



# Case for Feather RP2040 USB Host

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<https://learn.adafruit.com/case-for-feather-rp2040-usb-host>

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# Overview



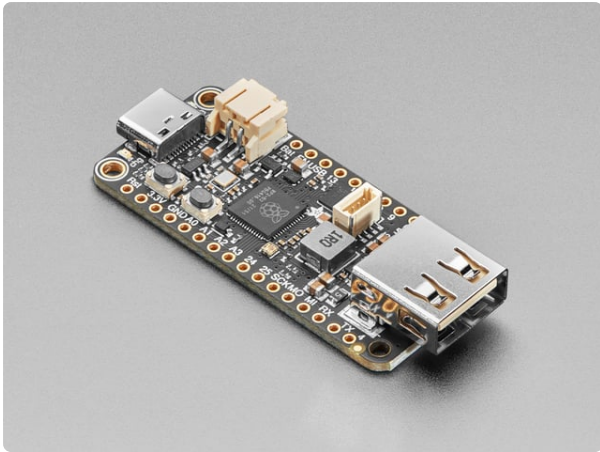
## Snap Fit Enclosure

3D print an enclosure for the Feather RP2040 that snap fits together! No screws needed. The case features openings for both of the USB ports and the STEMMA QT port. The cover features built-in actuators for pressing the on-board boot and reset buttons.



## Light Pipe

The on-board NeoPixel shines through the top cover. Use a dab of hot glue to create a DIY light pipe to make the NeoPixel illuminate at all viewing angles.



### Adafruit Feather RP2040 with USB Type A Host

You're probably really used to microcontroller boards with USB, but what about a dev board with two? Two is more than one, so that makes it twice as good! And...

<https://www.adafruit.com/product/5723>



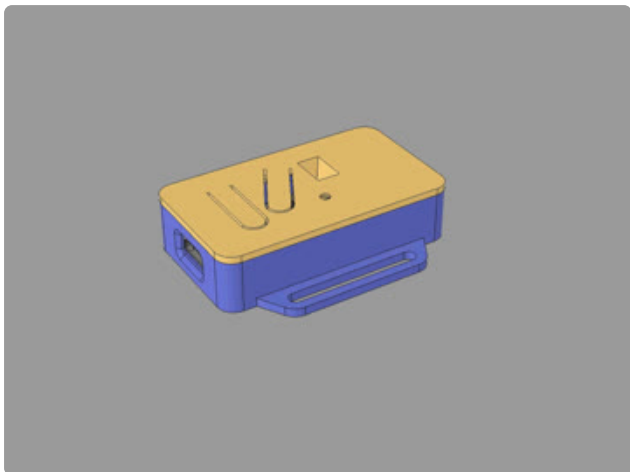
### Pink and Purple Woven USB A to USB C Cable - 1 meter long

This cable is not only super-fashionable, with a woven pink and purple Blinka-like pattern, it's also made for USB C for our modernized breakout boards, Feathers, and...

<https://www.adafruit.com/product/5153>

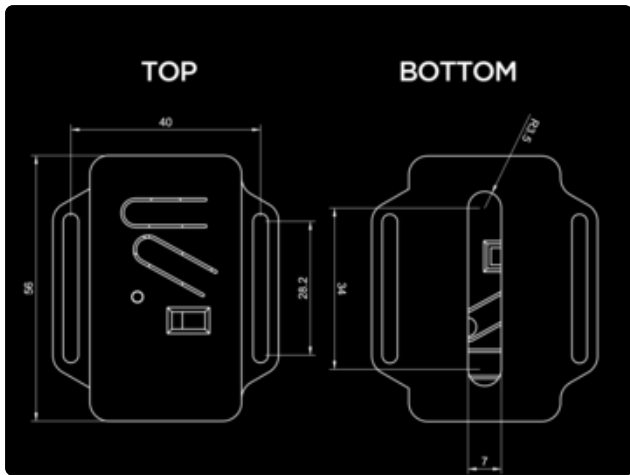
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## CAD Files



### CAD Assembly

The Feather RP2040 USB Host is installed into the case without any hardware screws. The top cover snap fits over the case.



## Technical Drawing

Use the PDF to reference the dimensions of the case and spacing between the two mounting tabs.

[Download Drawing PDF](#)

<https://adafru.it/18Dd>

[Download CAD source \(STEP, F3Z format\)](#)

<https://adafru.it/18Df>

[Download STLs.zip](#)

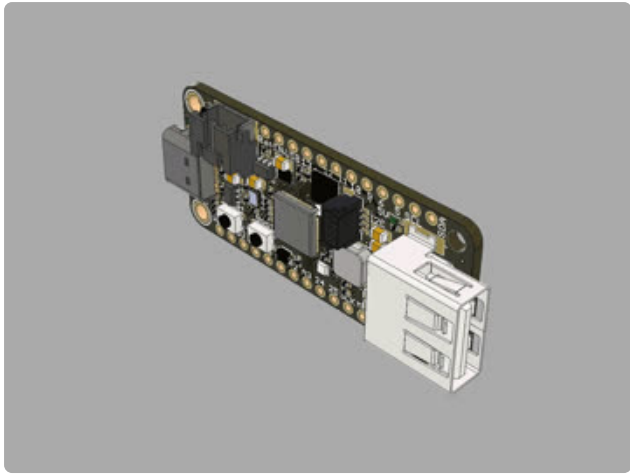
<https://adafru.it/18Dh>



## Build Volume

The parts require a 3D printer with a minimum build volume of:

58mm (X) x 50mm (Y) x 14mm (Z)

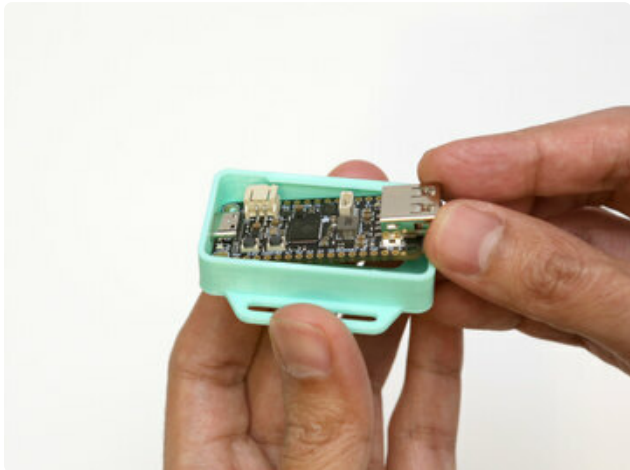


## Design Source Files

The project assembly was designed in Fusion 360. This can be downloaded in different formats like STEP, STL and more. Electronic components like Adafruit's boards, displays, connectors and more can be downloaded from the [Adafruit CAD parts GitHub Repo \(https://adafru.it/RvF\)](https://adafru.it/RvF).

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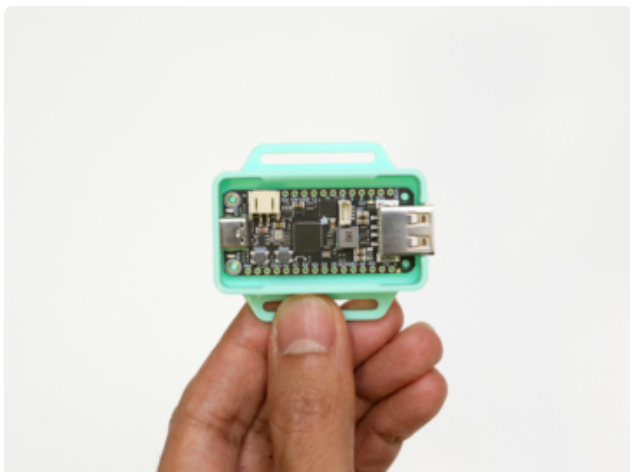
## Assembly



### Install Feather

Orient the Feather and the case with the USB-C connector facing the smaller opening.

Insert Feather at an angle with the USB-C port passing through the USB-C opening in the case.



### Installed Feather

Press the Feather into the case so the pegs in the built-in standoffs fit through the four mounting holes.



## Align Cover

Orient the top cover with the two buttons and the STEMMA QT port lined up with the components on the Feather.



## Install Cover

Place the cover over the top of the case and firmly press the edges together until they snap fit.



## Assembled Case

The case features two tabs that are M3 sized for securing to surfaces.



## USB Ports

The USB-C and USB-A ports are accessible on the front and back of the enclosure.



## Bottom Slot

For projects that require additional wires, they can pass-through the slot in the bottom of the case.