Feather TFT STEMMA Case

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https://learn.adafruit.com/feather-tft-stemma-case

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Overview

3D print a Stemma case for the Adafruit TFT Feather with ESP32-S2.

This dev board features a 1.14 inch display with a Lipo battery charging circuit and battery monitor.

It’s has the ESP32-S2 mini module which works with both Arduino or CircuitPython.

We designed and 3D Printed a snap fit case to make a little compact IoT project.

You can easily add STEMMA QT breakouts like temperature and humidity sensors.

The two buttons on the front are accessible so you can quickly reboot or get into the bootloader.

The STEMMA QT connector is also accessible, so you can daisy chain your sensors and make a portable IoT project.
You can 3D print the parts without any support material using your favorite filament.

The bottom features slots so you can use M2.5 hardware to secure STEMMA QT sensors.

You can fit up to two boards and secure them using hex nuts.

A small Lipo battery is able to fit in between the built-in standoffs with the cable routed through the side.

The Feather press fits into the case and the two covers just snap fit over the top.
We've got a new machine here at Adafruit, it can uncover your deepest desires. Don't believe me? I'll turn it on right now to prove it to you! What, you want unlimited...
https://www.adafruit.com/product/5300

Lithium-ion polymer (also known as 'lipo' or 'lipoly') batteries are thin, light, and powerful. The output ranges from 4.2V when completely charged to 3.7V. This...
https://www.adafruit.com/product/2750

This 4-wire cable is 50mm / 1.9" long and fitted with JST SH female 4-pin connectors on both ends. Compared with the chunkier JST PH these are 1mm pitch instead of 2mm, but...
https://www.adafruit.com/product/4399
Black Nylon Machine Screw and Stand-off Set – M2.5 Thread
Totaling 380 pieces, this M2.5 Screw Set is a must-have for your workstation. You'll have enough screws, nuts, and hex standoffs to fuel your maker...
https://www.adafruit.com/product/3299

Stacking M2.5 Hardware Kit for STEMMA QT and RP2040 Trinkey
Here is the perfect hardware kit to make a RP2040 QT Trinkey into any kind of USB-connected smart sensor with a...
https://www.adafruit.com/product/5248
3D Printing

Parts List
STL files for 3D printing are oriented to print "as-is" on FDM style machines. Parts are designed to 3D print without any support material. Original design source may be downloaded using the links below.

Slice with settings for PLA material.
The parts were sliced using CURA using the slice settings below.

PLA filament 220c extruder
0.2 layer height
10% gyroid infill
60mm/s print speed
60c heated bed
Assemble

Mount STEMMA sensors

The bottom features slots so you can use M2.5 hardware to secure STEMMA QT sensors if you wish.

You can fit up to two boards and secure them using hex nuts.

Using the stacking headers, you could stack multiple sensor on top of each other! ()
A small Lipo battery is able to fit in-between the built-in standoffs with the cable routed thru the side.

The Feather press fits into the case. The two covers just snap fit over the top.
The STEMMA QT connector is accessible so you can daisy chain your sensors and make a portable IoT project!