

Holder/case for ESP32-C3 with OLED display



nsty

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Summary

ESP32 board sold on AliExpress for about \$3, includes an OLED display. Case for use as cheap Home Assistant display.

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Tags: [esp32](#) [esp32case](#) [esp32c3](#)

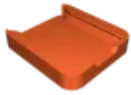
I needed a small case for this particular ESP32-C3 board offered with integrated OLED display on AliExpress. I use it as a cheap, tiny display with ESPHome and Home Assistant to present small amounts of sensor data directly at the locations of interest. In addition to the onboard reset button and a red power LED, the board offers one blue LED and another button for general purpose, which can be used with the case. The reset button can be pushed using a pen through the pinhole.

The holder/bottom and lid both print without support. It is best to place the ESP board onto the lid first and, then, slide both into the bottom part. When doing it the other way around, I damaged a button while sliding the lid onto the board. The holder with hole fits a 3-mm countersunk screw for mounting.

I added Fusion360 files and also included my rough 3D template for the commercial board. Maybe someone can make use of it. You can find my ESPHome config files in [this Gist](#) and may use them as an inspiration for

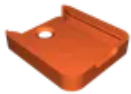
yours. It includes the configuration of the display offset, debouncing button, and the way I interfaced Home Assistant.

Model files



esp32-c3-oled-v19_holder.stl

📄 Holder bottom



esp32-c3-oled-v19_holder_with_hole.stl

📄 Holder bottom with 3-mm mounting hole



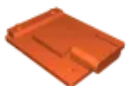
esp32-c3-oled-v19_lid.stl

📄 Holder lid



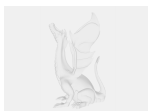
esp32-c3-oled-v19_full_with_esp.stl

📄 Full assembly



esp32-c3-oled-v19_esp.stl

📄 Template for ESP32-C3 board with OLED display



esp32-c3-oled-v19.f3d

📄 Fusion360 files

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