusa PETG Orange

Notes:

STL files are provided in the correct printing orientation. The tripod threads will likely print a little rough however they should form reasonably well once the tripod screw is inserted a few times.

Post-Printing

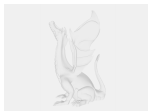
All parts are press fit, just solder wires to the PWR and GND on the USB connector and crimp the to a two pin Dupont connector on the other end to connect PWR to 5V and GND to GND.

Make sure the USB board is flush with the bottom of the case (you will need to cut your solder joints flush. I added a little hot glue for strain relief but that's totally optional. Make sure your ESP32-Cam is working as needed before putting it all together.

Model files



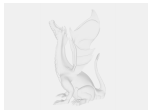
esp32-cam-back-bluepcb.stl



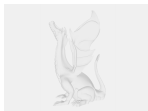
esp32-cam-back-bluepcb.step



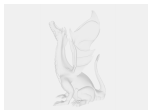
esp32-cam-front-no-tripod.stl



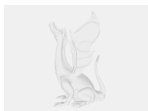
esp32-cam-back-bluepcb-rotated.step



esp32-cam-front-top-tripod.step



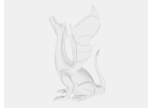
esp32-cam-front-right-tripod.step



esp32-cam-front-bottom-tripod.step



esp32-cam-back-bluepcb-rotated.stl



esp32-cam-front-no-tripod.step



esp32-cam-back-greenpcb.stl



esp32-cam-front-left-tripod.stl



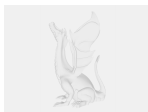
esp32-cam-front-top-tripod.stl



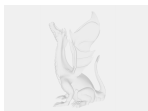
esp32-cam-front-right-tripod.stl



esp32-cam-front-bottom-tripod.stl



esp32-cam-front-left-tripod.step



esp32-cam-back-greenpcb.step

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com)

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