



The KM6LYW DigiPi Project

A Data Transceiver Hotspot for Raspberry Pi

John Zaruba K2ZA

What is DigiPi?



- DigiPi is an easy-to-use amateur radio data transceiver hotspot for Raspberry Pi. All radio data modes are easily accessible over wifi via your phone or web browser.
- Make FT8, JS8Call, APRS and packet modes work like any other mobile phone app.
- Hookup a DigiPi to your rig and instantly have access to radio SMS, EMail, and texting.
- Ultra-light, low-power makes it indispensable for Summit and Park operations.

DigiPi supported modes



- AX.25 Packet radio
- APRS
- FT-4, FT-8 via WSJT-X
- JS8Call
- FLDigi Suite - CW, PSK31, MFSK, THOR, Contestia, and many more.
- Winlink - Server and client, AX.25 packet (V/UHF), and ARDOP (HF)

Supported Raspberry Pi Hardware



- Zero 2 Wireless
- Pi 3 (all variants)
- Pi 4 (all variants)
- Pi 5 (all variants)
- The more compute power available the better performance.

Supported Radio Interfaces



- AIOC "All in One Cable" for Baofeng/Kenwood two-prong rigs na6d.com
- Masters Communications DRA-Pi-Zero masterscommunications.com
- DigiPi Hat elekitsorparts.com
- DigiRig Mobile (not Lite) with proper cable
- TOADS digital interface <https://temporarilyoffline.com/products/toads-digital-interface>
- And more!

This session's focus



- Pi Zero 2 wireless
- APRS TNC mode
- APRS Webchat
- Baofeng / Kenwood connector radios with the AIOC
- Not Icom or Yaesu
 - USB radios like the Icom 705 don't need an interface, can connect to the Pi directly with the correct cable.

Download the software



digipi.org

The KM6LYW Radio DigiPi Project

DigiPi 2.0 Released!

Download*
Ver 2.0-1
Trixie
October '25

Ver 1.9-4

* Password is currently available to patrons on the [KM6LYW Patreon Page](#)

Why the paywall? Anything gets you access to the DigiPi image, even a dollar. This is a way for me to give something tangible back to supporters of the [KM6LYW Radio Youtube Channel](#).

Please share with friends, but do not post this image online. All of the software carries an open-source license and is [freely available](#), just not all in one place in a collective-work bootable image. Embedded Trademarks, logos, and support-links are copyright "KM6LYW Radio."

Thank you for your continued support.

- Click the download icon
- A popup will appear asking for a username and password.
- Username:
 - patreon
- Password:
 - km6lyw2021

Get the Raspberry Pi Imager



[Connect](#) [Raspberry Pi OS](#) [Raspberry Pi Pico](#) [Software sources](#)

Raspberry Pi software

From our operating system to our GitHub repos, explore the software that powers our technology

Raspberry Pi Imager

Raspberry Pi Imager is the quick and easy way to install **Raspberry Pi OS** and other operating systems to a microSD card, ready to use with your Raspberry Pi.

Download and install Raspberry Pi Imager on a computer with an SD card reader. Insert the microSD card you'll use with your Raspberry Pi into the reader and run Raspberry Pi Imager.

[Download for macOS](#)

[Download for Windows](#)

[Download for Debian or Ubuntu \(x86_64\)](#)

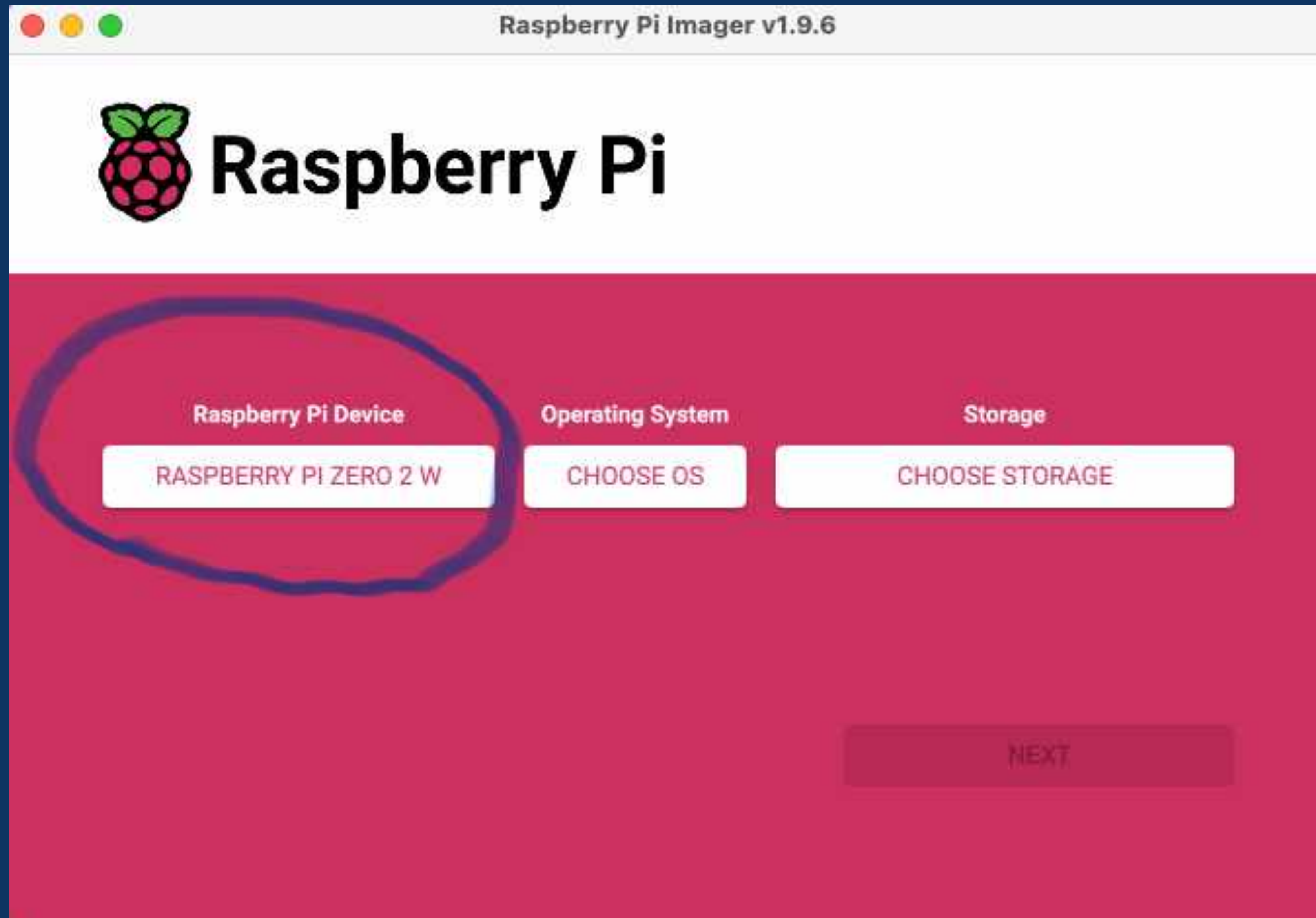
```
To install on Raspberry Pi OS, type  
sudo apt install rpi-imager  
into a terminal window
```



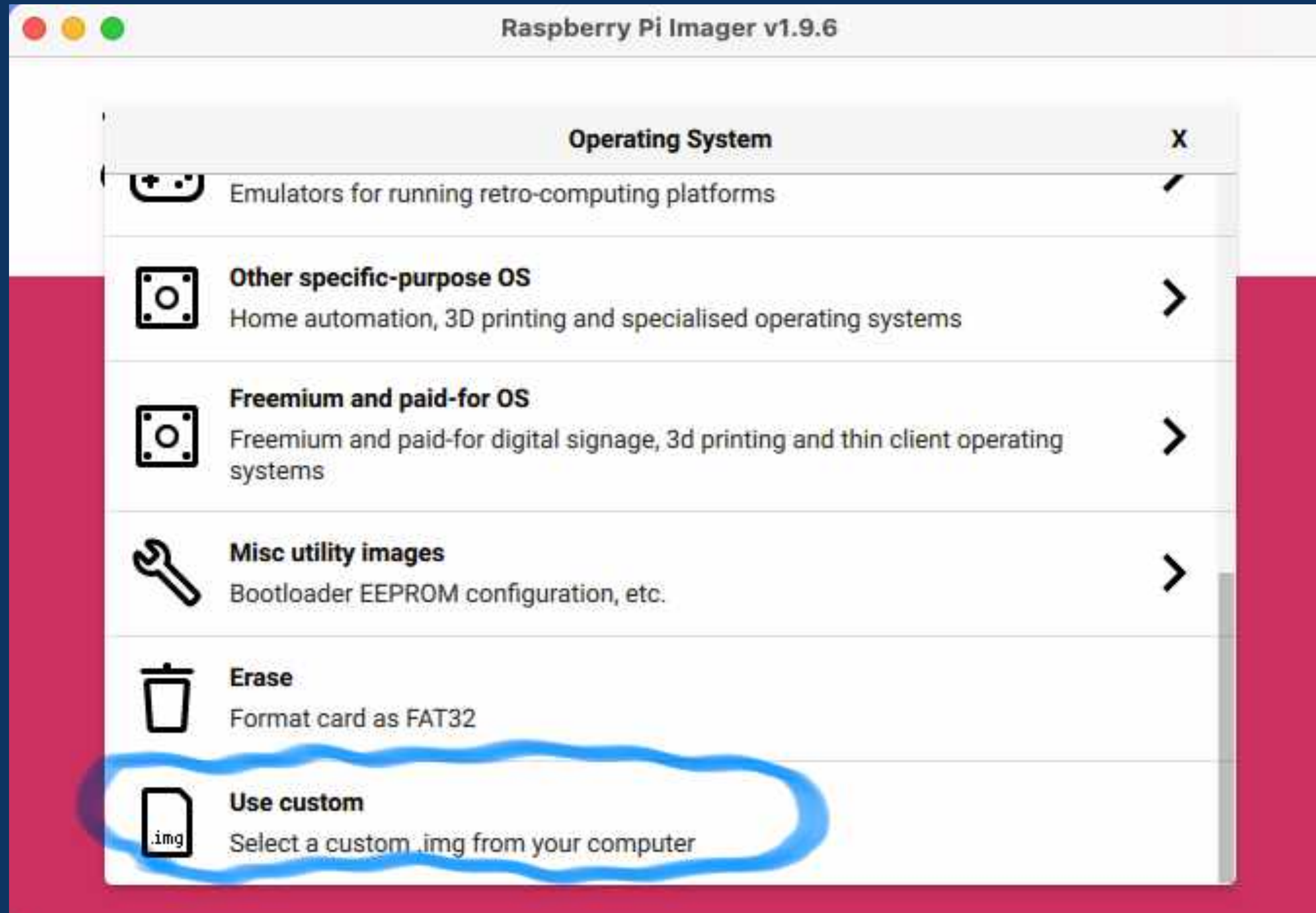
Create the SD card - Step 1



Create the SD card - Step 2



Create the SD card - Step 3



Create the SD card - Step 4



Raspberry Pi Imager v1.9.6



Raspberry Pi

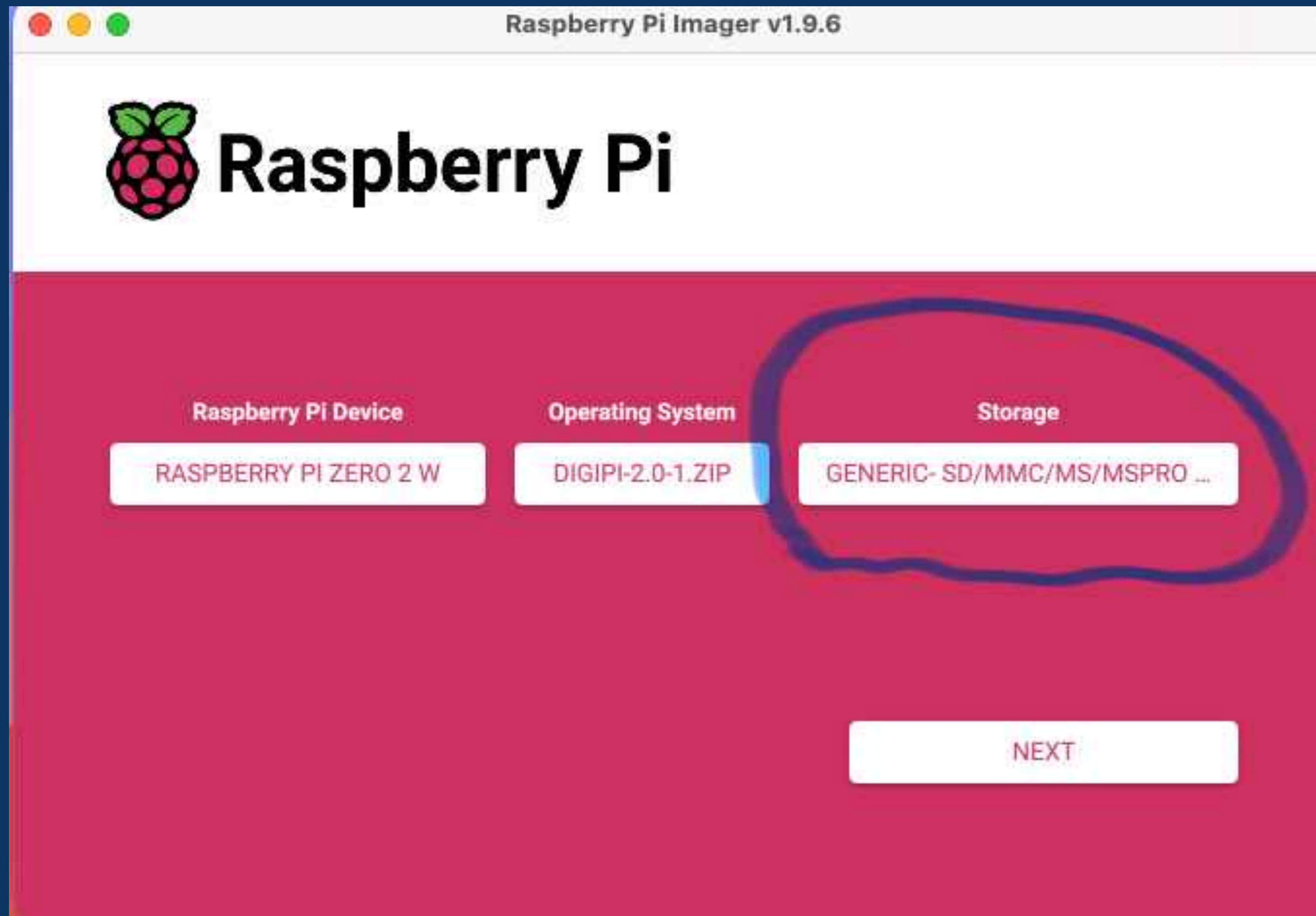
Raspberry Pi Device Operating System Storage

RASPBERRY PI ZERO 2 W DIGIPI-2.0-1.ZIP CHOOSE STORAGE

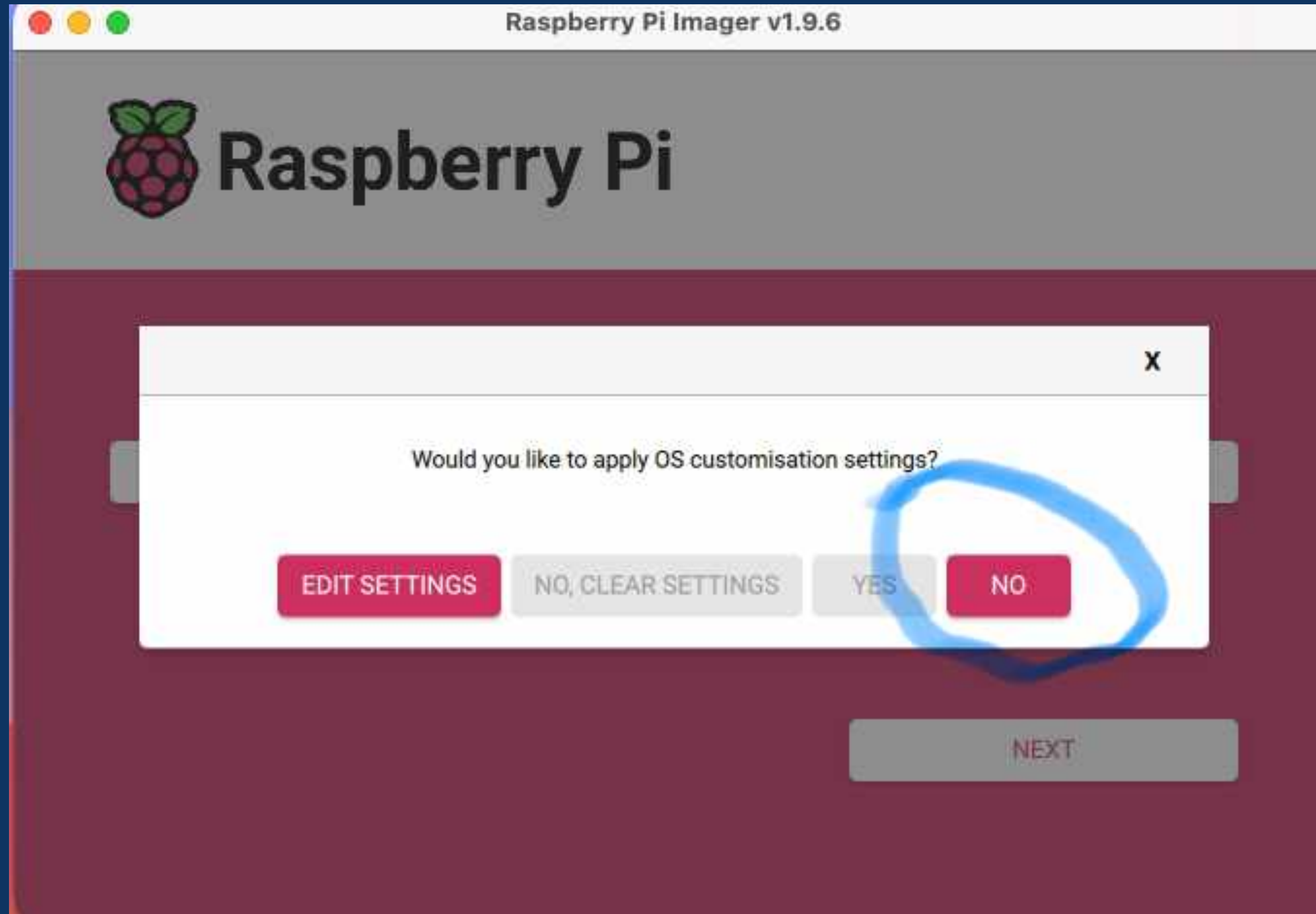
NEXT

The image shows the Raspberry Pi Imager v1.9.6 interface. The 'Operating System' dropdown menu is highlighted with a blue hand-drawn circle. The 'Storage' dropdown menu is currently set to 'CHOOSE STORAGE'. A 'NEXT' button is visible at the bottom right of the interface.

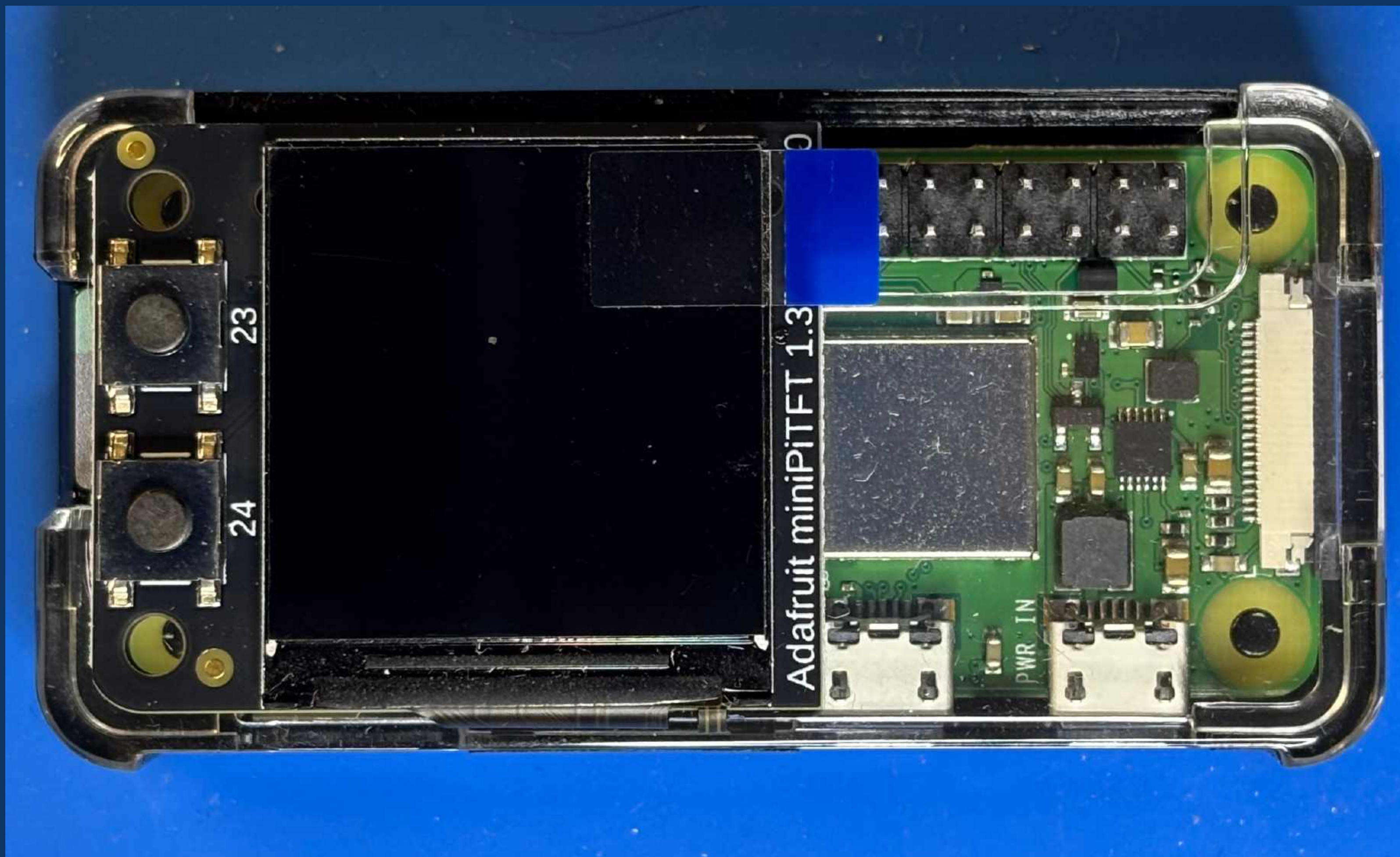
Create the SD card - Step 5



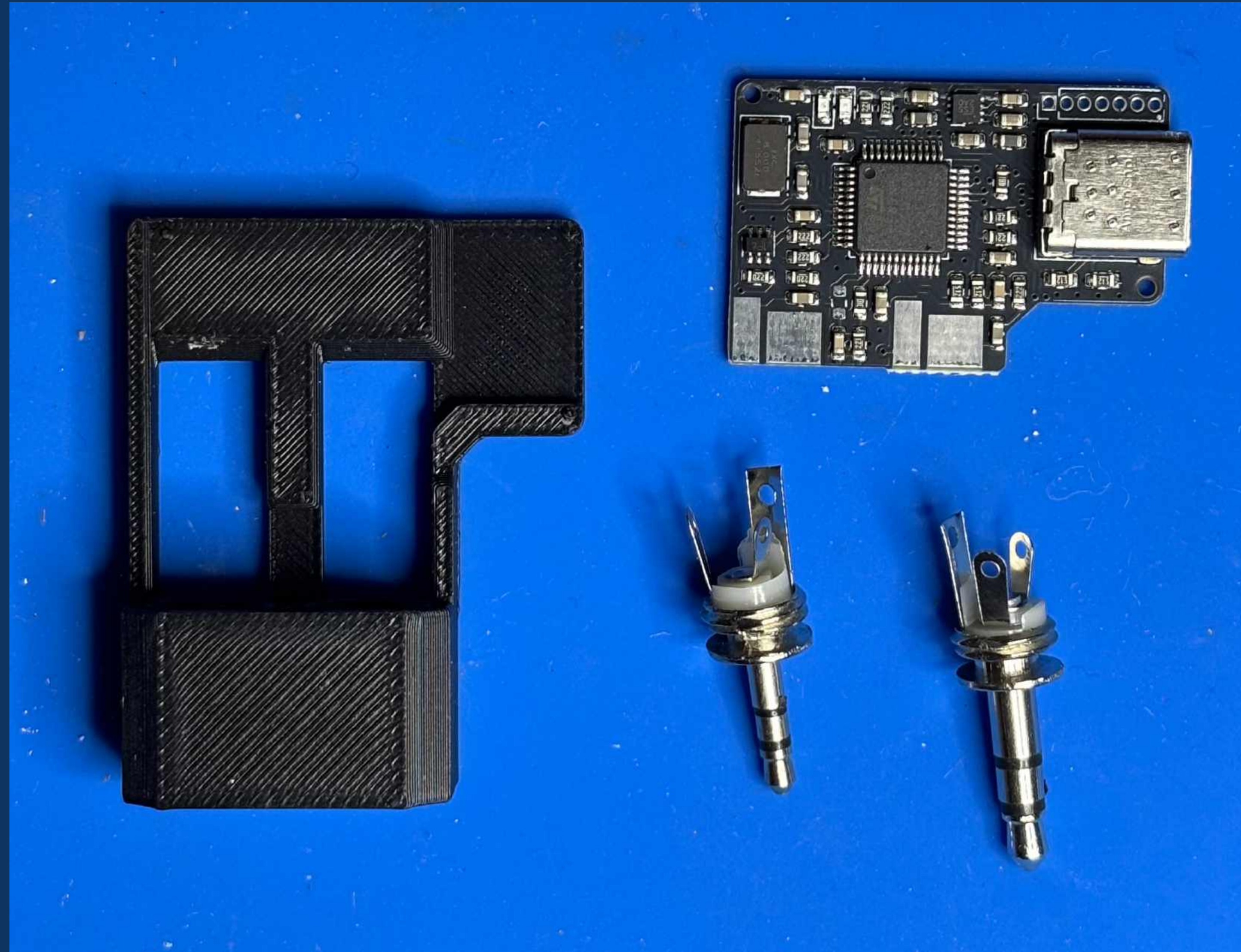
Create the SD card - Step 6



Raspberry Pi Zero 2 Wireless preparation



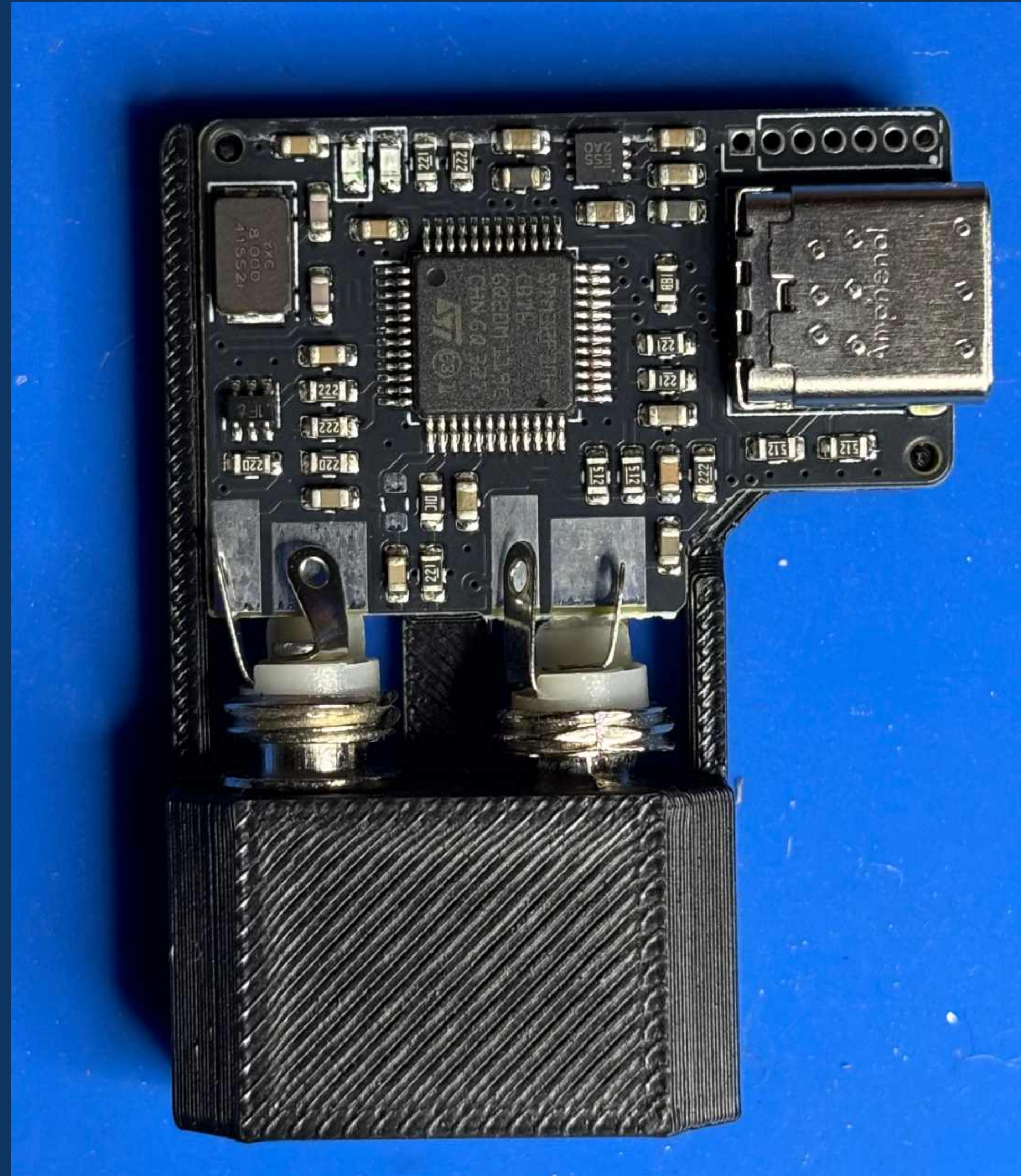
All-In-One-Cable (AIOC) prep - step 1



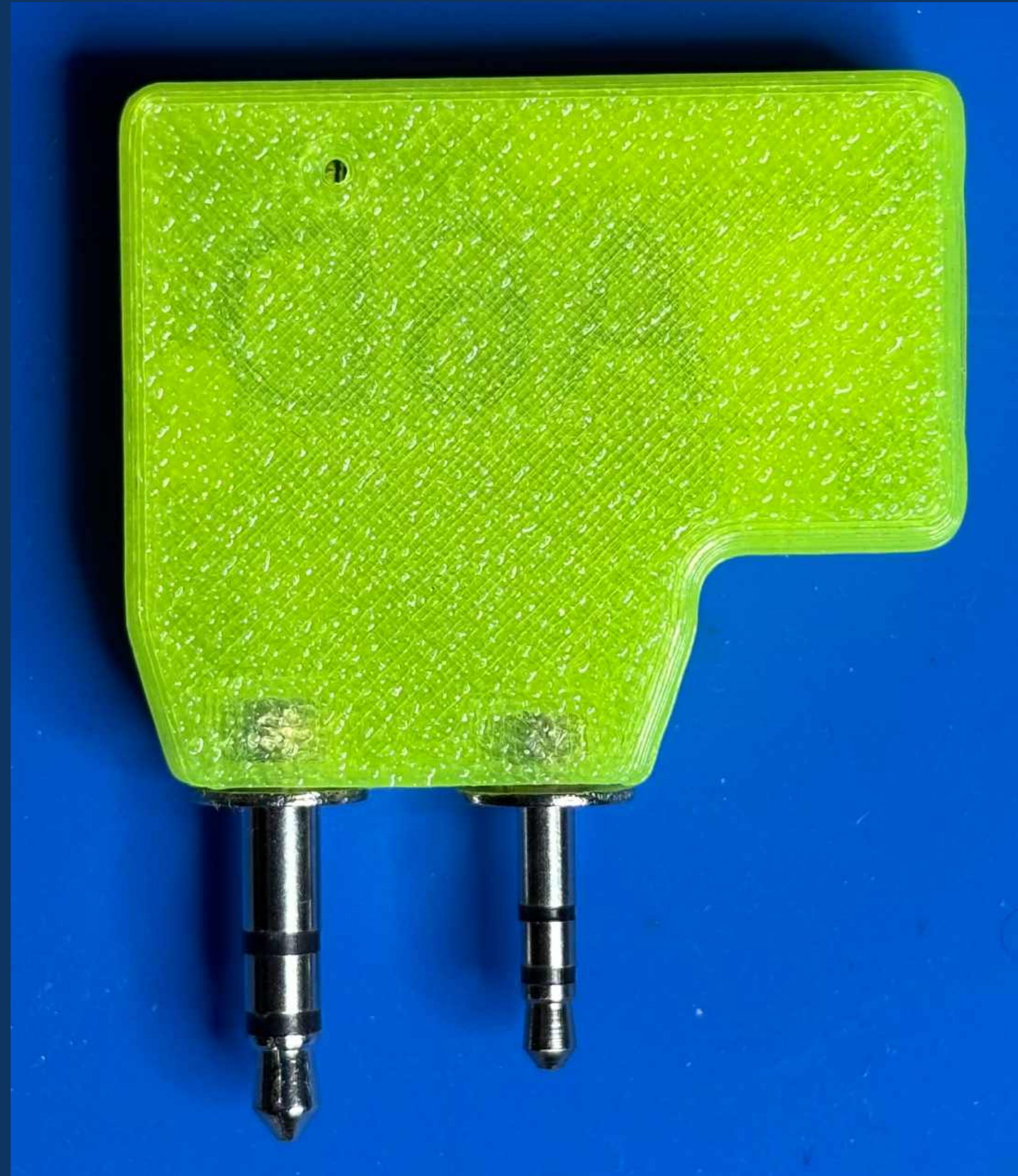
All-In-One-Cable (AIOC) prep - step 2



All-In-One-Cable (AIOC) prep - step 3



All-In-One-Cable (AIOC) prep - step 4



All-In-One-Cable (AIOC) prep - step 5

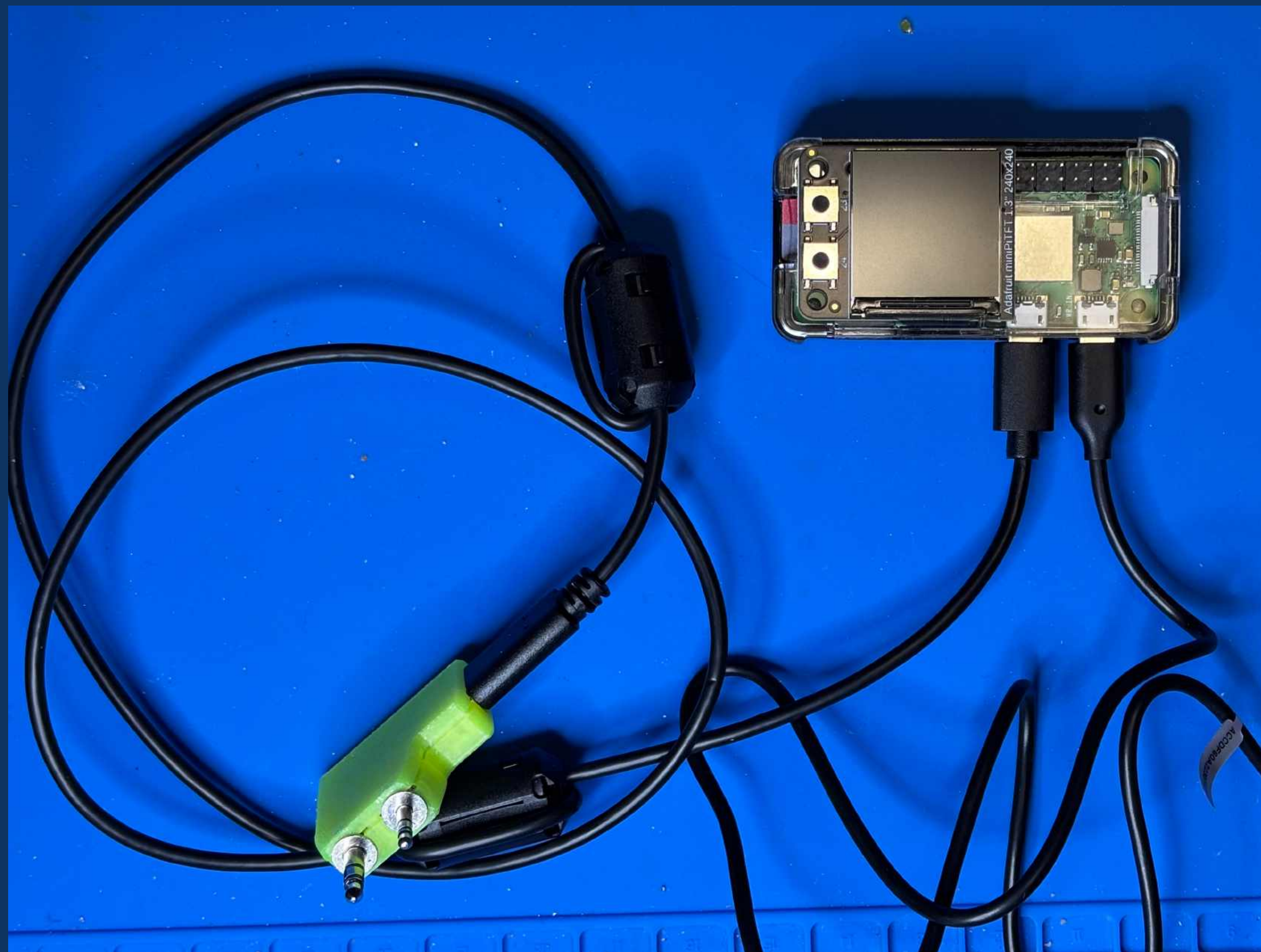


Startup

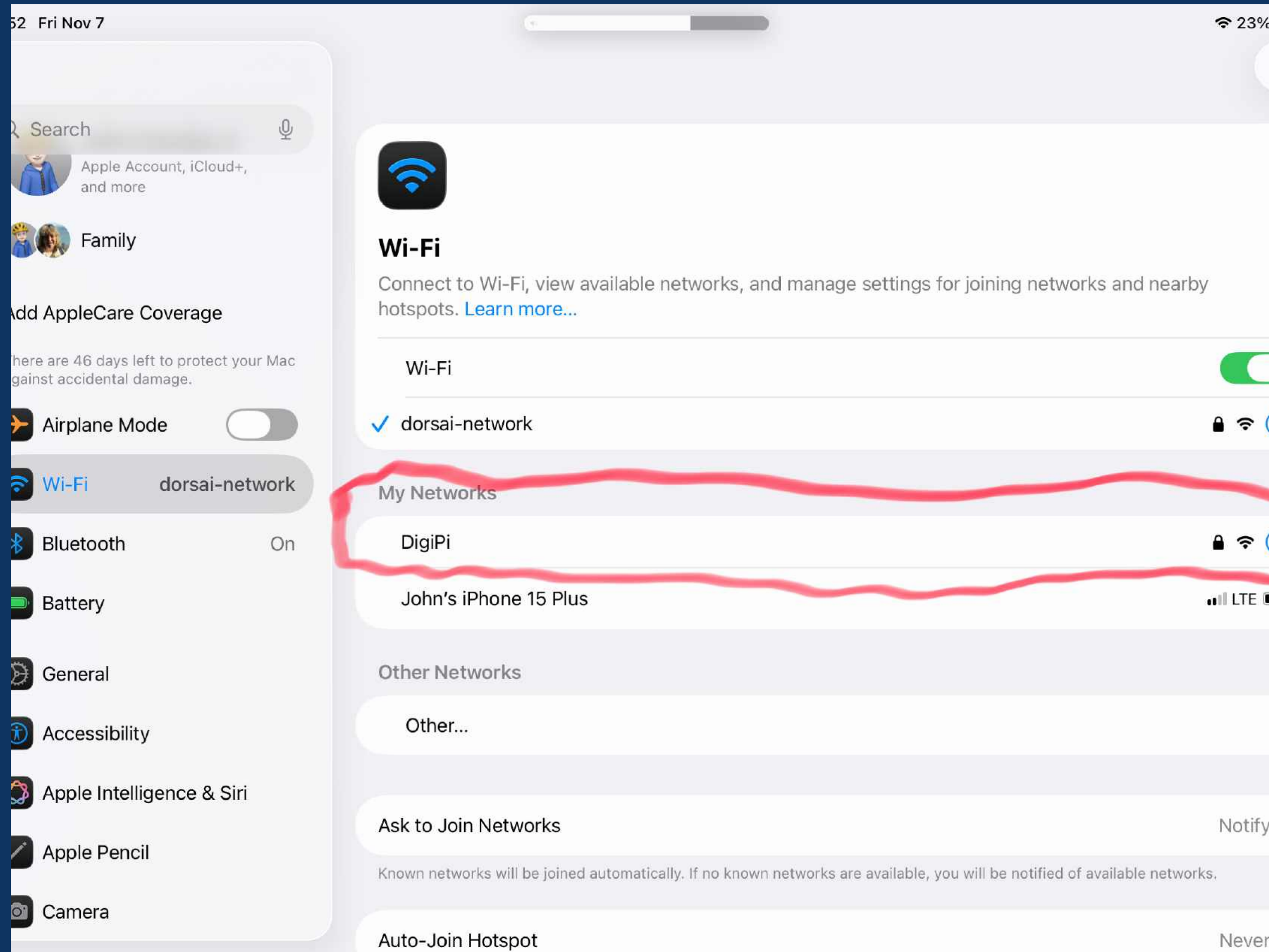


- Plug the power connection to the **LEFT** micro-USB port.
- This port only provides power to the Pi, no other connectivity.

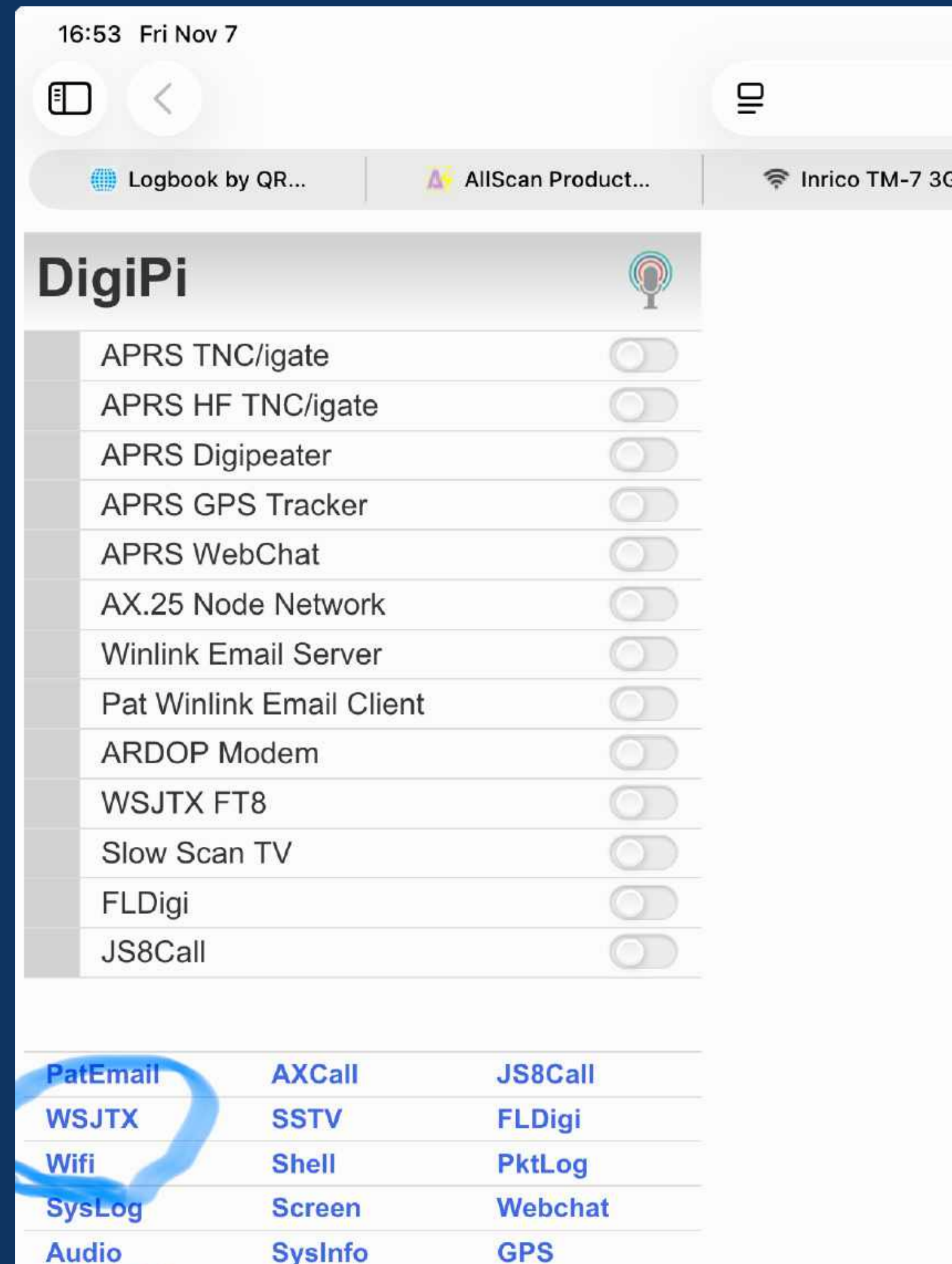
Connect AIOC to left port



Connect to DigiPi over Wifi

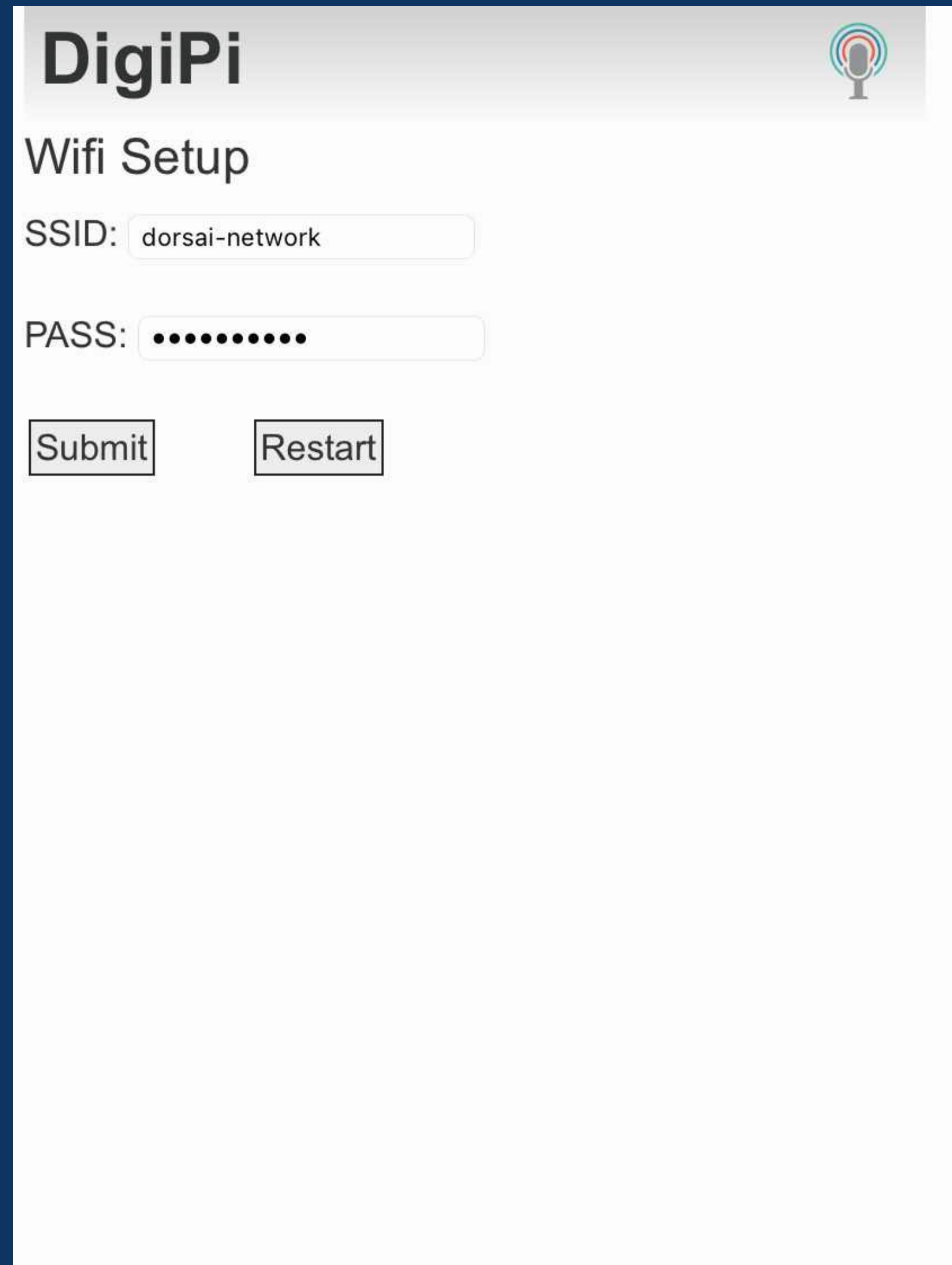


Startup, continued



- Click on “Wifi”

Startup, continued



The screenshot shows the DigiPi web interface for Wifi Setup. At the top left, the text "DigiPi" is displayed next to a microphone icon. Below this, the heading "Wifi Setup" is visible. There are two input fields: "SSID:" with the text "dorsai-network" and "PASS:" with ten dots. At the bottom of the form, there are two buttons: "Submit" and "Restart".



- Enter the sign on credentials for your wifi network.
- Click “Submit”
- Click “Restart”
- The Pi will disconnect from your phone.

Startup, continued



16:54 Fri Nov 7

digipi.local

Logbook by QRZ.C... AllScan Products -... Inrico TM-7 3G/WiF... Zello | The Most R

DigiPi

DigiPi Initialization

Please try to fill out this form completely the first time, as you cannot currently come back and make changes here later. If you need to make subsequent edits, see /home/pi/localize.env for items you can change after-the fact. You can always reflash your SD card and start over if not sure.

Callsign	<input type="text" value="KX6XXX"/>	Base callsign, no sid/suffix
Winlink Password	<input type="password" value="•••••"/>	Create Account
APRS Password	<input type="text" value="12345"/>	Generate
Grid Square	<input type="text" value="CN99mv"/>	Find
Latitude	<input type="text" value="40.9999"/>	Locate (12.3456)
Longitude	<input type="text" value="-120.9999"/>	Locate (-123.4567)
GPS Device	<input type="text" value="ttyACM1"/>	ttyACM1, ttyUSB0
AX.25 Node Pass	<input type="text" value="abc123"/>	any alpha-numeric string
Default Mode	<input type="text" value="Standby"/>	Service to start at boot
Screen Type	<input type="text" value="ST7789 240x240"/>	Optional gpio display
Large Display	<input type="checkbox"/>	Use with PC or large tablet
Radio Interface	<input type="text" value="AIOC"/>	

Detected Radio/GPS devices
ttyACM0: usb-AIOC_All-In-One-Cable_d5921d0e-if04

Detected audio interface:
0 [AllInOneCable]: USB-Audio - All-In-One-Cable AIOC All-In-One-Cable at usb-3f980000.usb-1, full speed

- When the Pi has finished starting up, go to your web browser and enter “digipi.local” in the address bar.
- Go to the bottom of the screen and click “Initialize”.
- The screen to the left will appear.

Startup, continued



17:03 Fri Nov 7

digipi.local

Logbook by QR... AllScan Product... Inrico TM-7 3G/... Zello | The Most... Flrig

DigiPi

DigiPi Initialization

Please try to fill out this form completely the first time, as you cannot currently come back and make changes here later. If you need to make subsequent edits, see /home/pi/localize.env for items you can change after-the fact. You can always reflash your SD card and start over if not sure.

Callsign	<input type="text" value="K2ZA"/>	Base callsign, no sid/suffix
Winlink Password	<input type="password" value="•••••"/>	Create Account
APRS Password	<input type="text" value="25233"/>	Generate
Grid Square	<input type="text" value="FM29lo"/>	Find
Latitude	<input type="text" value="39.60133"/>	Locate (12.3456)
Longitude	<input type="text" value="-75.0515"/>	Locate (-123.4567)
GPS Device	<input type="text" value="ttyACM1"/>	ttyACM1, ttyUSB0
AX.25 Node Pass	<input type="text" value="abc123"/>	any alpha-numeric string
Default Mode	<input type="text" value="APRS TNC"/>	Service to start at boot
Screen Type	<input type="text" value="ST7789 240x240"/>	Optional gpio display
Large Display	<input type="checkbox"/>	Use with PC or large tablet
Radio Interface	<input type="text" value="AIOC"/>	


Detected Radio/GPS devices
ttyACM0: usb-AIOC_All-In-One-Cable_d5921d0e-if04

Detected audio interface:
0 [AllInOneCable]: USB-Audio - All-In-One-Cable AIOC All-In-One-Cable at usb-3f980000.usb-1, full speed

- Make sure you have all your information correct, otherwise you will have to re-image your SD card.
- Enter your information and click “initialize”.
- Click on “Restart”

Startup, continued



DigiPi K2ZA 

<input checked="" type="checkbox"/>	APRS TNC/igate	<input checked="" type="checkbox"/>
<input type="checkbox"/>	APRS HF TNC/igate	<input type="checkbox"/>
<input type="checkbox"/>	APRS Digipeater	<input type="checkbox"/>
<input type="checkbox"/>	APRS GPS Tracker	<input type="checkbox"/>
<input checked="" type="checkbox"/>	APRS WebChat	<input checked="" type="checkbox"/>
<input type="checkbox"/>	AX.25 Node Network	<input type="checkbox"/>
<input type="checkbox"/>	Winlink Email Server	<input type="checkbox"/>
<input type="checkbox"/>	Pat Winlink Email Client	<input type="checkbox"/>
<input type="checkbox"/>	ARDOP Modem	<input type="checkbox"/>
<input type="checkbox"/>	WSJTX FT8	<input type="checkbox"/>
<input type="checkbox"/>	Slow Scan TV	<input type="checkbox"/>
<input type="checkbox"/>	FLDigi	<input type="checkbox"/>
<input type="checkbox"/>	JS8Call	<input type="checkbox"/>

PatEmail	AXCall	JS8Call
WSJTX	SSTV	FLDigi
Wifi	Shell	PktLog
SysLog	Screen	Webchat

- Turn on APRS/TNC by clicking the button.
- After the service has started, click the APRS WebChat button.
- After the WebChat service has started, click the WebChat link at the bottom of the screen.

Startup, continued



17:09 Fri Nov 7 19%

digipi.local

Logbook by QRZ.C... AllScan Products -... Inrico TM-7 3G/WiF... Zello | The Most Rel... Flrig v2.0.06 now a... DigiPi APRS WebChat

DigiPi APRS WebChat **K2ZA**

WXBOT Default Path Message Send Send Position

WXBOT x

Locate

K2ZA 10/15/2025 4:14:55 PM
08062

WXBOT 10/15/2025 4:15:11 PM
Mullica Hill NJ. Today,Increasing Clouds High 60

WXBOT 10/15/2025 4:16:07 PM
Mullica Hill NJ. Today,Increasing Clouds High 60

[Powered by APRSD](#)



Questions?