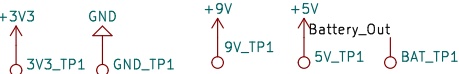
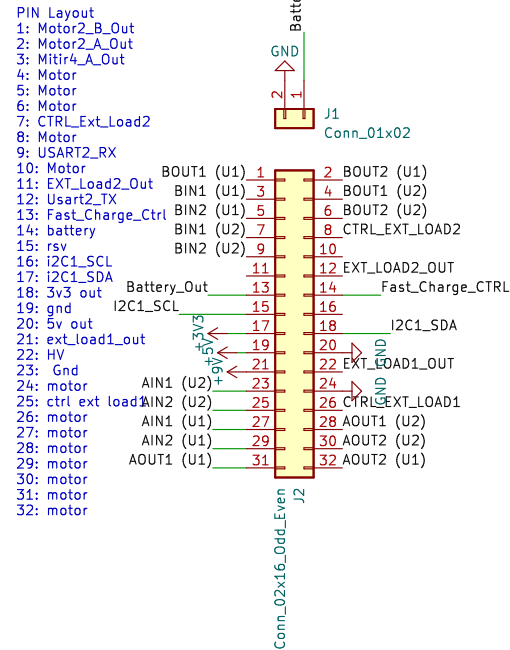


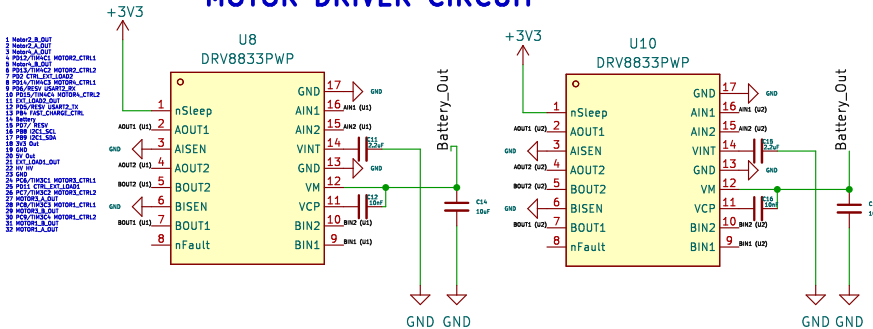
Global Test Points



Connectors

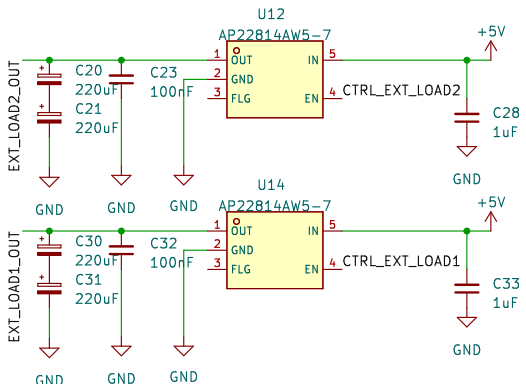


MOTOR DRIVER CIRCUIT



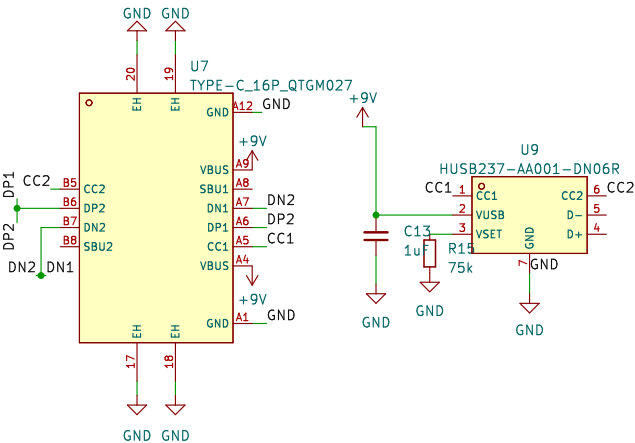
DRV8833PWP (U8, U10) controls four motors bidirectionally (REQ-001). U8 drives Motor 1 and 2 at 200mA (SP-001-01). U10 drives Motor 3 and 4 at 500mA (SP-001-02). nSLEEP enables the driver, and control signals (AIN/BIN) manage direction/speed.

EXTERNAL LOAD SWITCHING CIRCUIT



AP22814AW5-7 (U12, U14) manages two 1A loads from 5V (REQ-006, SP-006-01). EXT\_LOAD2\_OUT and EXT\_LOAD1\_OUT deliver 0.9-1.1A each, with overcurrent protection above 1.5A. EN pins enable/disable the loads.

USB-C INTEGRATION CIRCUIT



HUSB237 (U9) and TYPE-C\_16P\_QTGM027 (U7) negotiate 9V  $\pm$ 5% (8.55V-9.45V) from a USB host (REQ-005, SP-005-01). VBUS feeds the charging circuit, with decoupling capacitors for stability.

ON/OFF SWITCH

SS-12D06-G050 (SW1) controls power to the system (REQ-008). When ON, it allows up to 2A (SP-008-01); when OFF, it limits battery draw to <30 $\mu$ A (SP-008-02) and cuts 5V/3.3V outputs to 0V (SP-008-03).

