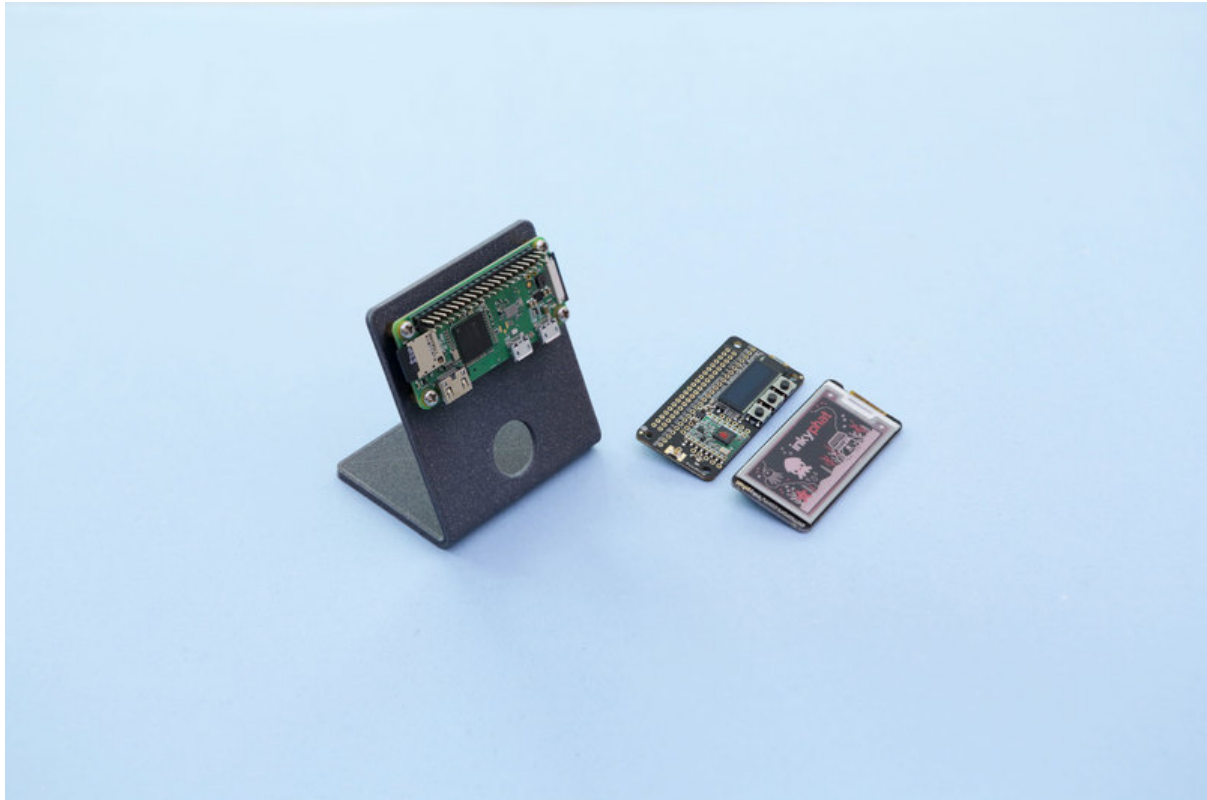




Raspberry Pi Zero Stand

Created by Ruiz Brothers



<https://learn.adafruit.com/raspberry-pi-zero-stand>

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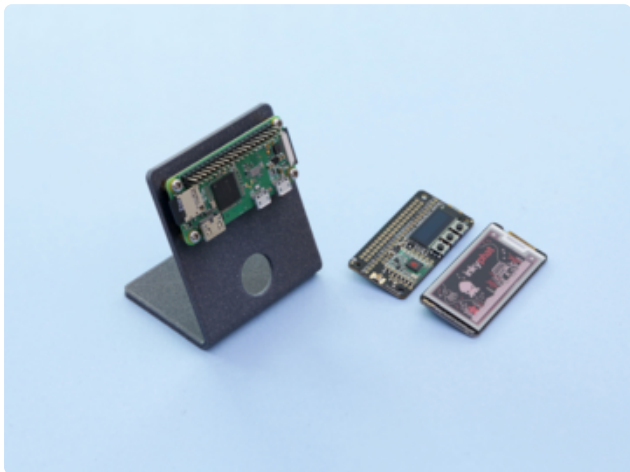
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3D Printing



Pi Zero Projects

Display your Pi Zero on your desk with this simple yet useful stand. 3D prints in one piece and doesn't require any supports. It features mounting holes for securing a Pi Zero. A hole in the stand allows for wires to pass through for USB power and peripherals.



Pi Bonnets, Hats and Add-Ons

There's heaps and heaps of accessories for the Raspberry Pi Zero, from touchscreen and displays to HATs, and Bonnets, there's something for your project! Check out all the goodness Adafruit shop has to offer! Use the link below or just use the search bar.

[Adafruit Pi Bonnets](https://adafru.it/DWK)

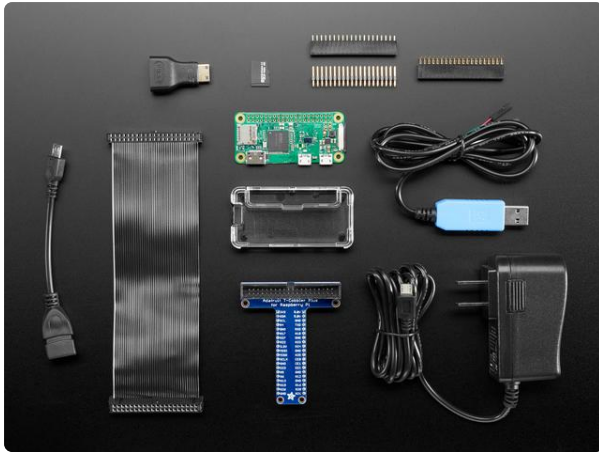
<https://adafru.it/DWK>



Parts & Hardware

A Pi Zero W, microSD card and microUSB cable is about all you need for this project. You can grab one of the [Pi Zero Kits \(http://adafru.it/3411\)](http://adafru.it/3411) to get you going. You'll also need additional hardware to secure the Pi Zero W. Pi uses M3 mounting holes but you can use M2.5, we have a handy [M2.5 nylon standoff kit \(http://adafru.it/3299\)](http://adafru.it/3299).

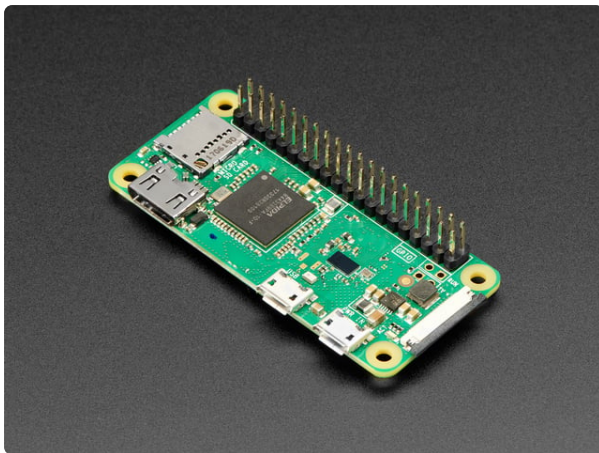
- 4x M2.5/M3 x 5mm female/male standoffs
- 4x M2.5/M3 x 5mm button head screws
- 4x M2.5/M3 hex nuts



Raspberry Pi Zero W Starter Pack - Includes Pi Zero W

Remember those cereal commercials that would always say, "part of a complete breakfast"? Well the Pi Zero's a lot like that bowl of cereal - while it's...

<https://www.adafruit.com/product/3411>



Raspberry Pi Zero WH (Zero W with Headers)

If you didn't think that the Raspberry Pi Zero W could possibly get any better, then boy do we have a pleasant surprise for you! The new Raspberry Pi Zero...

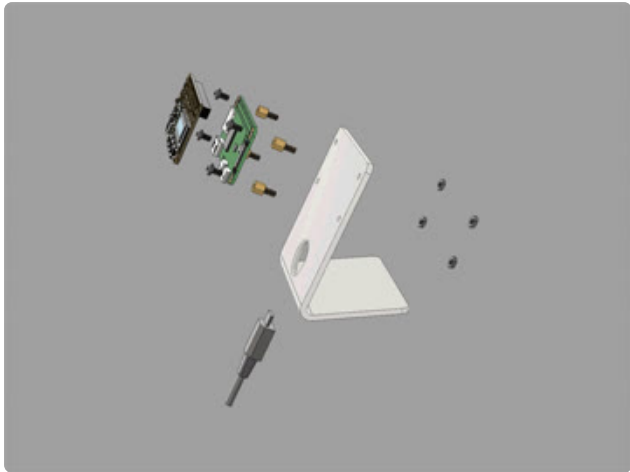
<https://www.adafruit.com/product/3708>



Black Nylon Machine Screw and Stand-off Set – M2.5 Thread

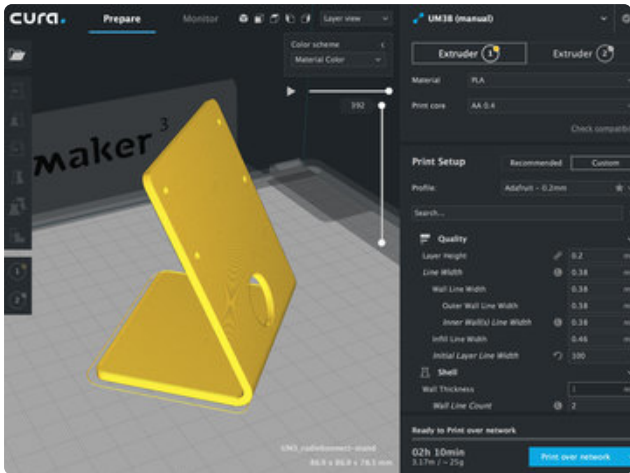
Totaling 380 pieces, this M2.5 Screw Set is a must-have for your workstation. You'll have enough screws, nuts, and hex standoffs to fuel your maker...

<https://www.adafruit.com/product/3299>



3D Model

The stand is a one piece design that does not require any support material. It's parametrically driven so the viewing angle, thickness and size can be easily modified by changing a parameter. Check out my [Layer by Layer tutorial \(https://adafru.it/DWM\)](https://adafru.it/DWM) on how I set that up using Autodesk Fusion 360.



Slice Settings

Use these settings as reference. Values listed were used in [Ultimaker's CURA 3.X \(https://adafru.it/C26\)](https://adafru.it/C26) slicing software.

- 0.2mm Layer Height / 0.4mm nozzle
- 0.38mm Line Width (inner & outer widths)
- 40mm/s printing speed
- 20% infill
- Supports: No

[Download CAD Files](#)

<https://adafru.it/DWP>

Design Source Files

The enclosure assembly was designed in Fusion 360. This can be downloaded in different formats like STEP, SAT and more. Electronic components like the board, displays, connectors and more can be downloaded from our [Fusion 360 CAD parts github repo \(https://adafru.it/AW8\)](https://adafru.it/AW8).

[Download Adafruit CAD Parts](#)

<https://adafru.it/AW8>

[Fusion 360 Share Link](#)

<https://adafru.it/DWN>

Assembly



Install Standoffs

Start by installing the M3 standoffs to the four mounting holes. Finger tightened them so as not to strip the holes. If you find the mounting holes are too tight, I suggest tapping using an M3 tapping tool to create threads.



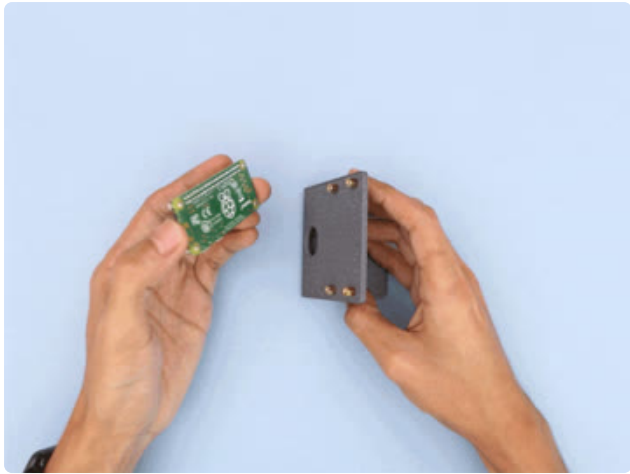
Install Hex Nuts

Place the M3 hex nuts onto the male threads of the standoffs. Finger tighten at first and optionally use a pair of pliers to firmly tighten. Repeat for all four standoffs.



Install Screws

Grab four M3 x 5mm metric screws and begin to fasten into the mounting holes on the Pi Zero board. The mounting holes might be tight so I suggest using an M3 screw tap to loosen up the holes and create proper threads.



Pi Zero Placement

Grab the Pi Zero PCB and place it on top of the standoffs. The USB and HDMI connectors should be oriented down towards the center hole in the stand.



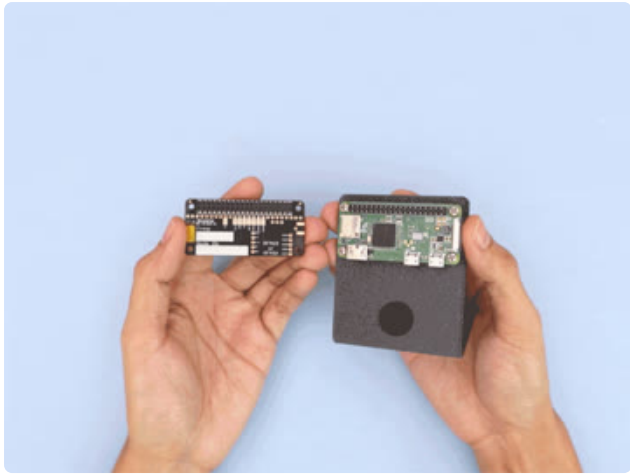
Secure Pi

Fasten the four screws until fully tightened – Be careful not to over tighten as you could damage the PCB or strip the threading.



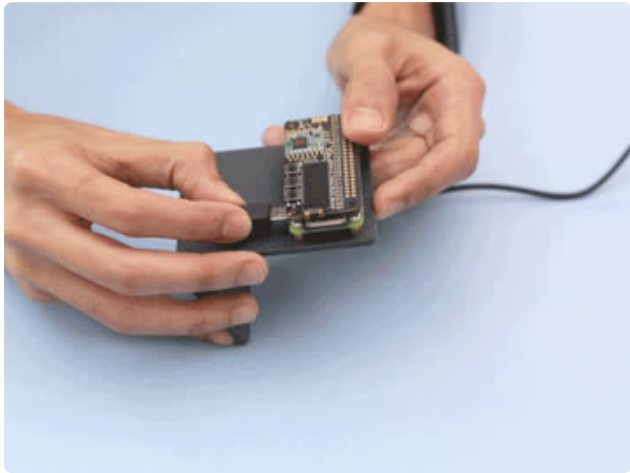
Pi Check

How's everything looking? Rotate the stand and inspect all of the hardware.



Install Add-Ons

Press fit your bonnets, pHAT, display or add-on to your Pi Zero.



USB Power

Cables can pass through the center hole near the bottom of the stand. HDMI cables are the most chunky but should pass through OK. However, an HDMI adapter on a cable might not have enough clearance to use properly.