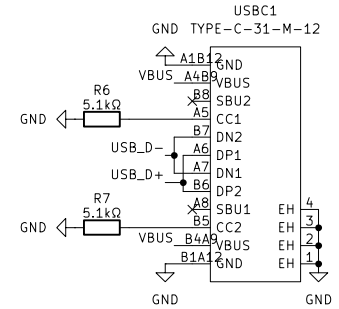
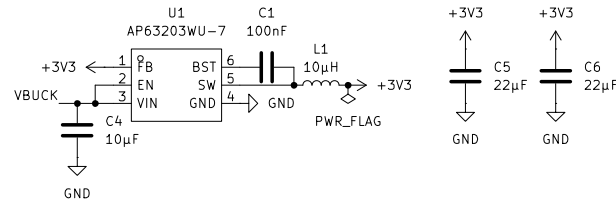
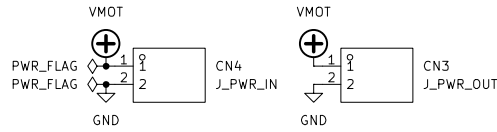
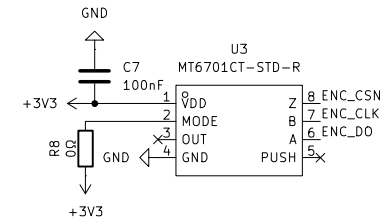
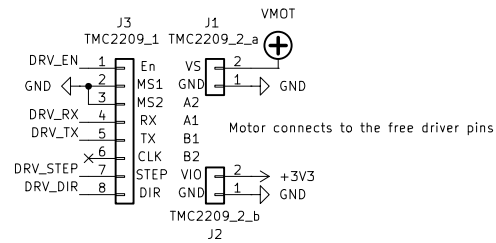
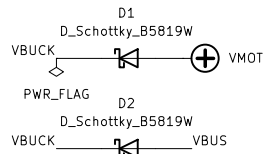


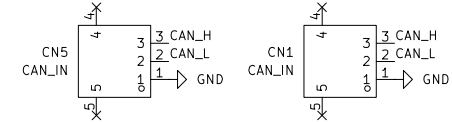
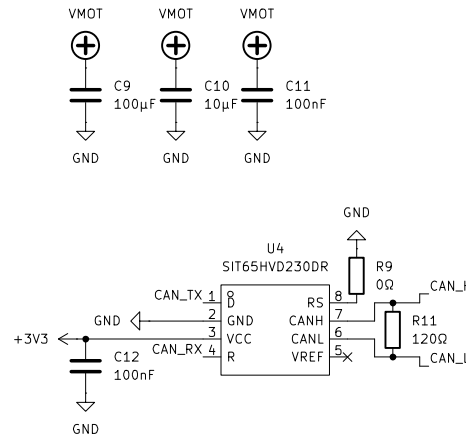
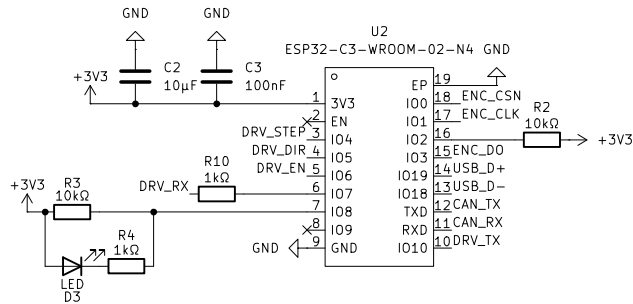
VMOT 12–24 V (20 V nominal). TMC2209 abs max 29 V.



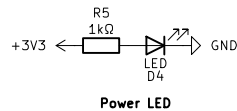
D1/D2 OR 20 V and USB 5 V into the buck
Logic can run on USB alone, motor power off.
D1 also blocks reverse polarity.



10 µF + 100 nF at the 3V3 pin – local charge reservoir for fast switching current.



CAN termination. Populate ONLY on the two boards at the physical ends of the bus (first and last). Leave unpopulated on all others



Samer Haddadin

Sheet: /
File: Robotic Arm.kicad_sch

Title: 6-DOF CANbus Stepper Node

Size: A4 Date: 2026-07-29

KiCad E.D.A. 9.0.7

Rev: v1.0

Id: 1/1