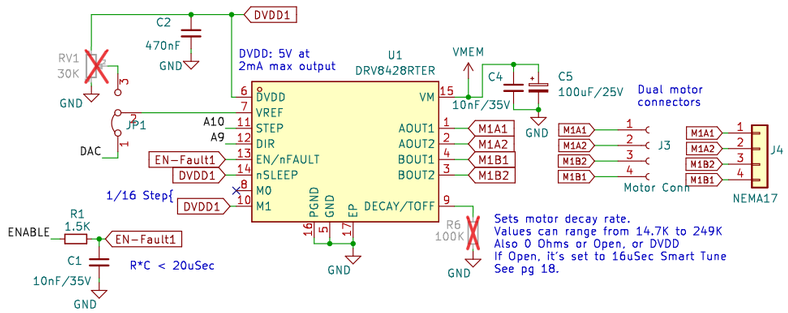
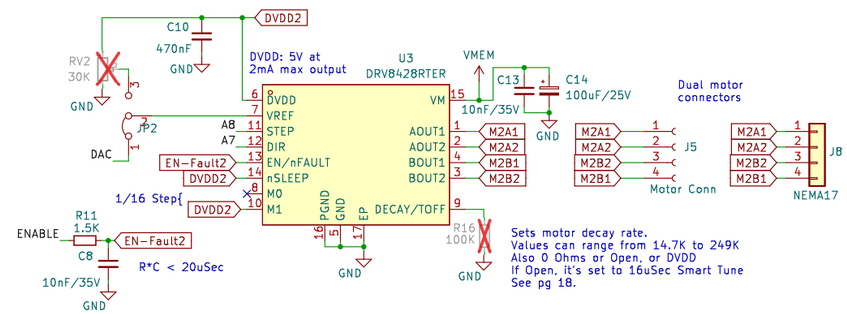
DRV8428 Motor Driver
4.2V to 33V
up to 1A

A4988 board was set to
16th steps (all +)
Which for the DRV8428
is: M0=HI-Z, M1=High

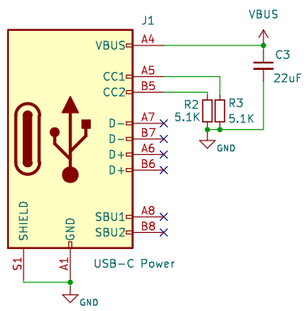
Motor Controller 1



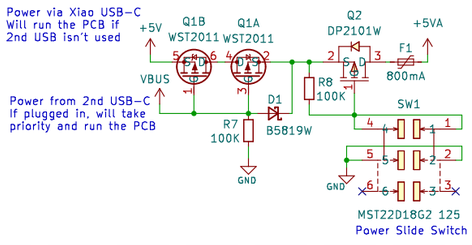
Motor Controller 2



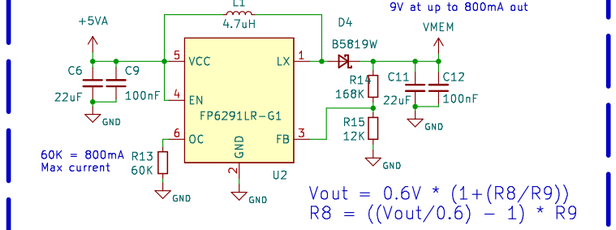
Powers the Stepper Motors, No Data



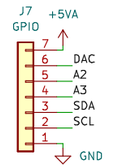
Backflow Protection / Power Switch



5V to 9V Boost



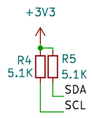
GPIO BREAKOUT



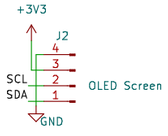
ESP32-C3
* bluetooth?
* interactive mode?
* upload files?

Xiao RP2040
* original model
* dual USB-C
* could use the DAC to control max motor current

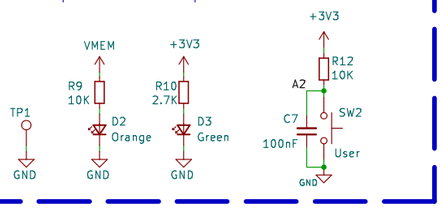
i2C Pullups



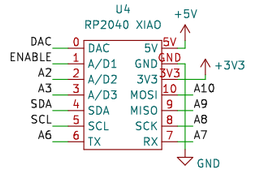
OLED Screen



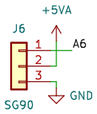
Inputs & Outputs



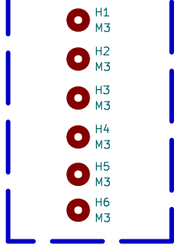
XIAO RP2040



SERVO



Mounting Holes



PCB Tests:
* check max motor current vs. 5V draw
* is DC PSU OC resistor rating correct? What should it be?
* after check above, check polyfuse rating