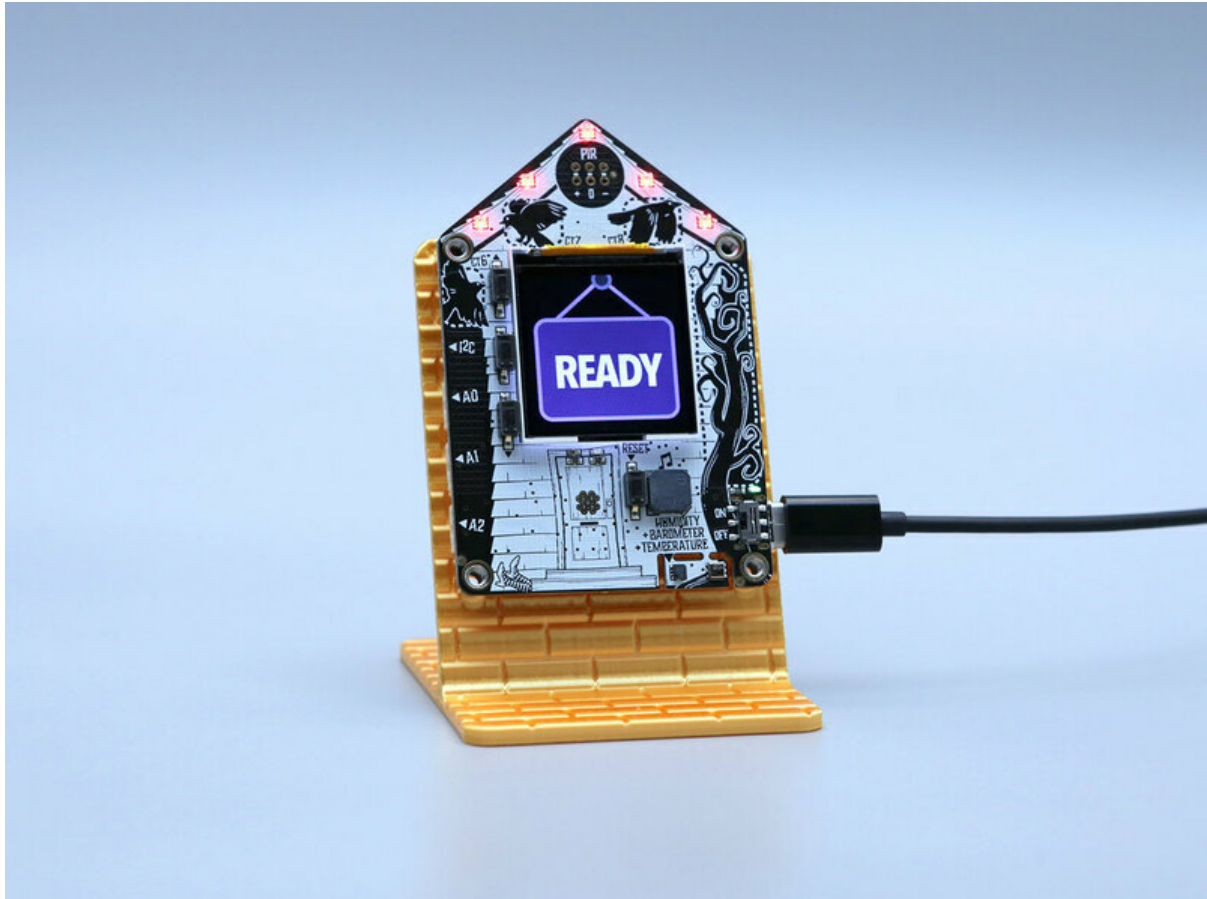




FunHouse 3D Printed Stand

Created by Ruiz Brothers



<https://learn.adafruit.com/funhouse-3d-printed-stand>

Last updated on 2024-06-03 03:23:58 PM EDT

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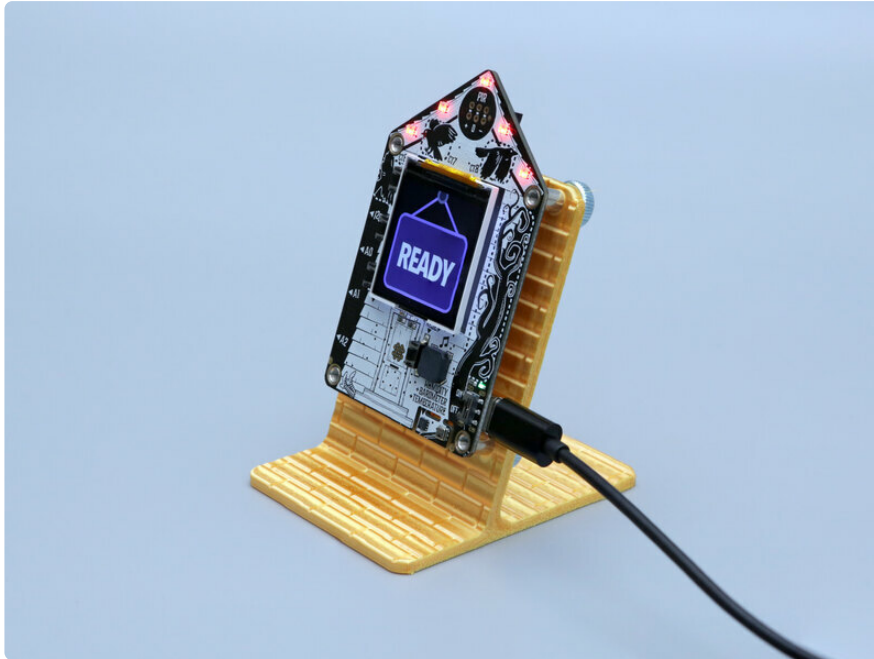
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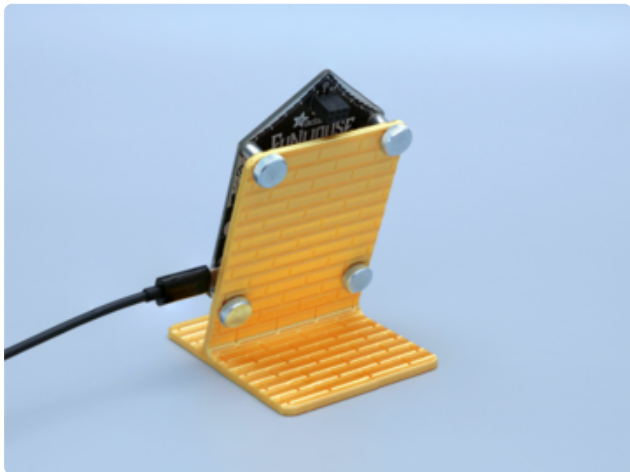
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Overview



3D Printed Stand

This simple stand is designed for the Adafruit FunHouse. It features a nice brick texture that is reminiscent to the Yellow Brick Road from The Wizard Of Oz.



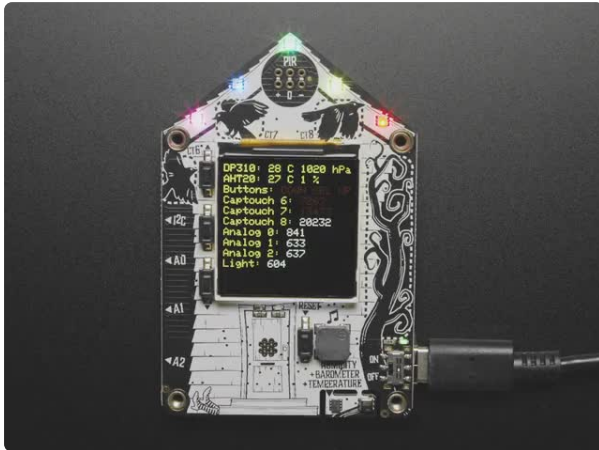
The stand features four M3 size mounting holes for securing the Adafruit FunHouse. It is optimized to 3D print without any support material.

Prerequisite Guides

Take a moment to walk through the following guides:

- [Adafruit FunHouse \(https://adafru.it/RQf\)](https://adafru.it/RQf)
- [Creating FunHouse Projects with CircuitPython \(https://adafru.it/RZA\)](https://adafru.it/RZA)

Parts



Adafruit FunHouse - WiFi Home Automation Development Board

Home is where the heart is...it's also where we keep all our electronic bits. So why not wire it up with sensors and actuators to turn our house into an electronic wonderland...

<https://www.adafruit.com/product/4985>



Black Nylon Machine Screw and Stand-off Set – M3 Thread

Totalling 420 pieces, this M3 Screw Set is a must-have for your workstation. You'll have enough screws, nuts, and hex standoffs to fuel...

<https://www.adafruit.com/product/4685>



USB Type C Cable with Data/Charge Switch

Perhaps your smart phone, tablet, or even your Raspberry Pi 4, charges off of USB, but can you really trust that charging station at the airport? Now you can control when to allow...

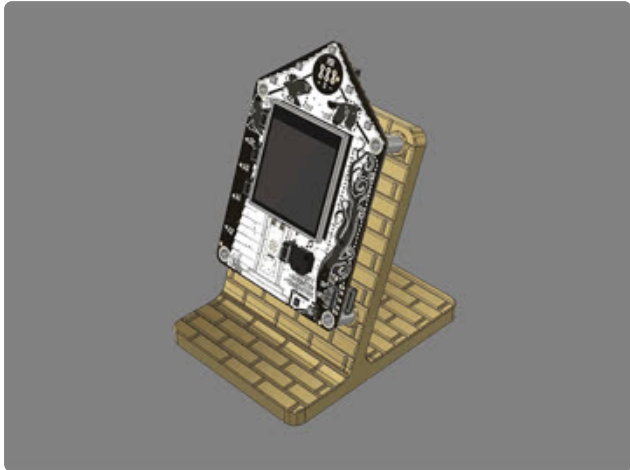
<https://www.adafruit.com/product/4696>

1 x Ultra Silk Gold PLA

1.75mm diameter filament by Eryone

<https://amzn.to/2ROamre>

CAD Files



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 board, displays, connectors and more can be downloaded from the [Adafruit CAD parts GitHub Repo \(https://adafru.it/AW8\)](https://adafru.it/AW8).

[Download Stand STL files](https://adafru.it/ScP)

<https://adafru.it/ScP>

[Download Stand CAD source](https://adafru.it/ScQ)

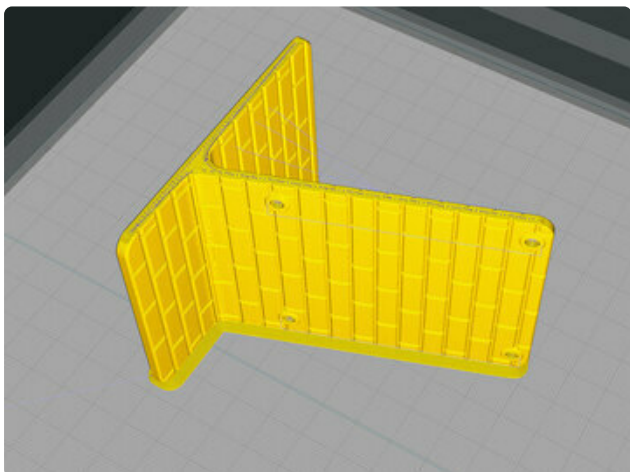
<https://adafru.it/ScQ>

[Download Wall Mount CAD source](https://adafru.it/SiB)

<https://adafru.it/SiB>

[Download Wall Mount STL file](https://adafru.it/SiC)

<https://adafru.it/SiC>



Slicing Stand

The stand is oriented to print "as is" with the part being printed on its side. This ensures the part has the most structural integrity. No support material is needed to print.

The parts were sliced using CURA using the slice settings below.

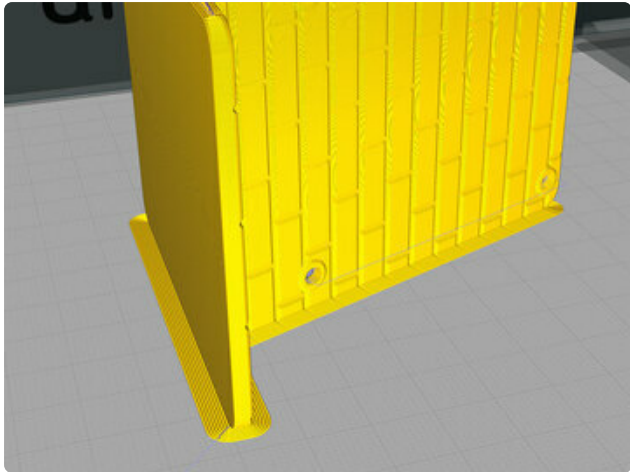
PLA filament 220c extruder

0.2 layer height

10% gyroid infill

60mm/s print speed

60c heated bed

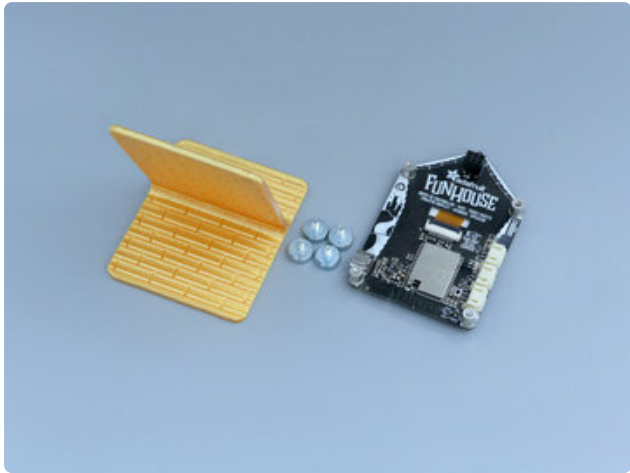


Build Plate Adhesion

Use a brim to help ensure the part has the best adhesion to the bed of your 3D printer. Increase the brim width or set the brim count to minimum of 8.

Enable Brim

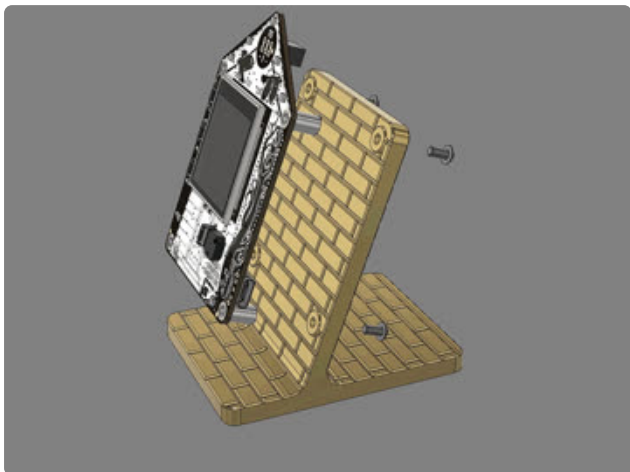
Brim Line Count: 8



Hardware

Use the following hardware to secure the FunHouse PCB to the stand.

4x M3 x 8mm screws



Assembly

Place the FunHouse PCB over the stand and line up the mounting holes. Insert an M3 x 8mm long screw through one of the holes in the stand and fasten to secure the FunHouse. Repeat for the remaining screws.