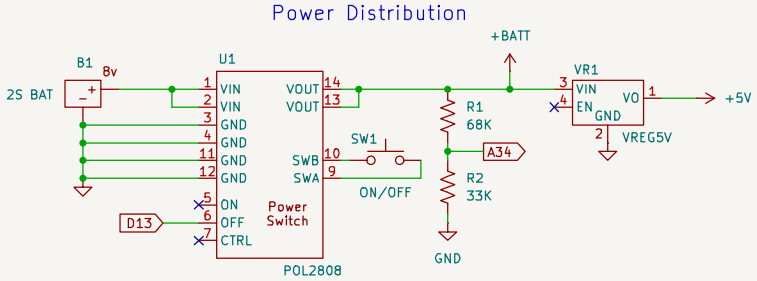

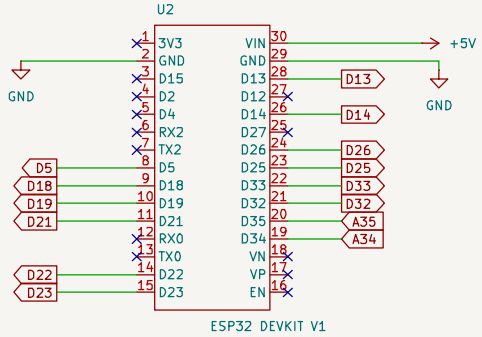

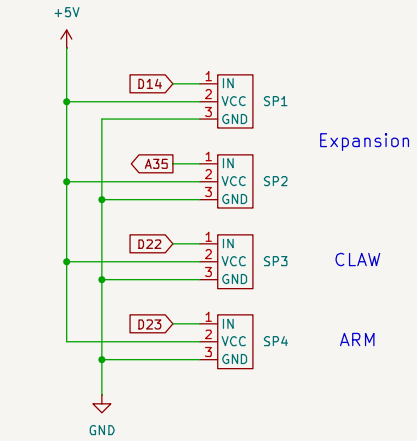

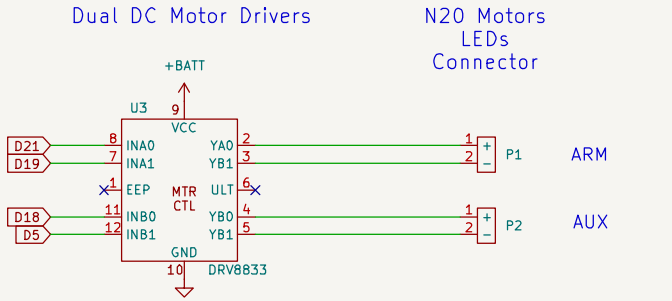

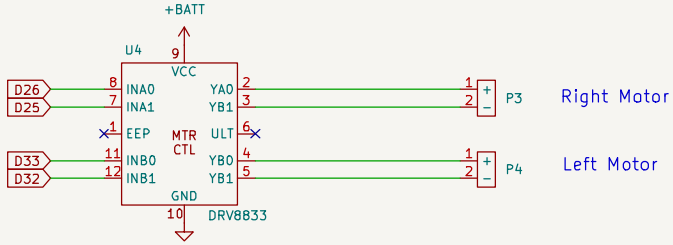

NOTES:

Controller is designed for small RC Skid Steer that can be 3D printed. Skidi is controlled by Game Controllers

2S LiPo battery (7–8.4v) powers circuit. 300–450mAH should fit at right side of PCB

Install Power Distribution circuit first & test to ensure you have +5v from regulator and that A34 is not above 3.3v which will destroy ESP32

Pololu 2808 "Power Switch" has onboard pushbutton to turn on Battery <–> Regulator connection. You can connect your own pushbutton, but it should be a low bounce (tactile) type. Pulse the OFF signal high to turn the switch off and shut down.

A34 monitors the state of the LiPo battery. Connect 7.0v to VIN of 2808 and read ESP32 ADC to see the low value to turn off the POL2808 to prevent battery from discharging. ESP32 ADCs are not exact between modules.

DRV8833 module provides power for N20 DC motors and can power LEDs. By reversing the polarity of INA0/1 you can reverse motors and power 2 sets of LEDs (both can't be on at same time)

Crab Consulting

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File: ESP32_CNTRL.kicad_sch

Title: ESP32 RC Controller

Size: A	Date: 2024-06-28	**Rev: 0**
KiCad E.D.A. 8.0.3		Id: 1/1