USBLITER8 RP2350 Pwn DFU Setup Guide

By Otix - a simple guide for hardware selection, wiring, firmware flashing, and the final connection order.

Use this guide only with devices you own or have clear permission to test. Before powering the board, double-check every connection. Wrong USB power wiring can damage the phone, cable, or RP2350 board.

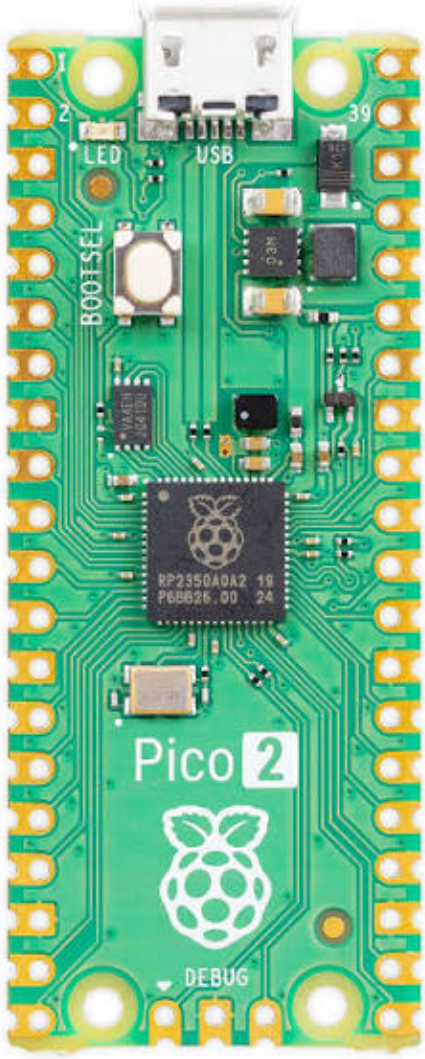
1. Hardware Requirements

Recommended board: Waveshare RP2350 USB-A board. This is the easiest option because it already includes a USB-A host port, so the Lightning cable can be connected directly after flashing the correct firmware.

Waveshare RP2350 USB-A board

Alternative Board

Raspberry Pi Pico 2 RP2350: use this option if the Waveshare board is not available in your country. The Pico 2 can be used, but you must connect the USB data and power lines manually, or solder a USB-C breakout board.



Raspberry Pi Pico 2 RP2350 alternative board

2. Wiring / Connection Options

Option A - Waveshare RP2350 USB-A board

With the Waveshare board, connect the USB Lightning cable directly to the USB-A port on the board. No cutting or soldering is needed on the phone-side cable.

Waveshare RP2350 connected between the Mac/laptop and the DFU iPhone cable

Option B - Raspberry Pi Pico 2 RP2350 with cut Lightning cable

For Pico 2, solder four USB lines. USB cable wire colors can vary, so do not trust color only. Confirm each wire with a multimeter or a known cable pinout before soldering.

Pico 2 pin	Connects to Lightning cable
GND	GND / ground
VBUS / VCC	VCC / USB 5V power
GP12	D+
GP13	D-

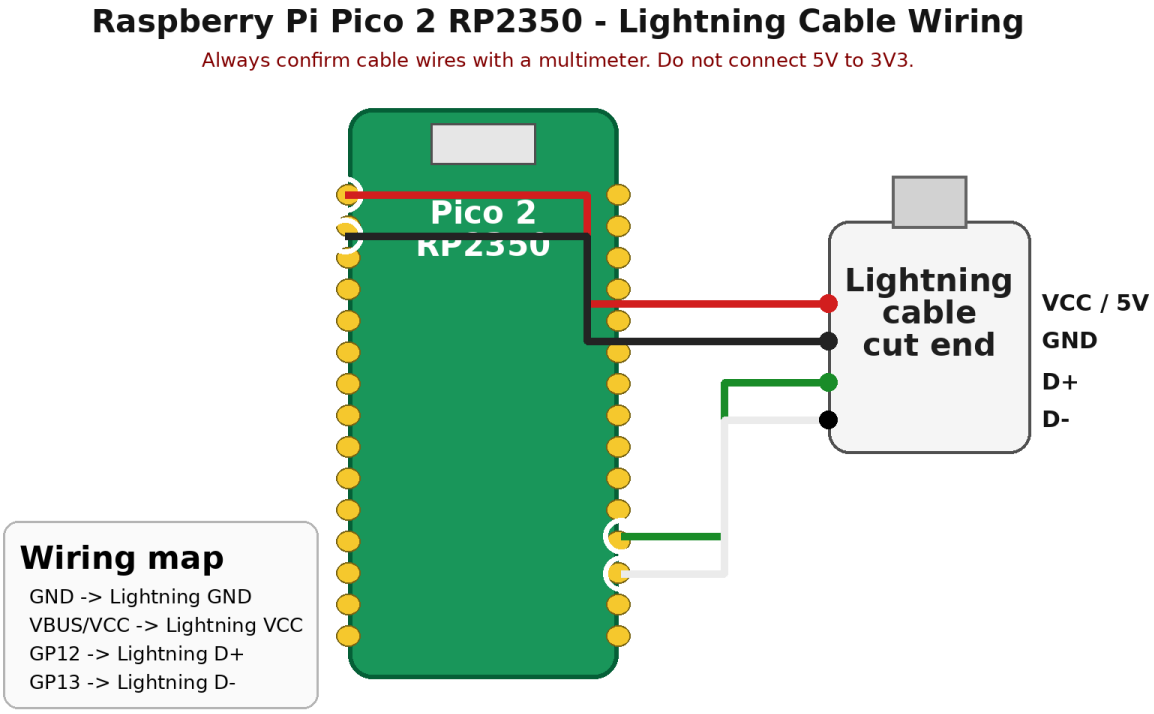
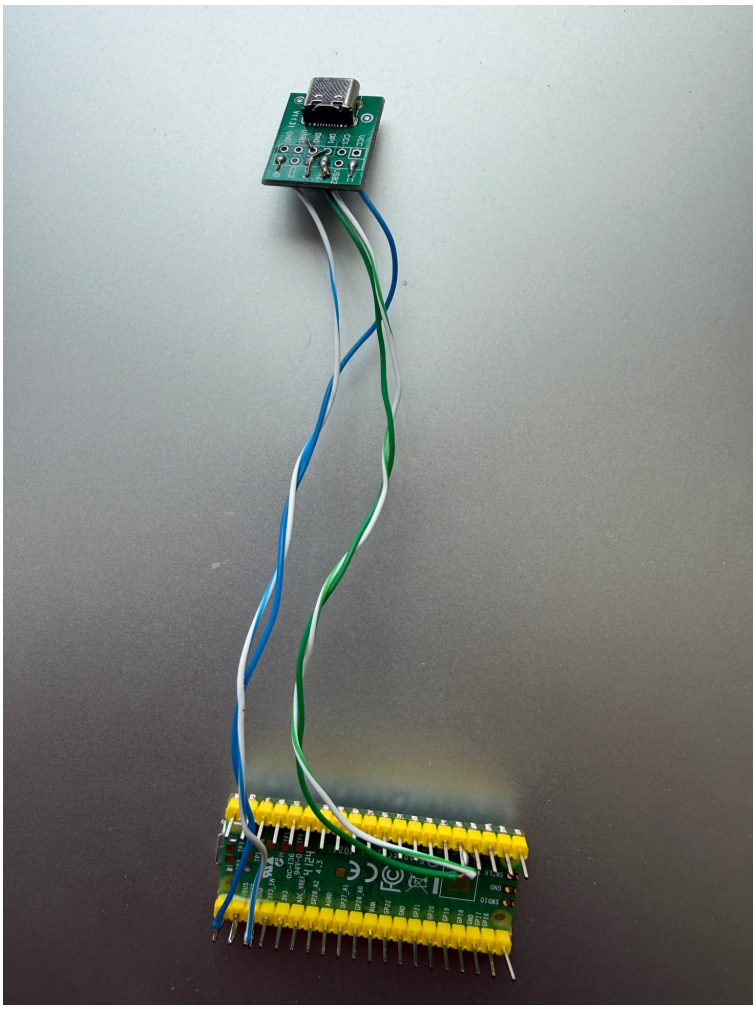


Diagram: Pico 2 RP2350 wiring for a cut Lightning cable

Important: connect USB 5V/VCC to **VBUS**, not to the **3V3** pin. For this setup, **GP12 = D+** and **GP13 = D-**.

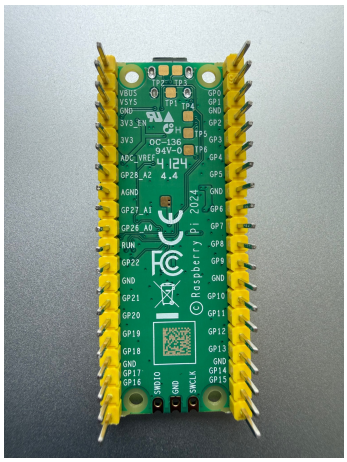
Option C - Pico 2 with USB-C Breakout Board

If you do not want to cut a Lightning cable, you can solder a USB-C breakout board to the Pico 2 and then use a normal cable. Keep the wires short and clean. After soldering, check continuity and make sure there is no short between VBUS and GND.



Pico 2 wired to a USB-C breakout board

The Pico 2 pin labels are printed on the back side of the board. Use those labels when confirming VBUS, GND, GP12, and GP13.



Back side pin labels of the Raspberry Pi Pico 2 RP2350

3. Flashing the Firmware

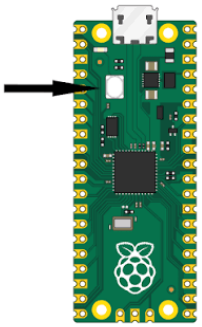
Download the firmware package from:

https://mega.nz/file/BDcWxKiB#NcJVBRUfRDfrNMb5e3QKtVgaTnAVOnnBBfkVbx8l6W8

Choose the firmware file that matches your exact board: Waveshare RP2350 USB-A firmware for the Waveshare board, or Raspberry Pi Pico 2 RP2350 firmware for the Pico 2.

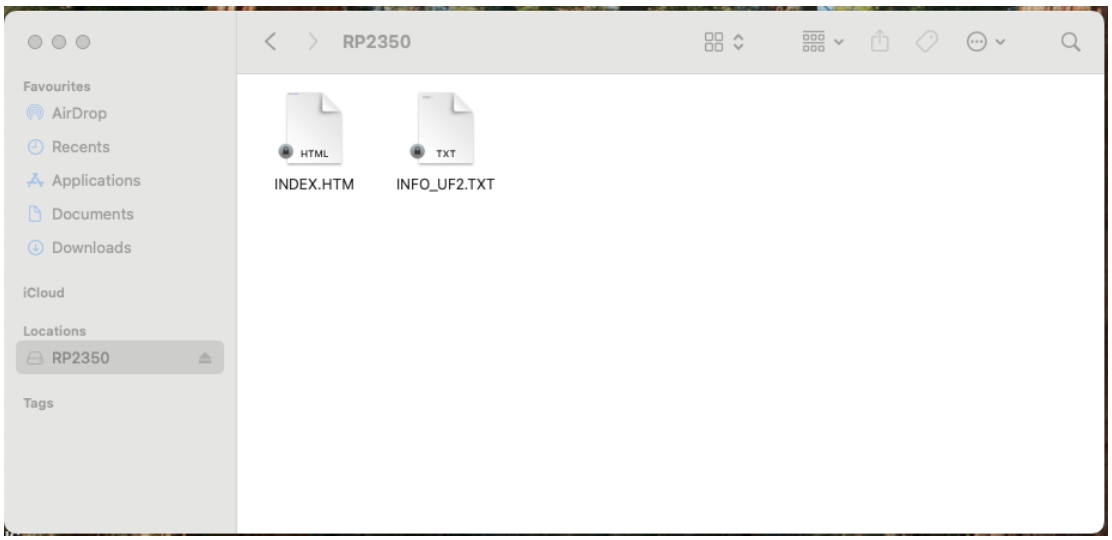
Flashing steps

1. Unplug the RP2350 board from your computer.
2. Press and hold the BOOT button on the board.
3. While holding BOOT, plug the board into your Mac or laptop.
4. Release the BOOT button after the board appears as a USB drive.
5. Drag and drop the correct .uf2 firmware file onto the RP2350 drive.
6. Wait for the copy to finish. The board will reboot automatically.



Hold the BOOT button while plugging the board into the computer

Firmware Drive Check



The board appears as an RP2350 USB drive on macOS

After the .uf2 file is copied and the board reboots, your RP2350 board is ready.

4. Using the Board

Follow this order for the most stable result:

1. Connect the iPhone to your Mac or laptop first.
2. Put the iPhone into DFU mode.
3. Plug the RP2350 board into power and wait until it turns on.
4. A stable green light means the board is ready.
5. Connect the DFU iPhone to the RP2350 board.
6. A blinking green light means the process is running.
7. When the green light becomes stable again, the operation has completed successfully.

Light Status and Quick Troubleshooting

Green light status	Meaning
Stable / not blinking	Board is powered and ready, or the operation has completed
Blinking	The board is running the process

If nothing happens, recheck the firmware file, USB cable, DFU mode, and wiring. For Pico 2 wiring, confirm D+ and D- are not swapped. Also confirm there is no short between VBUS and GND before connecting the phone.