Disclaimer/Warnings:

The following instructions are written in a fictional cyberpunk in-universe style. The assembly instructions produce an electronic cyberdeck prop inspired by various works of cyberpunk genre fiction.

Any references to illegal or unethical activity are purely for entertainment and story purposes, and not meant to promote or condone any such activities. The instructions are written as if by a shadowrunner/decker/hacker in a fictional cyberpunk setting.

Don't hit anybody with it.

1) It's not designed for that.
2) That would be illegal.
3) You are just as likely to hurt yourself with it. The "blade" is attached with a hinge and magnets.

When using it, carefully rotate the "blade" into position. Don't try to flick it into the usable position. There is a bit of pinch hazard if you aren't careful with it, and you can damage the prop in the process. I may or may not have already hit my thumb more than once, and you risk damaging the USB port and wireless dongle.

Read all warnings that come with the parts used to assemble this.

Don't be an idiot. I'm not responsible for what you do with it.

Build and use at your own risk.

Zero Stack

https://github.com/Ralnarene/SRC000_Zero_Stack

Standard Runner's Constructs:

This is part of a series of documents covering the creation and use of tools for runners. These are meant as guidelines, as a starting point. Update, modification, and personalization is *heavily* encouraged for your success and survival as a runner.

You may be reading this from one of its scattered locations on the net, a repository, or off a chip you've acquired one way or another. You may or may not have all of the constructs, as more are being added, and they may not all be easy to find. Keep looking.

If you're wondering why we are being so altruistic in sharing our knowledge… we aren't. Educating other runners means we might not get killed by the ignorance of teammates. And if we make entry into running easier, we are more likely to find people to pad out our team rosters down the line. It's self-preservation.

Introduction to the Zero Stack:

Greetings, runners. The Zero Stack is designed to be a starter core for your cyberdeckbuilding needs. It serves as a known good assembly that is functional by itself and can be built around to fit your personal tastes. It contains a touchscreen display, Pi Zero W for the brains, and a PiSugar2 power management board for portable power.

As mentioned, it is a starter core, so don't expect it to work miracles, but it is compact and easy to build around to use for simpler builds. It serves as the core around which SRC #001: The πoneer Falchion is based.

Parts list:

Pi Zero W

www.amazon.com/gp/product/B072N3X39J/ref=ppx_yo_dt_b_asin_title_o06_s00?ie=UTF8&psc=1

Pisugar 2 Portable 1200 mAH UPS Lithium Battery Power Module

www.amazon.com/gp/product/B08D678XPR/ref=ppx_yo_dt_b_asin_title_o06_s00?ie=UTF8&psc=1

Raspberry Pi Zero W Screen

www.amazon.com/gp/product/B07H8ZY89H/ref=ppx_yo_dt_b_asin_title_o06_s00?ie=UTF8&psc=1

M2.5 screws kit

www.amazon.com/gp/product/B07F14J7X8/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1

Micro-USB to USB splitter

www.amazon.com/gp/product/B06WPBSWHB/ref=ppx_yo_dt_b_asin_title_o06_s01?ie=UTF8&psc=1

Pi Screws Box

www.amazon.com/gp/product/B0756CW6Y2/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

GPIO Header Extender

www.amazon.com/gp/product/B0827THC7R/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

32 GB MicroSD card

Solder

Tools Required:

Soldering Station

Allen Wrenches [insert size here]

Adjustable Wrench

Keyboard

Computer capable of writing to microSD cards

Assembly Instructions:

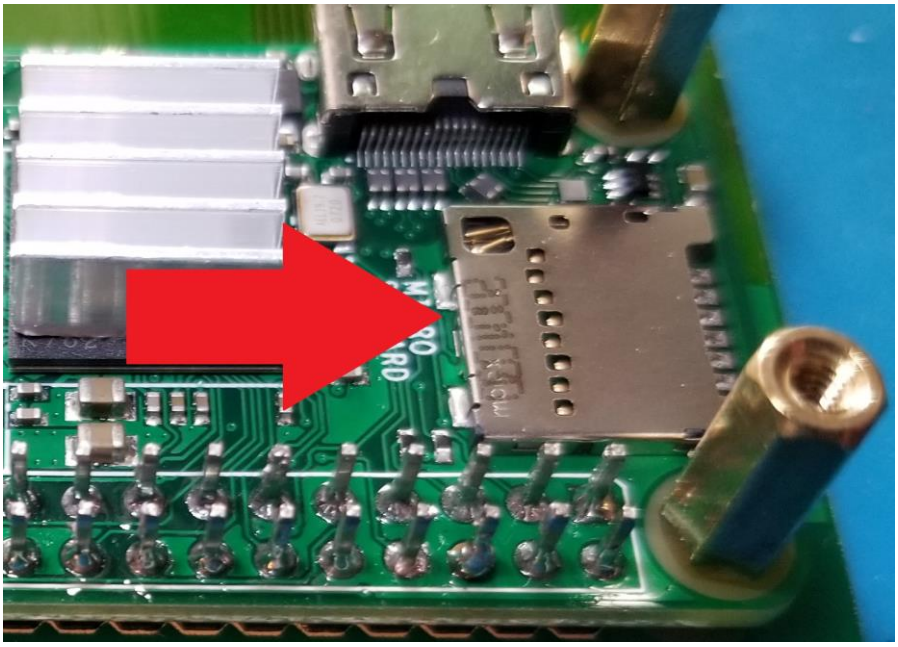
Note: The photos may not all be consistent or fully in continuity with each other in this document, but they should illustrate the placements intended by the instructions.

1. Attach the heat sink to the processor on the Pi.
2. Add Kapton tape across the wires on the back of the display.

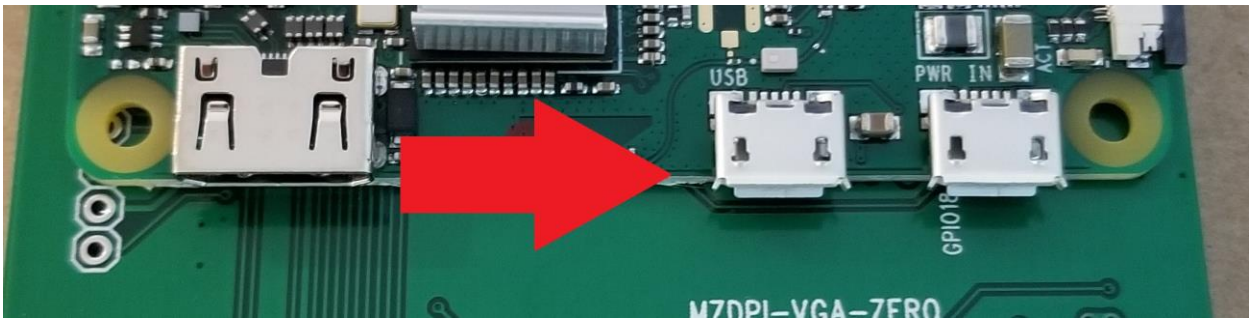
3. Attach Pi Zero W to the display as shown.
    a. DOUBLECHECK WHICH DIRECTION THE PI IS ATTACHED TO THE DISPLAY.
        i. The Pi will not function if you attach the electronic components in the wrong direction.

b. Use the M2.5 screws and Pi hardware to set up this configuration and then solder all of the GPIO pins to the Pi.

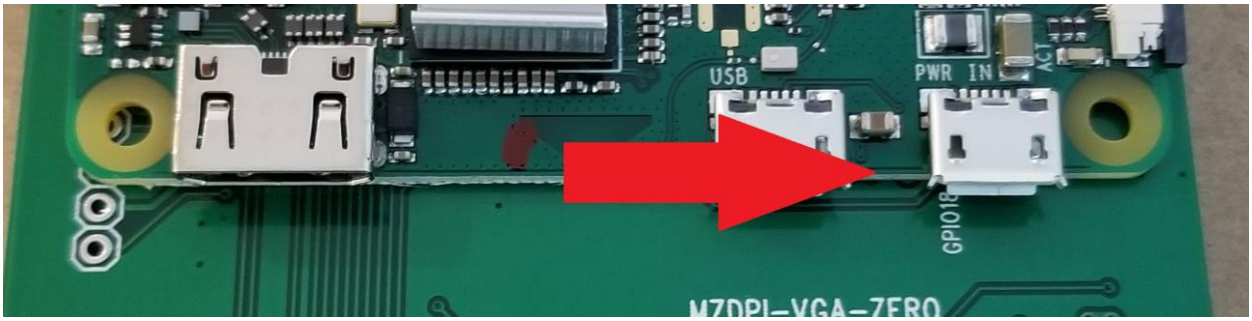
4. Download the disk image located on the included datachip (or downloaded from here: https://github.com/Ralnarene/SRC000_Zero_Stack).
5. Unzip the disk image, and load it onto the microSD card.
6. Validate the disk image.
7. Insert the microSD card into the slot in the stack.



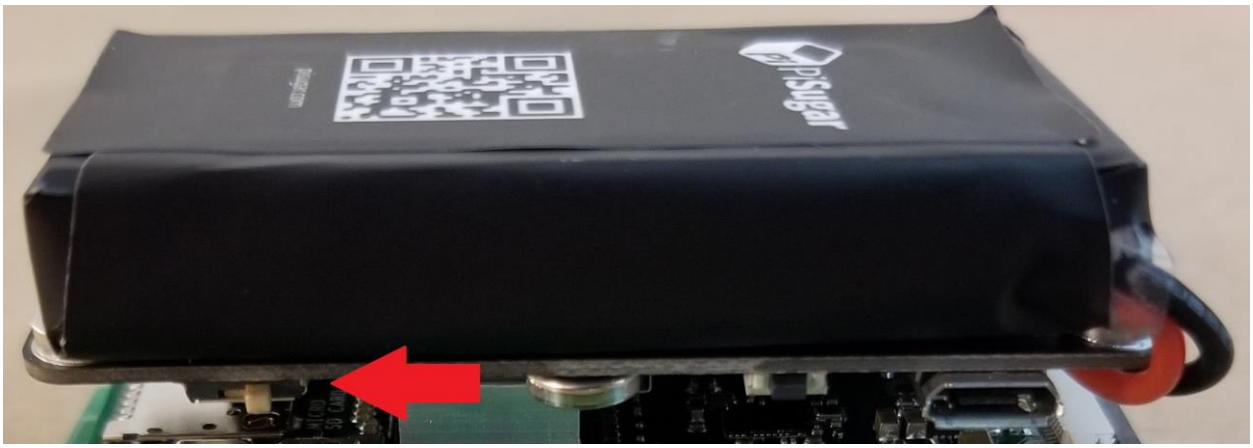
8. Plug the microUSB splitter into this port.



9. Plug a keyboard into one of the USB ports.
10. Plug a power supply into the pi.

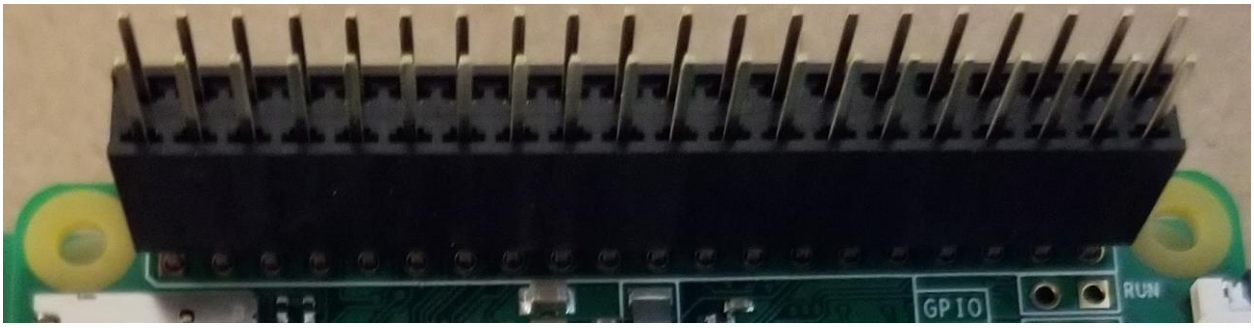


11. Wait for the boot sequence to complete. The display should turn on and display properly.
12. Log into the pi with the following credentials:
    a. Username: pi
    b. Password: Level0
13. When the boot sequence finishes, shut down and unplug the Pi.
14. Verify the power switch for the Pi Sugar is in the off position.



15. Using pliers, carefully remove the pogo pins.

16. Attach a header pin extender to existing stack.

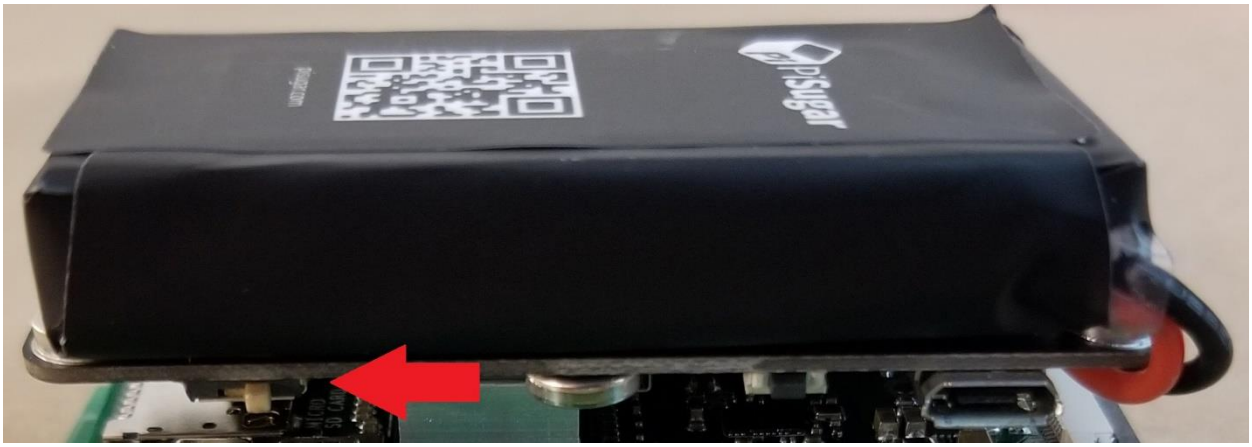


17. Place the Pi Sugar battery board to the Pi Zero W as shown.

18. Solder these pins with the metal pads.

19. Place the batter on top of the stack.
20. Charge the stack via the PiSugar2 power port.

21. Turn on the power using this switch.



    a. The screen should turn on and display a logon screen.
22. Change the logon credentials.
23. Setup the wifi for your network.
24. Shutdown the stack using appropriate commands.
25. Turn off the battery.
26. Remove the USB splitter.