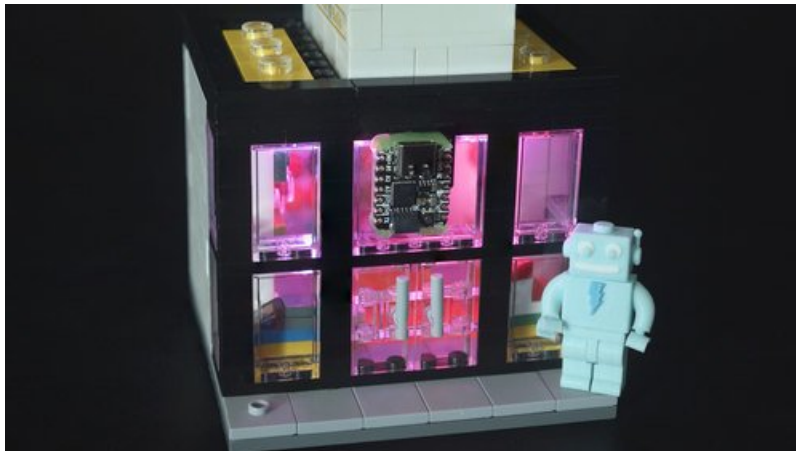




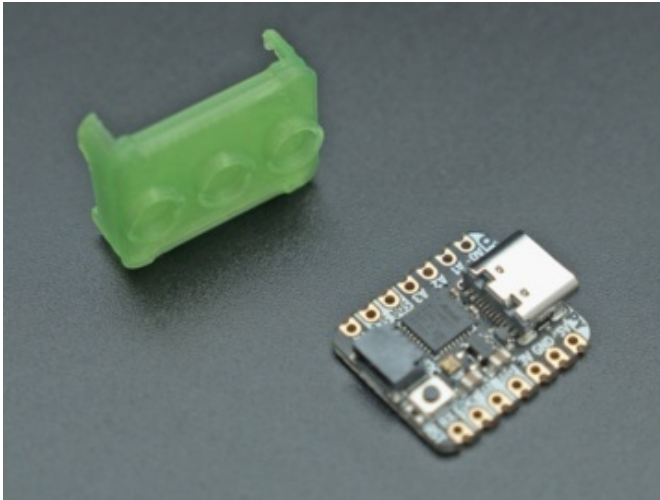
QT Py Lego

Created by Ruiz Brothers



Last updated on 2020-10-07 08:43:33 AM EDT

Overview

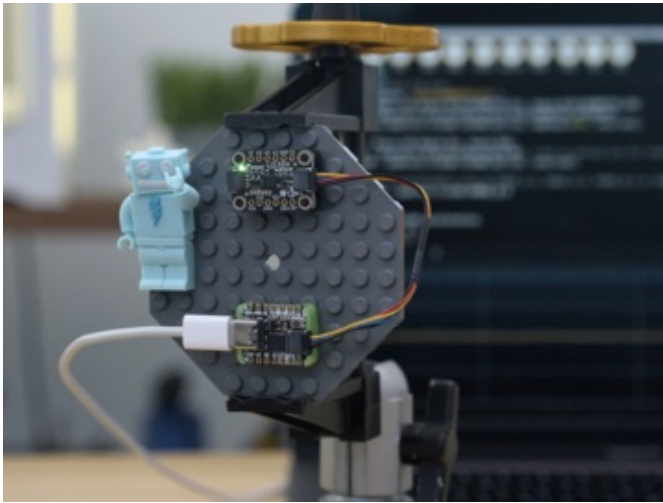


Organize projects with modular Lego base plates for QT Py ! These 3d printed holders feature built-in standoffs for press fitting the PCBs.

It's a nice way to secure them without screws or adhesives.

[Our favorite connector - the STEMMA](#)

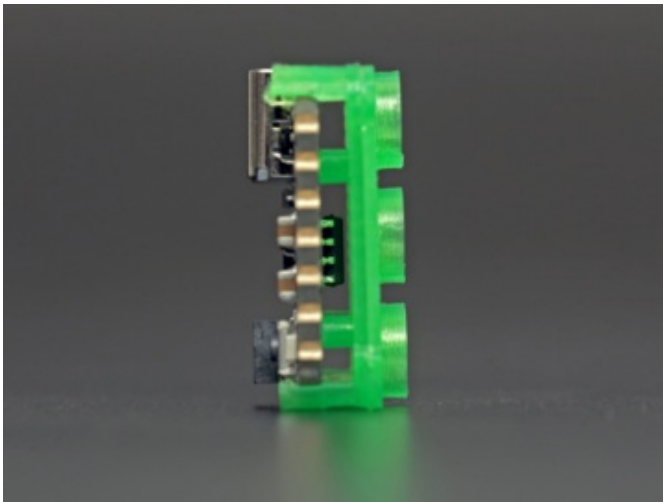
[QT \(https://adafru.it/HMB\)](https://adafru.it/HMB), a chainable I2C port that can be used with [any of our STEMMA QT sensors and accessories \(https://adafru.it/NmD\)](#). STEMMA allows you to plug-and-play together various devices and accessories, without any soldering!



In this project, we'll make a Lego base plate to fit with all of our STEMMA boards! We designed several different sizes to fit all of our boards!

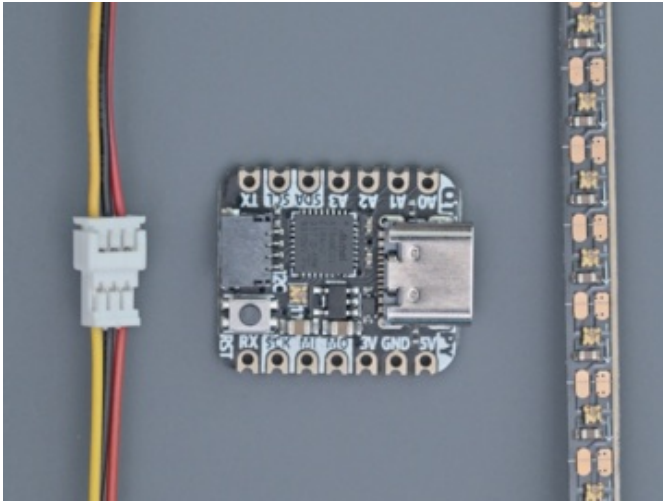
On the bottom are tubes that are designed to fit onto LEGO compatible bricks.

The clearance in between the PCB and holder allow space for components on the bottom of the PCB!

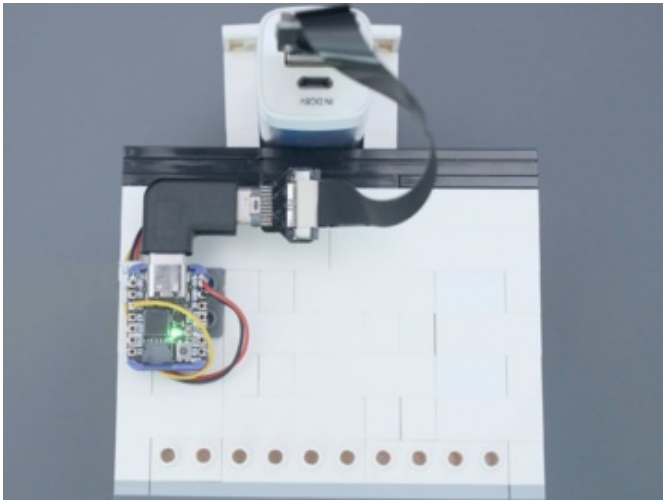


The QT Py is perfect for embedding into small spaces, like Lego buildings!

We used small PicoBlade 3 pin cables to wire our even smaller Ultra skinny Neopixel strips. These strip have a 4mm width, yet surprisingly flexible and can fit just about anywhere!



The strip is made of flexible PCB material, with some tape on the back making it easy to adhere to most surfaces.





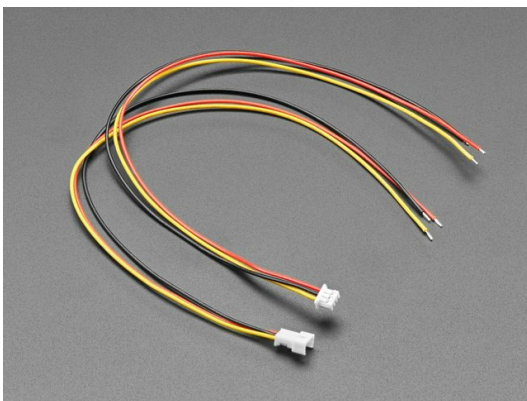
Parts

Your browser does not support the video tag.

[Adafruit QT Py - SAMD21 Dev Board with STEMMA QT](#)

\$6.00
IN STOCK

[Add To Cart](#)



[1.25mm Pitch 3-pin Cable Matching Pair - 40cm long](#)

\$0.95
IN STOCK

[Add To Cart](#)

Your browser does not support the video tag.

[Ultra Skinny NeoPixel 1515 LED Strip 4mm wide](#)

\$24.95
IN STOCK

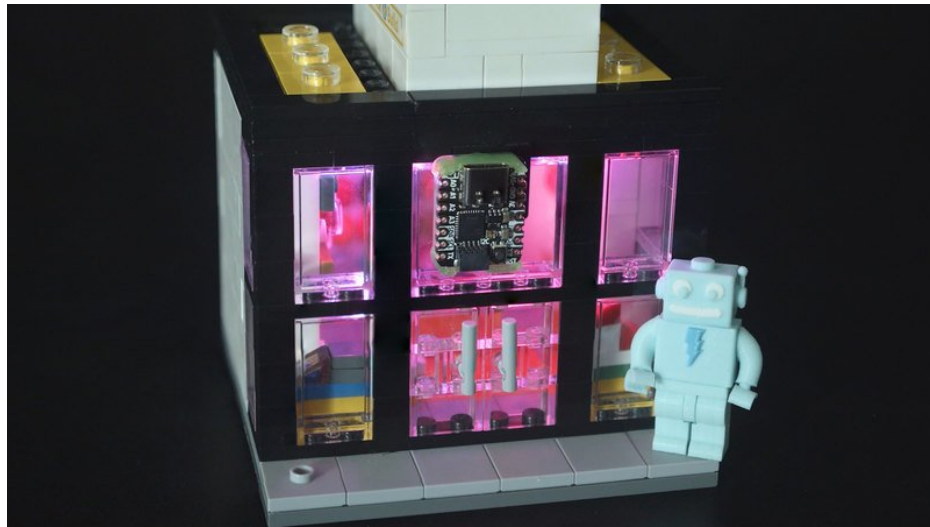
Add To Cart



Right Angle USB Type C Adapter - USB 3.1 Gen 4
Compatible

\$5.95
IN STOCK

Add To Cart



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.

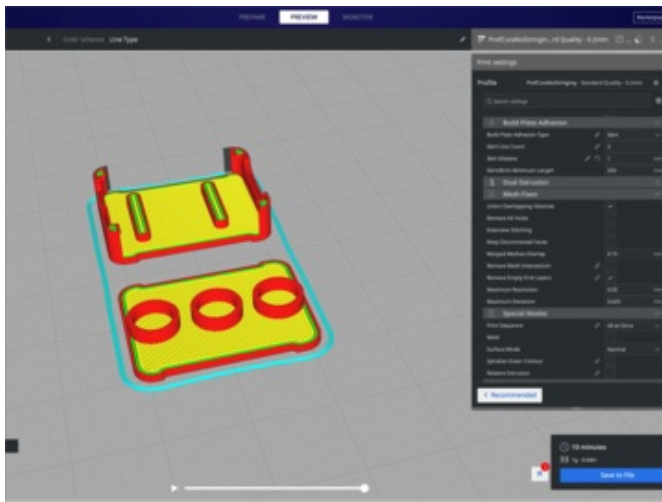
- QYPY-Lego.stl

<https://adafru.it/NFF>

<https://adafru.it/NFF>

<https://adafru.it/NFG>

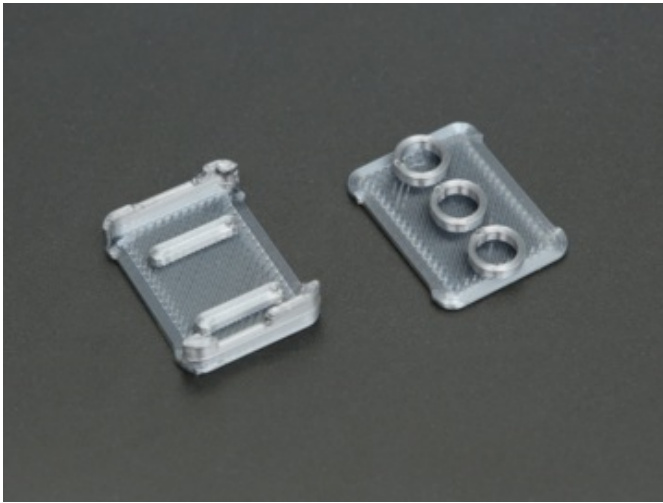
<https://adafru.it/NFG>



Slicing Parts

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

- PLA filament 215c extruder
- 0.2 layer height
- 10% gyroid infill
- 60mm/s print speed
- 60c heated bed



Glue

We use super glue to adhere the brick studs / tubes. Apply small even dots on one of the part, align both parts and gently press together. Allow the parts to dry for at least 10 minutes before use.



Follow the directions on the super glue container, do not touch with fingers, please wear eye protection and be careful. Older makers should help younger ones.

