

Using Zero with ssd1306 Based LCD and SPI

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***** THIS PAGE IS VERY MUCH WIP - PLEASE COME BACK LATER *****



Introduction

The main difference between the driver we will use here, and the driver we used on the Pico is:

- The GPIO pins you pass into the driver.
- The SPI bus number (Zero uses SPI0 by default).

The Pico we used SPI bus 1

[| download](#)

```
spi = SPI(1, sck=Pin(10), mosi=Pin(11))
oled = SSD1306_SPI(128, 64, spi, dc=Pin(8), res=Pin(9), cs=Pin(12))
```

The Pico we used a different set of GPIO pins, so these references have to change on the Zero.

[| download](#)

```
spi = SPI(0, sck=Pin(2), mosi=Pin(3))
oled = SSD1306_SPI(128, 64, spi, dc=Pin(6), res=Pin(7), cs=Pin(5))
```

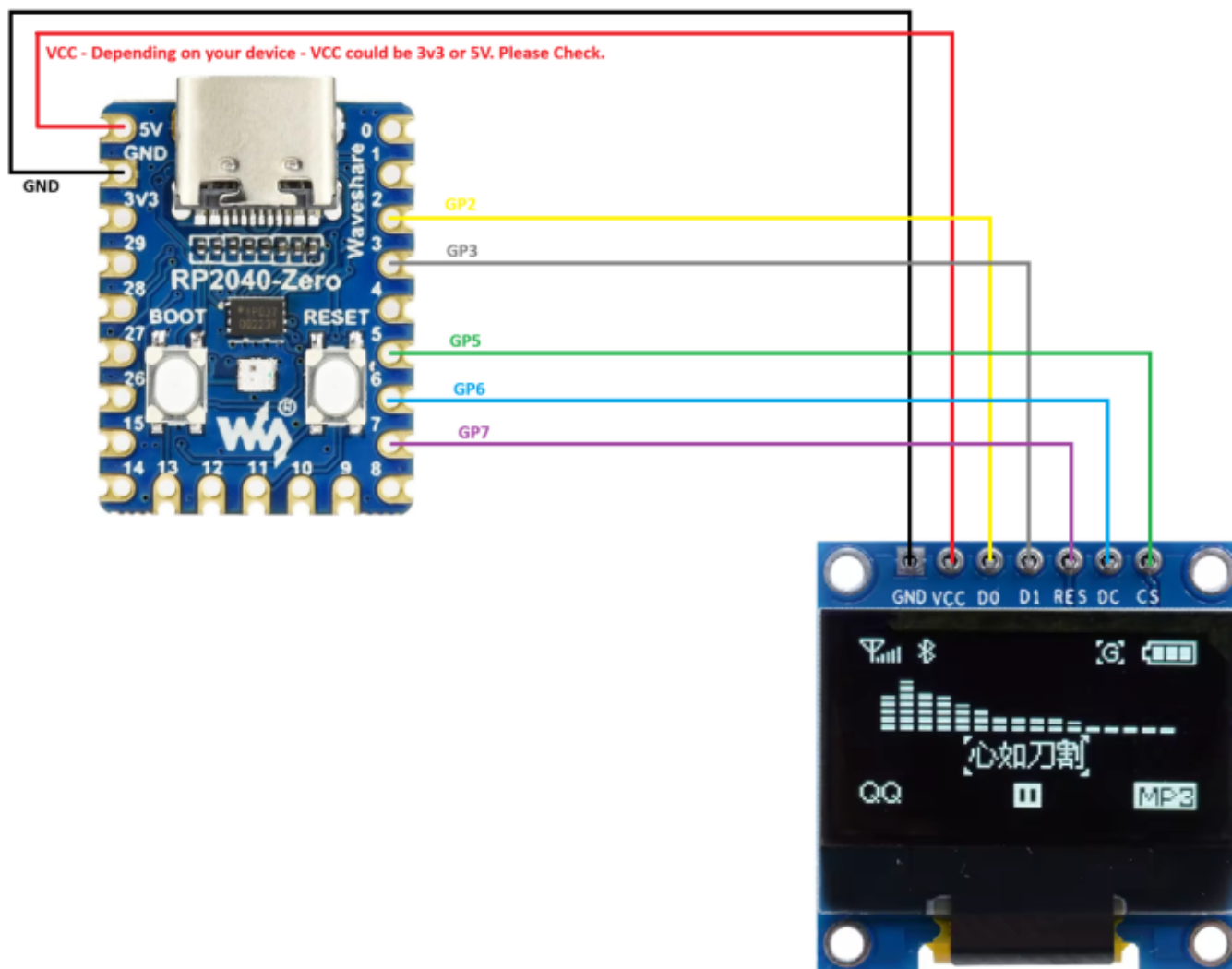
On the Zero, the SPI bus 1 pins are not exposed, so it cannot be used.

The Wiring

The wiring for the Zero is exactly the same as for the Pico, unfortunately there are two slight differences.

- 1. The GPIO Pins are different.
- 2. The Pico uses SPI1 and the Zero uses SPI0

[See the wiring below:](#)



Once you have wired up your LCD, we can move on to the software.

The Driver

You can download the driver here:

[ssd_1306_zero.zip](#)

you have to upload the driver to the \lib folder.

I am not going to talk about the driver because there isn't anything in there we need to change.

Test Code

All this test code does is to print 8 lines of text with sequential numbers after them, the numbers keep incrementing one at a time. The test code is designed to ensure the LCD is working fine, not to provide any real functionality, that will be up to you once you get your LCD working.

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