



MicroLipo v2 Case

Created by Ruiz Brothers



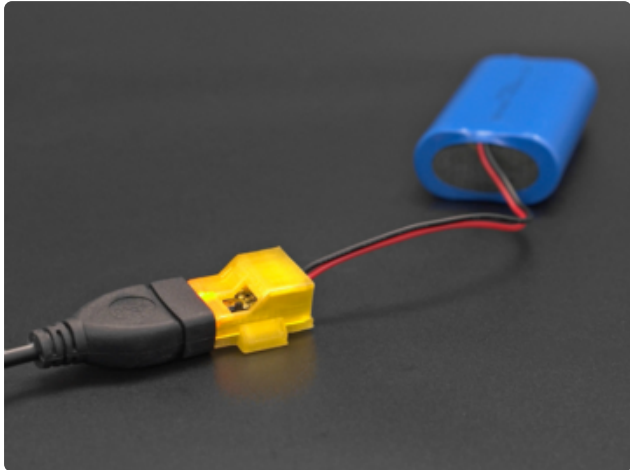
<https://learn.adafruit.com/MicroLipo-Case>

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Table of Contents

Overview	3
<hr/>	
• Rate switch	
• Protective Case	
• Parts	
3D Print	8
<hr/>	
• Parts List	
Assemble	9
<hr/>	
• Place	
• Snap	
• Charge	

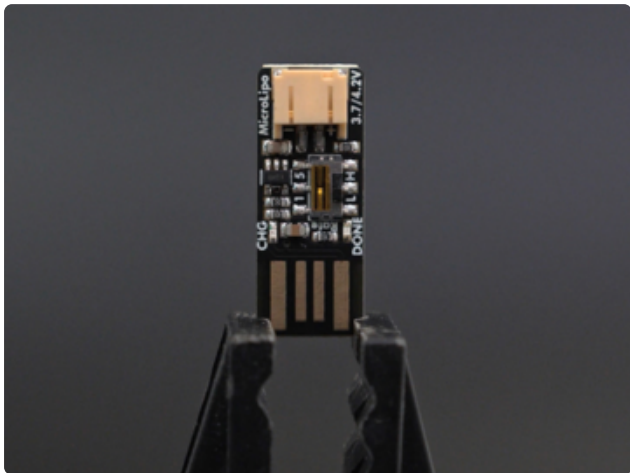
Overview



3D print a case for the updated Micro Lipo Charger V2!

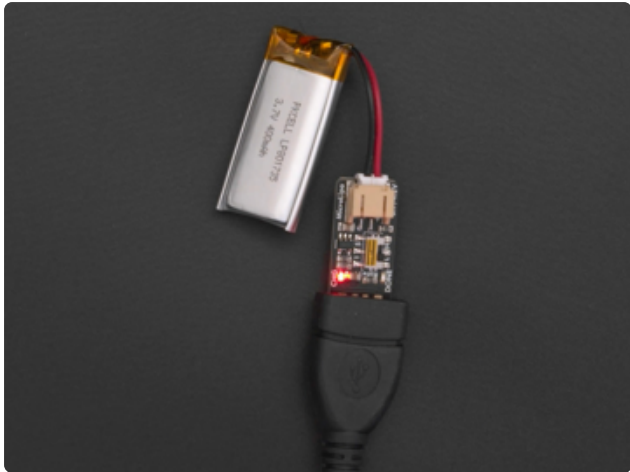
This features 5V input for charging single Lithium Ion/Lithium Polymer batteries. And it ships with a free JST cable.

The new V2 version features a built-in slide switch so you can easily switch between the two charging rates.



3D print the two halves in your favorite filament. Use translucent PLA to make it look like those clear enclosures from the 90's.

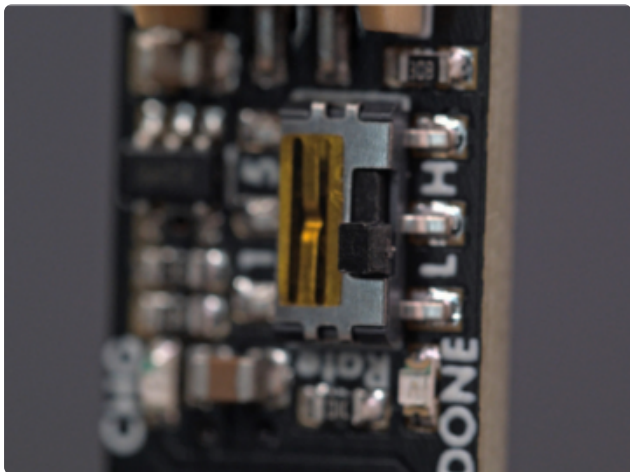
The JST connectors are covered to help keep out any dust and to provide a bit of protection.



Rate switch

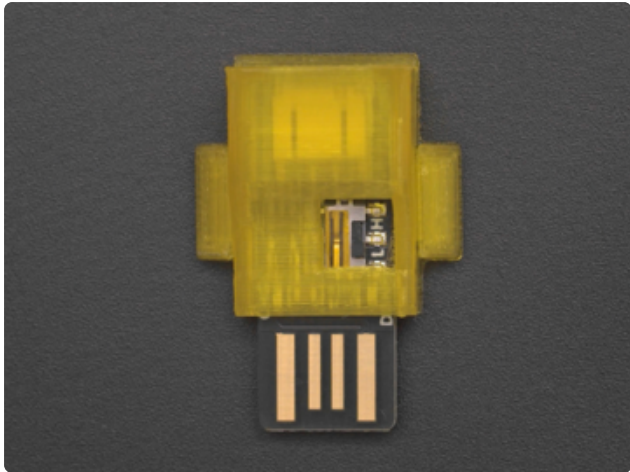
Flip the slide switch to choose between High or Low charge rates.

Check out this guide (<https://adafruit.it/dDT>) for more about selecting the right charge rate for your battery!



The PCB has pads for USB so you can plug it directly into anything with a USB type A socket.

It features charging status LEDs so you'll know when your battery is fully charged.



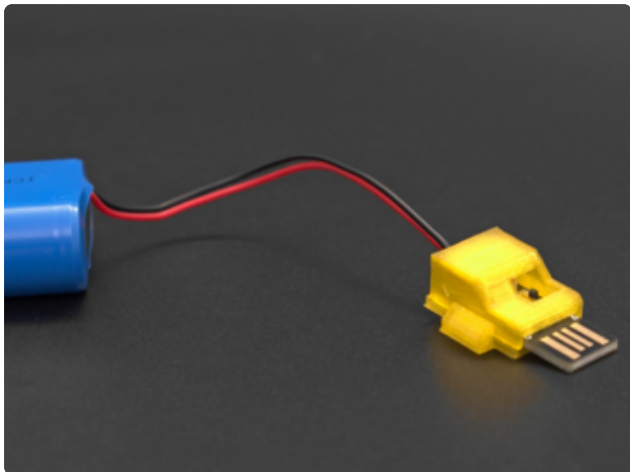
Protective Case

The PCB sits over the bottom half and the top snap-fits over the sides.

The case features a cutout for the built-in slide switch so you can still access it to adjust the charging rate.

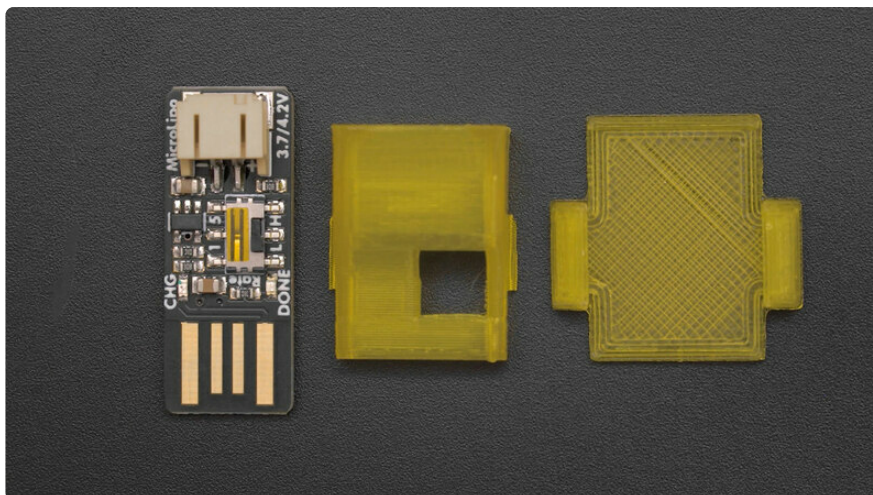
This supports all of the Adafruit lipo batteries so you can safely swap between the different types.

For all the technical details, be sure to check out the product learn guide.

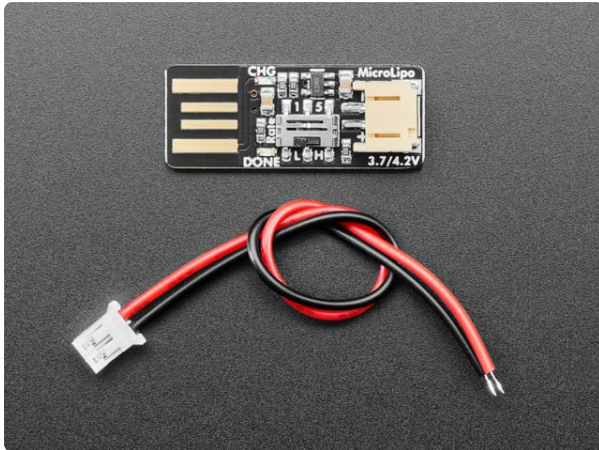


Full Battery Details

<https://adafru.it/tfO>



Parts



Adafruit Micro Lipo - USB Lipo/LiPoly charger

Oh so adorable, this is the tiniest little lipo charger, so handy you can keep it any project box! Its also easy to use. Simply plug in the gold plated contacts into any USB port and a...

<https://www.adafruit.com/product/1304>



USB Extension Cable - 3 meters / 10 ft long

This handy USB extension cable will make it easy for you to extend your USB cable when it won't reach. The connectors are gold plated for years of reliability. We use these handy...

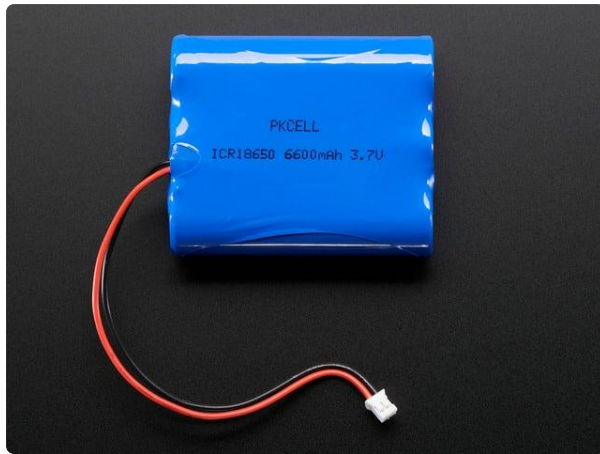
<https://www.adafruit.com/product/993>



USB Cable with Switch

Add a power switch to any USB-powered project simply by plugging this between the USB power port and the USB cable. This is the most useful thing you never knew you needed! You'll...

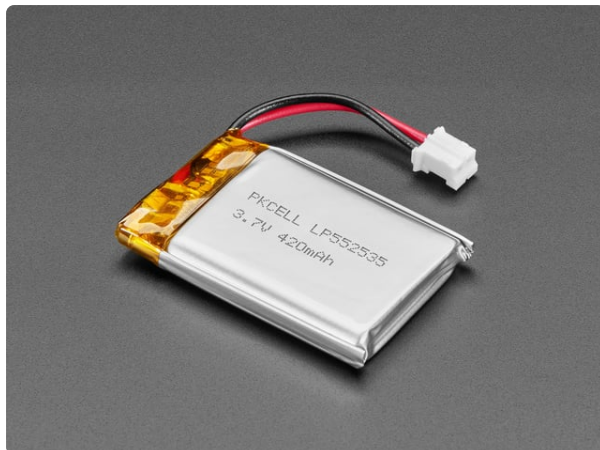
<https://www.adafruit.com/product/1620>



Lithium Ion Battery Pack - 3.7V 6600mAh

Need a massive battery for your project? This lithium-ion pack is made of 3 balanced 2200mAh cells for a total of 6600mAh capacity! The cells are connected in parallel and spot-welded...

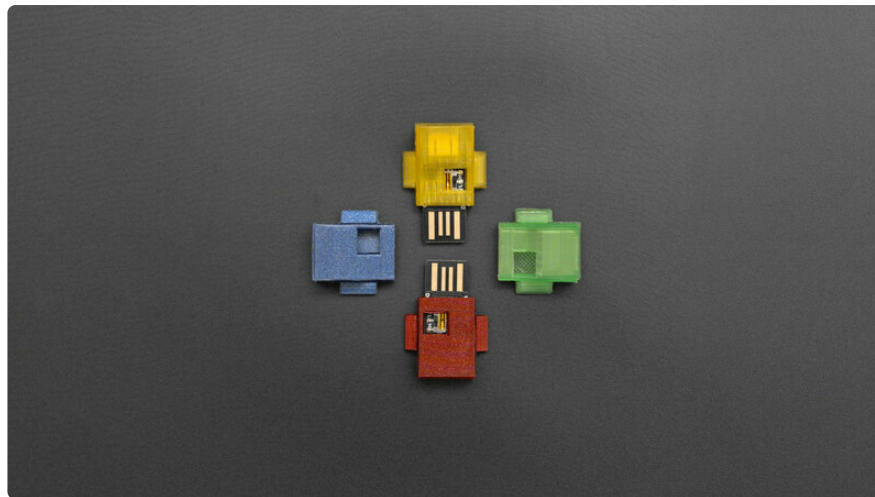
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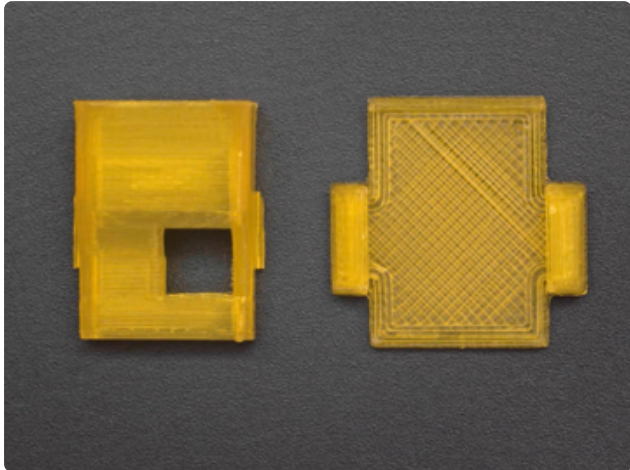
Lithium Ion Polymer Battery with Short Cable - 3.7V 420mAh

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/4236>



3D Print



Parts List

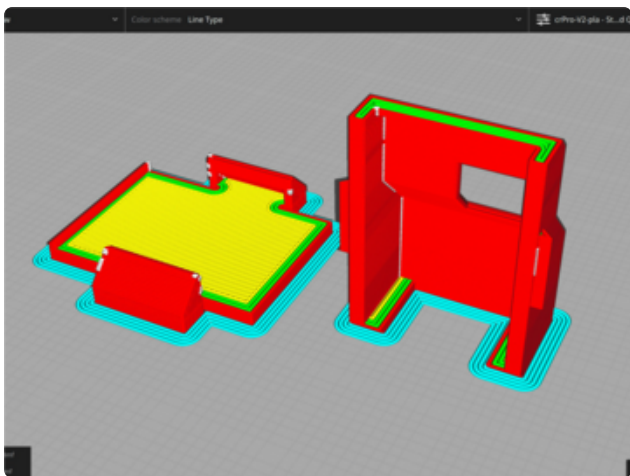
STL files for 3D printing are oriented to print "as-is" on FDM style machines. Parts are designed to 3D print without any support material. Original design source may be downloaded using the link below.

Edit Case Design

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

Download STLs

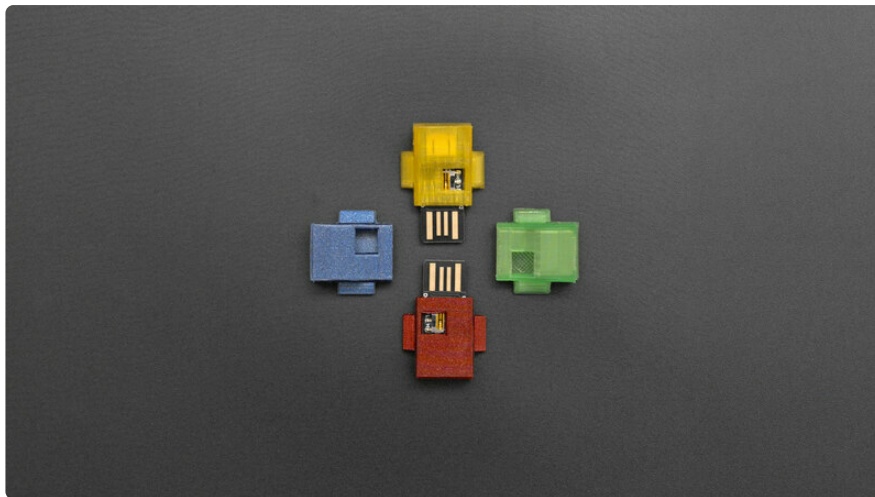
<https://adafru.it/18hC>



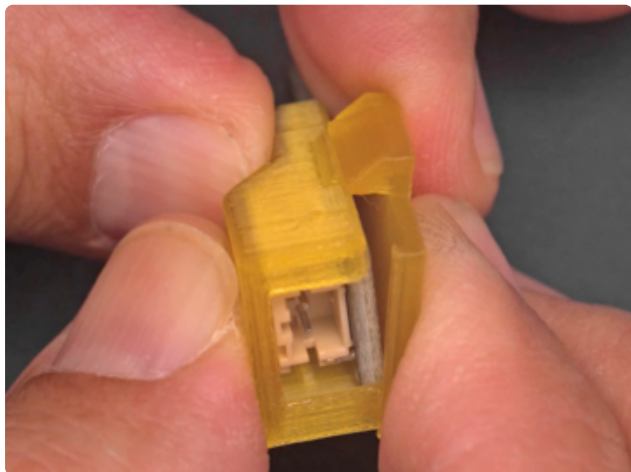
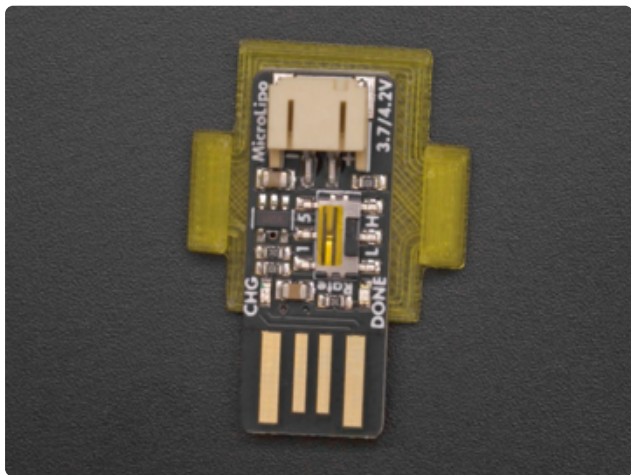
Slice with settings for PLA material.

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

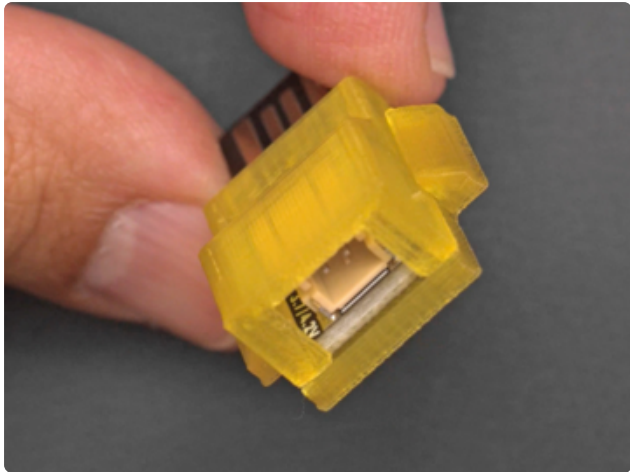


Place

Align the PCB board over the printed plate. The small wall is positioned next to the JST port.

The top part of the case is placed over the JST port. Align the nubs on each side of the case.

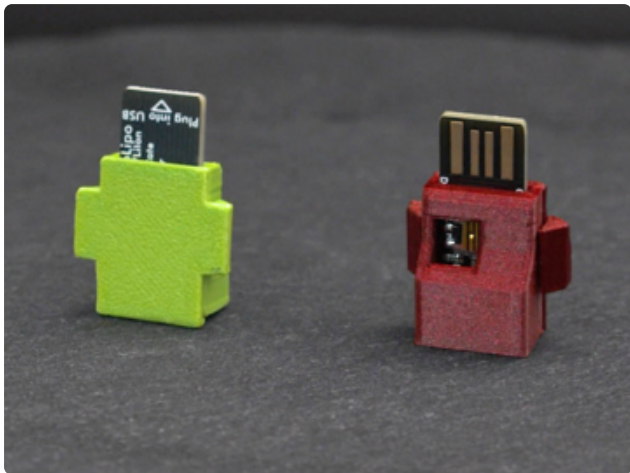
The nubs on the plate are aligned to the snaps on the top case. Press fit one side at a time to snap together.



Snap

The case features a cutout for the built-in slide switch so you can still access the charging rate.

The JST connectors are covered to help keep out any dust to provide a bit of protection.



Charge

For use with Adafruit LiPoly/Lilon batteries only! Other batteries may have different voltage, chemistry, polarity or pinout.



Remember to move the slide switch on the top over to "High / 500mA" mode, for when charging batteries with 500mAh size or larger.