

2024 Badge Info



Quick Links

ALL YOUR BADGES ARE BELONG TO US!!!

[Announcements](#)[2024 Badge](#)[Webex](#)[Hardware Village](#)[Help](#)[Offensive Summit Main Site](#)

Congrats on getting your 2024 Offensive Summit badge! We hope you enjoy playing with them, and if you make something cool with it please post in the Webex space so we can see it!

Your badge is currently setup with Circuit Python but you've got options. You can alternatively use Adafruit libraries in an Arduino environment or install and use the native ESP32 SDK environment.

You can view or edit files on your badge by plugging it into your computer through the USB-C cable

[CIRCUITPY Drive](#)

You can read more about Circuit Python below

[Circuit Python](#)

Assembling the badge

Follow the instructions below to assemble your badge!

Step 0: BOM

Verify you have the following 8 items in your badge packet. From left to right they are:

1. Micro-LiPo Module
2. LCD Screen
3. E-paper display
4. LiPo Battery
5. Bag of standoffs and screws
 - 2x short standoffs
 - 4x short screws
 - 2x long standoffs
 - 4x long screws
6. USB-C cable
7. Serial cable
8. Badge PCB

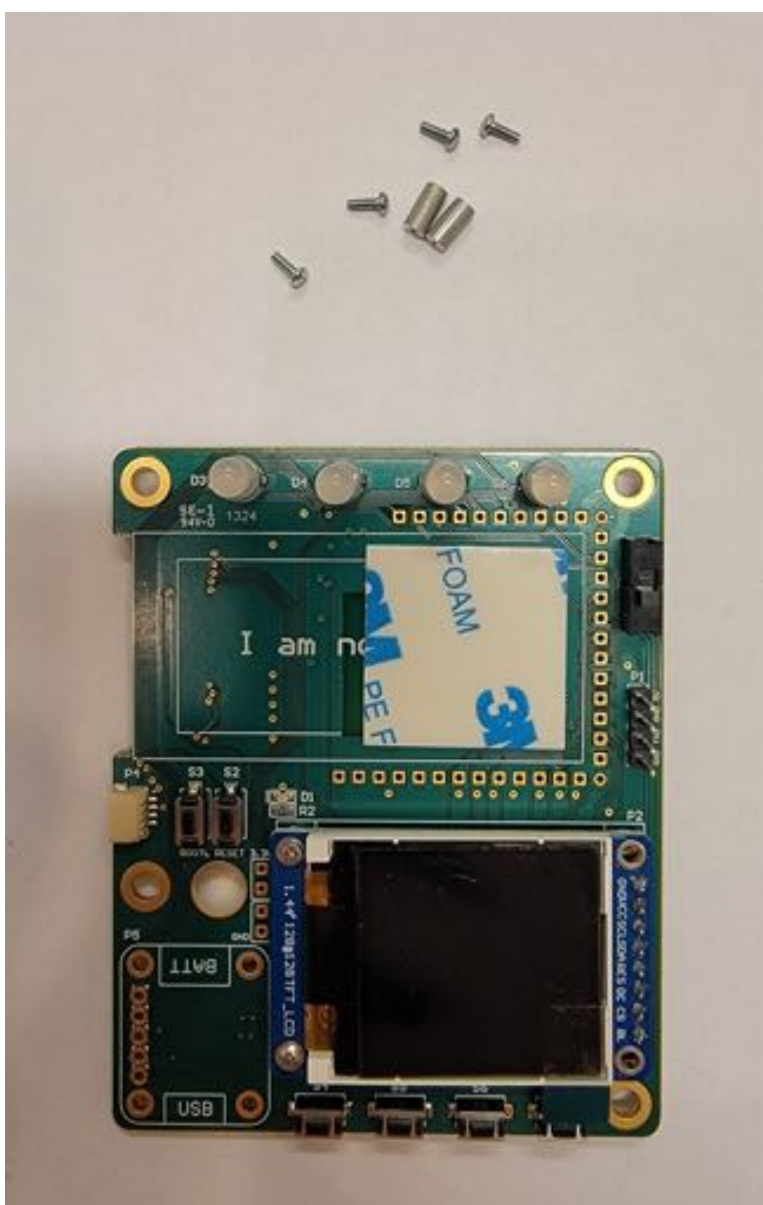


Step 1: Install LCD

Attach **short** standoffs with the **short** screws to the LCD mounting holes furthest from the **P2** header. Note: these short standoffs can be tricky to install and strip easily, you can use one long standoff here and the other for the Micro-LiPo module if it does.



Press the LCD into the **P2** header with the screen oriented like the silkscreen below it. Attach the LCD to the standoffs with the remaining **short** screws



Step 2: Micro-LiPo Module

Attach **long** standoffs with the **long** screws to the Micro-LiPo mounting holes furthest from the **P5** header.

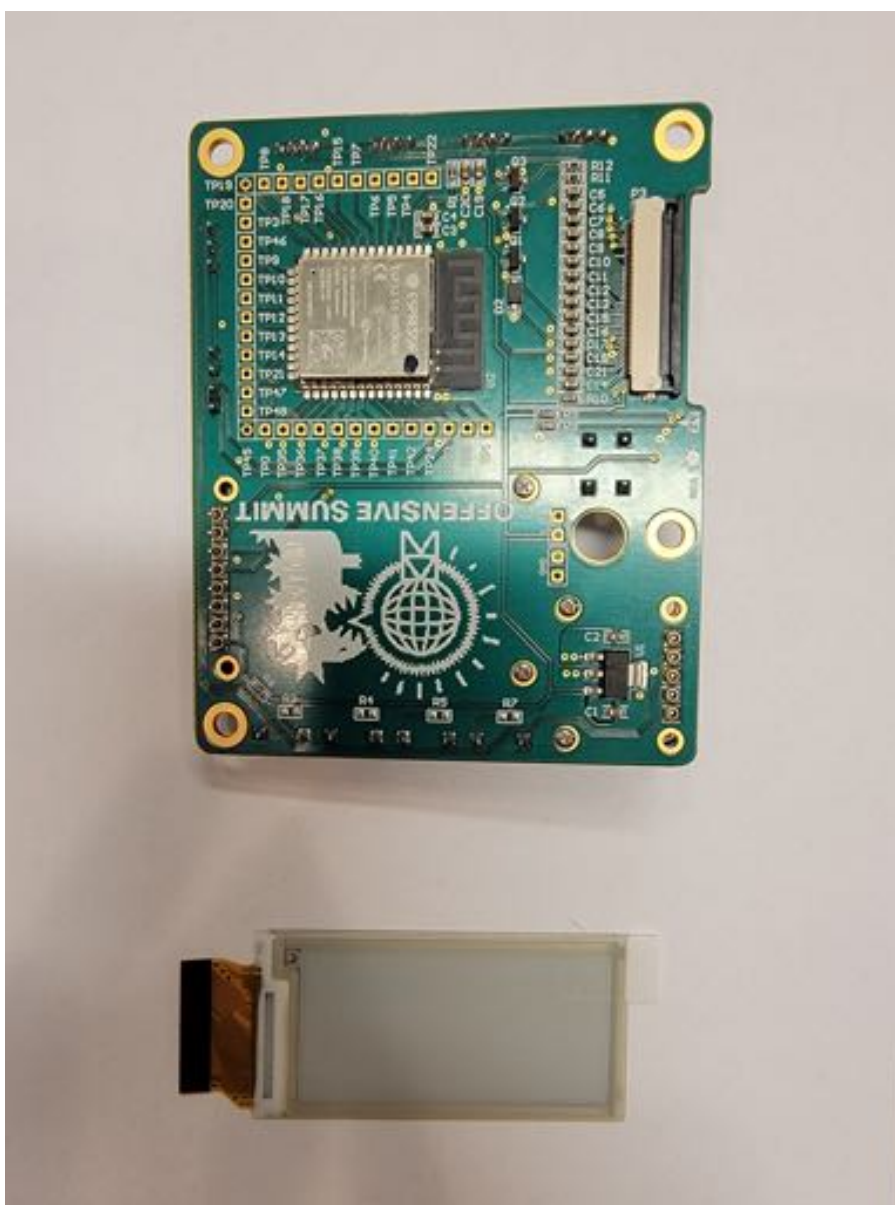


Press the Micro-LiPo Module into the **P5** header with the module oriented like the silkscreen below it. Attach the module to the standoffs with the remaining **long** screws

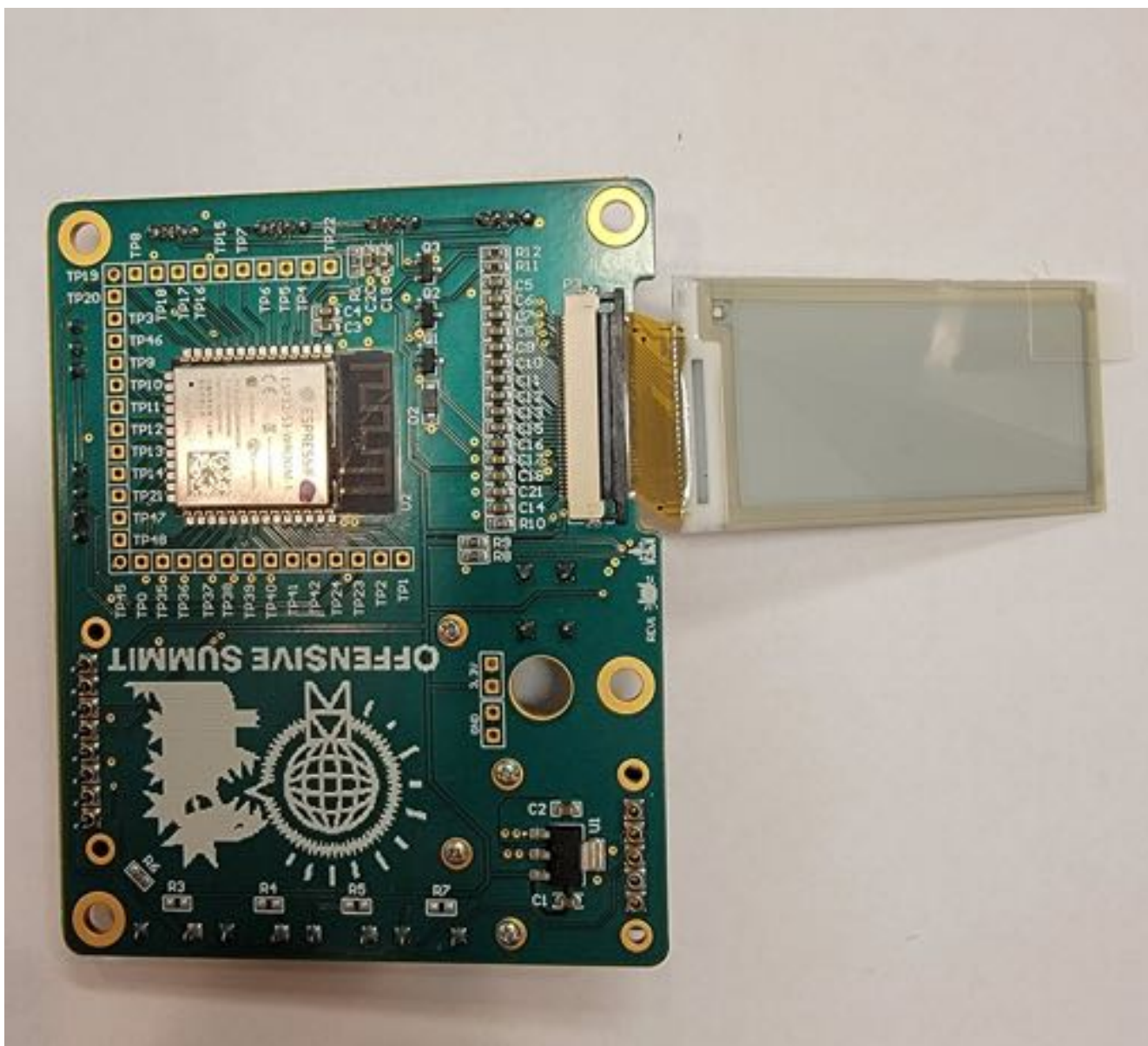


Step 3: Attach the E-Paper Display

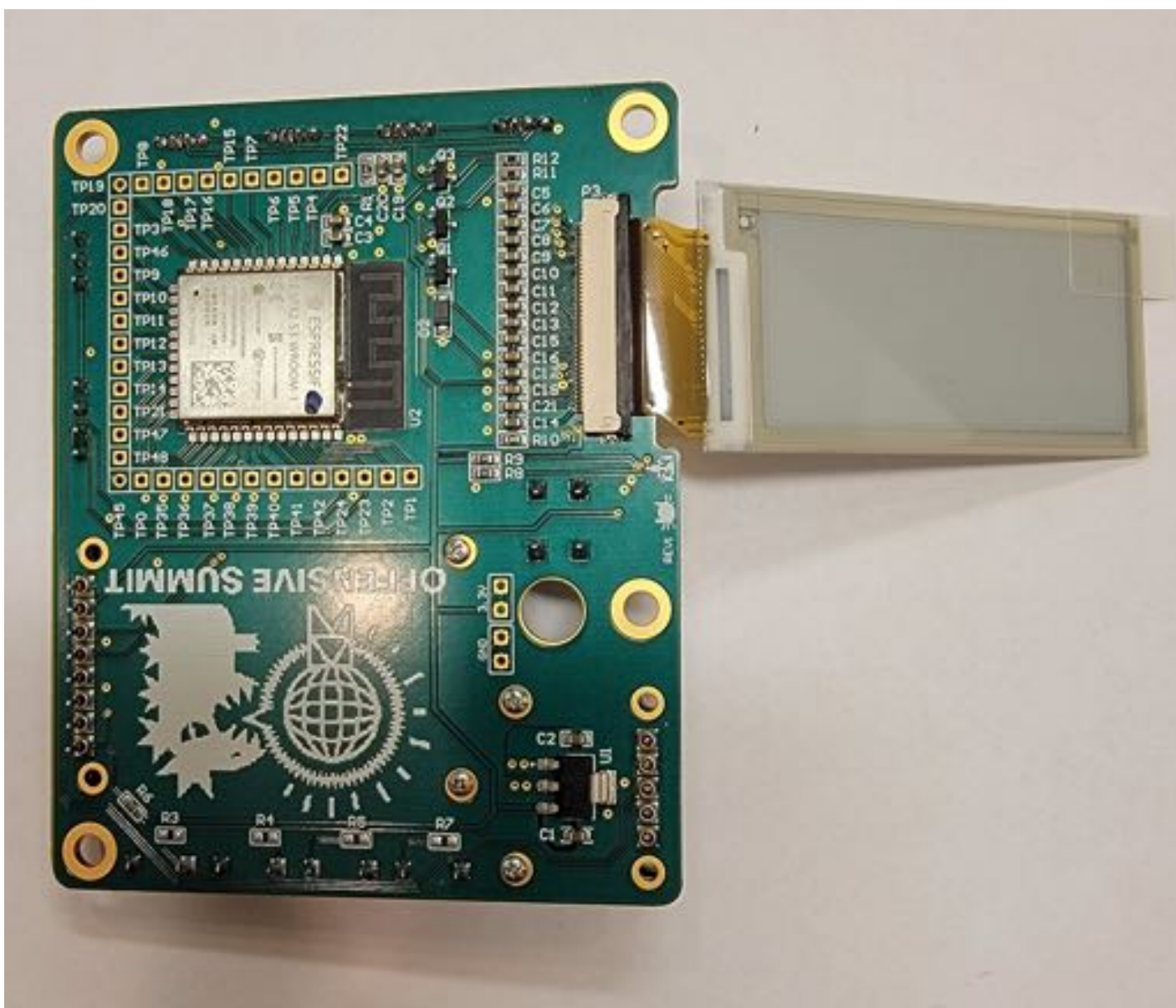
On the back of the badge locate the **P3** ZIF socket. Pull both sides of the black retaining clip towards the edge of the badge, this should take almost no force and move around half a centimeter



Carefully insert the FPC cable of the E-Paper display into the ZIF socket. The shiny gold contacts should be facing the back badge as shown below. **It should require almost no force to connect the display.**



Slide the black retaining clip of the ZIF socket back towards the center of the badge

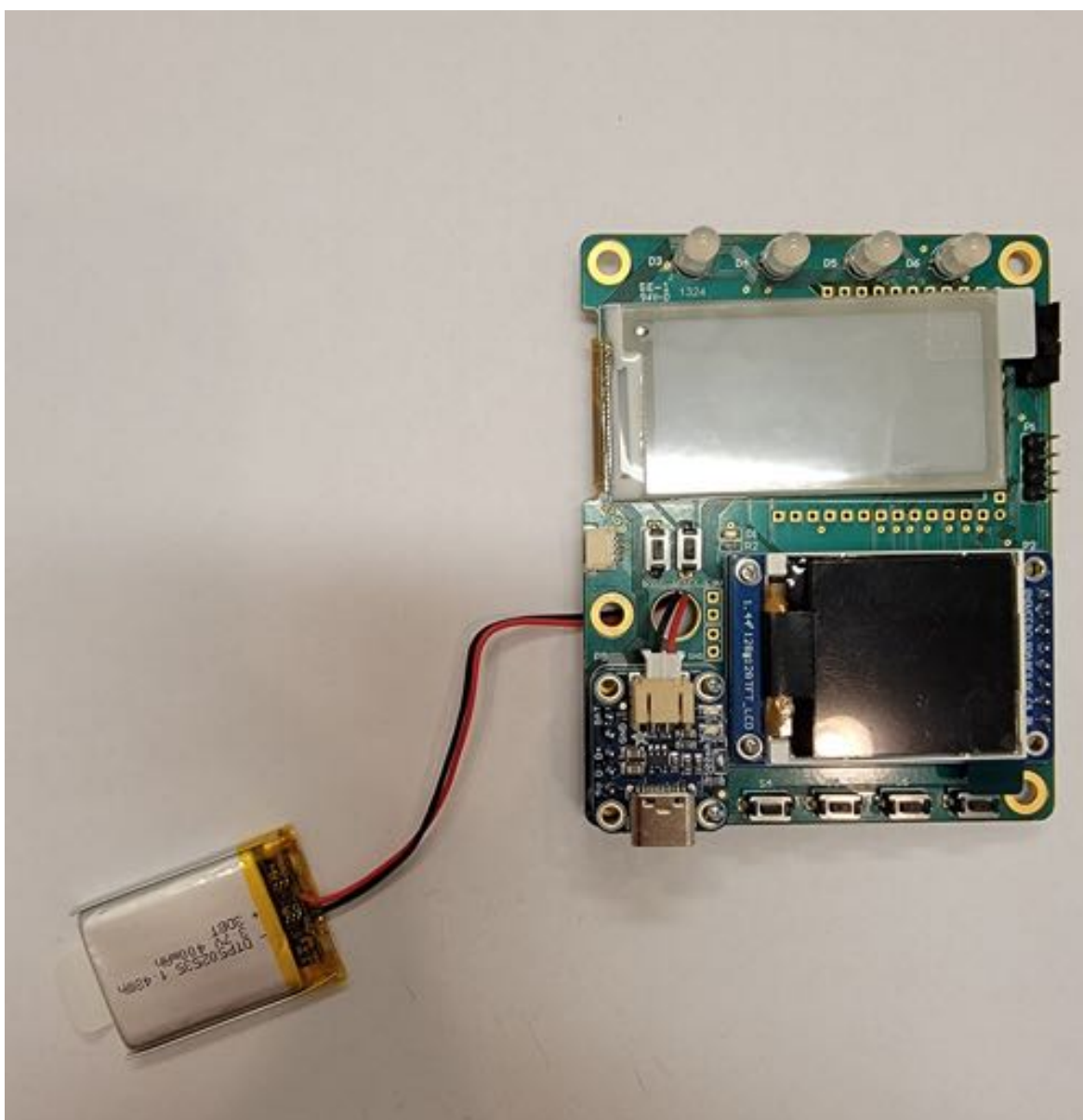


Remove the 3M sticker top on the face of the badge. Fold the E-Paper Display over to the face of the badge and press it onto the 3M sticky pad, making sure to line the edges of the display up to the silkscreen below it.



Step 4: Battery

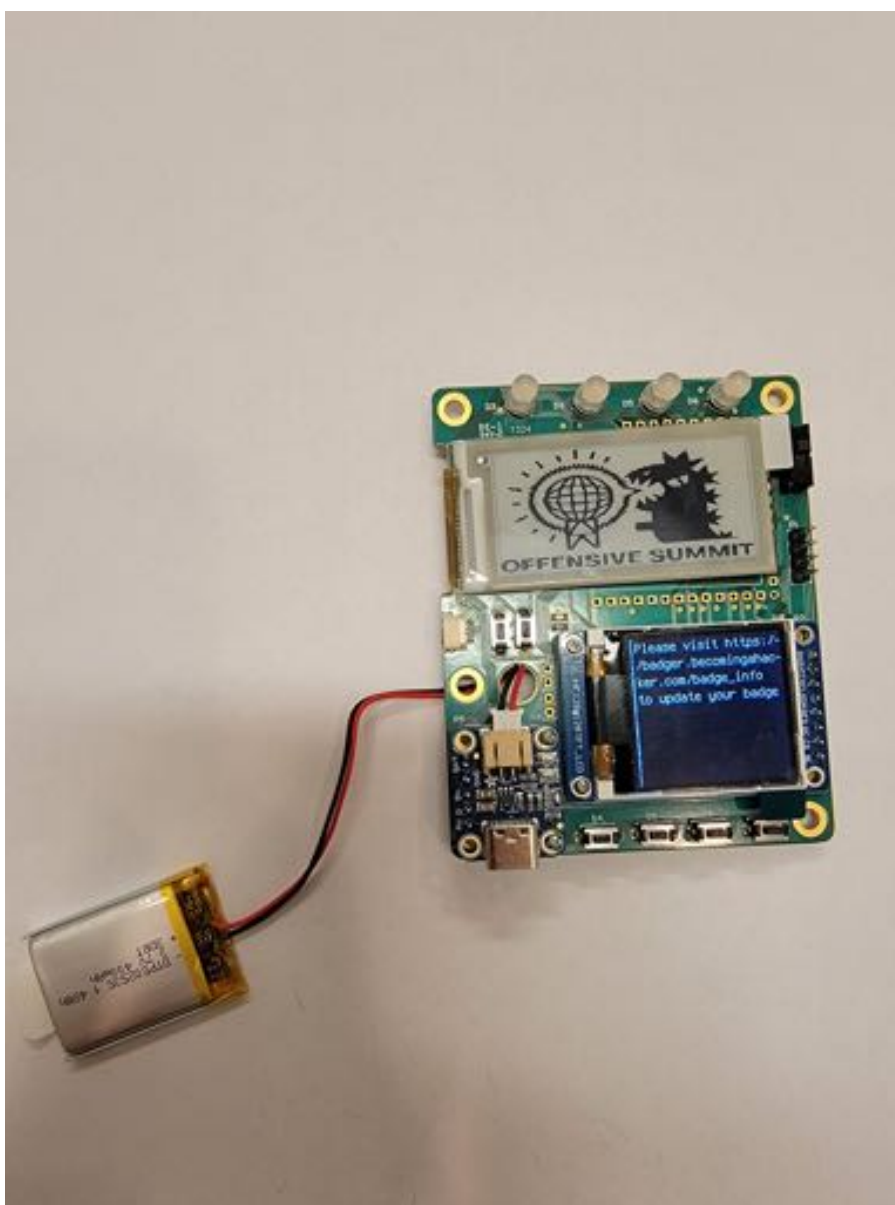
Snake the JST connector through the hole above the Micro-LiPo Module and push it into the JST socket on the LiPo module. The JST connector should have a spine which aligns with the top of the JST socket.



Use any tape (or gum) you have handy to hold the battery in place on the back of the badge.

Step 5: Power on

Put the switch at the top left of the badge to the top position to power the badge. Your badge should power on to this screen.



Updating the badge

Badge code 1.0 has been released, feel free to update your badge

The steps are as follows:

1. Download the code from the [badge repo](#)
2. Connect your badge to a computer
3. Copy the contents of the **src/** directory found inside the [badge repo](#) to your badge's external drive.
 - `cp /Volumes/CIRCUITPY/secrets.py ~/.badge2024secrets.tmp && cp -rf badge-2024/src/* /Volumes/CIRCUITPY/ && mv ~/.badge2024secrets.tmp /Volumes/CIRCUITPY/secrets.py`
 - If you are using an apple device you may also wish to clean up the pesky `._` files
 - `dot_clean -m /Volumes/CIRCUITPY`
4. Wait for the copy command to finish
5. Press the **RESET** switch at the top left of the LCD Display
6. Your badge should now be updated

If you decide to move files manually via finder or file explorer **make sure you dont copy over secrets.py!!!**. If you do overwrite it you cannot update your name or pull the schedule on the badge. See [Badge Recovery](#) if this happens to you.

Links

[Badge Repo](#)

[Espressif ESP32 SDK](#)

[Badge Recovery](#)