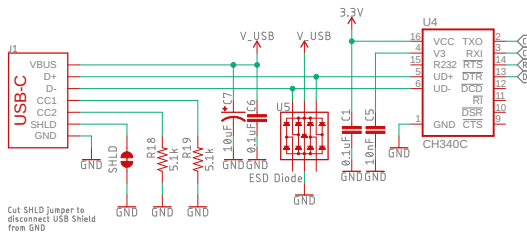


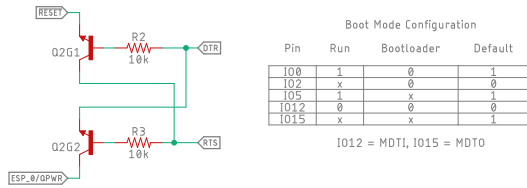
USB-to-Serial Converter

This is the penny-in-the-fuse jumper. Close only if you know what you're doing.



Cut SHLD jumper to disconnect USB shield from GND

Auto-Reset



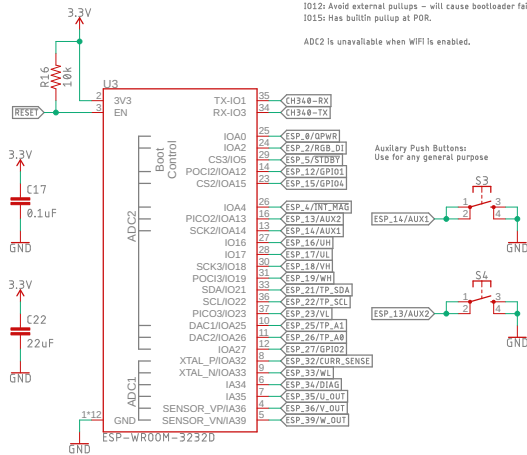
If DTR is LOW, toggling RTS from HIGH to LOW resets to run mode.
If RTS is HIGH, toggling DTR from LOW to HIGH resets to bootloader.

Espressif ESP32

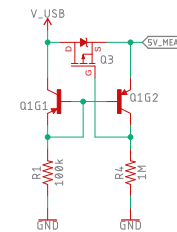
Use boot control pins with caution! 0, 2, 5, 12, 15

- I00: Avoid device connections. Can be used as a stat LED.
- I02: Avoid external pullups - will cause bootloader fail.
- I05: Has built-in pullup at POR.
- I012: Avoid external pullups - will cause bootloader fail.
- I015: Has built-in pullup at POR.

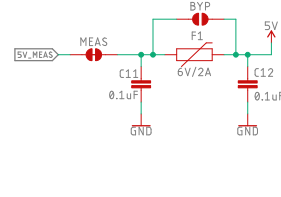
ADC2 is unavailable when WiFi is enabled.



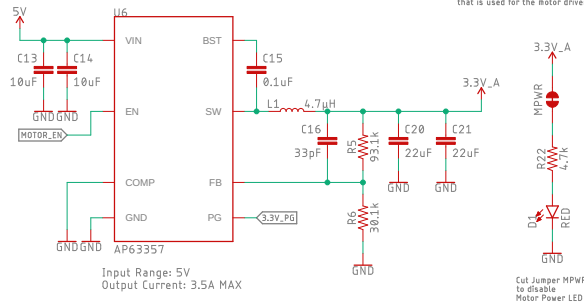
5V Bus Perfect Diodes



Current Measure Header and Fuse Jumper

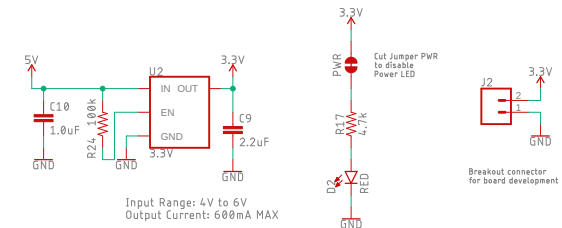


Motor Voltage Regulator

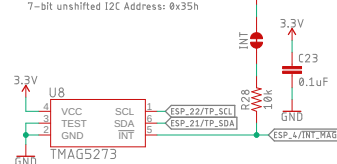


3.3V_A is the alternate voltage that is used for the motor driver

3.3V Regulator



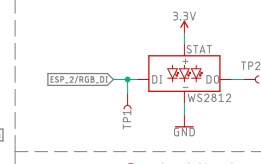
Hall-Effect Sensor



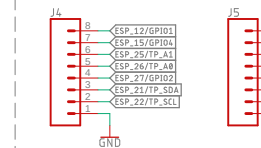
Boot and Reset Buttons



RGB Status LED

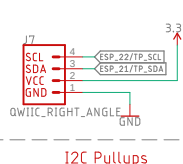


Breakout Headers

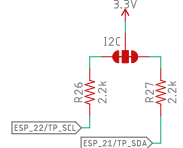


Qwiic Connector

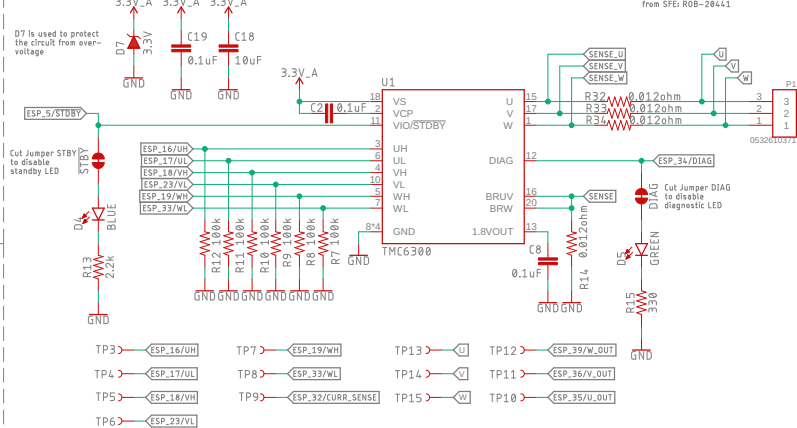
Qwiic Connector



I2C Pullups

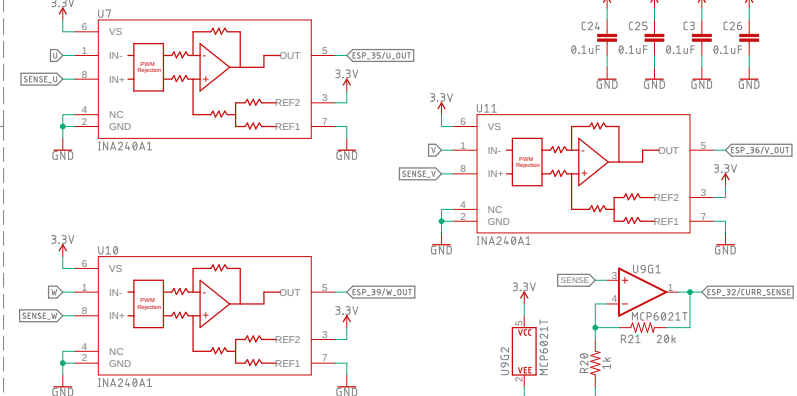


3-Phase Brushless Motor Driver



3-Pin Molex connector that mates nicely with this motor from SFE: ROB-284-141

Motor Current Sensing



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TITLE: ESP32_BLDC_Motor_Driver

Design by: M. Chodikov

Date: 7/7/2023 2:50 PM

REV: v10

Sheet: 1/1