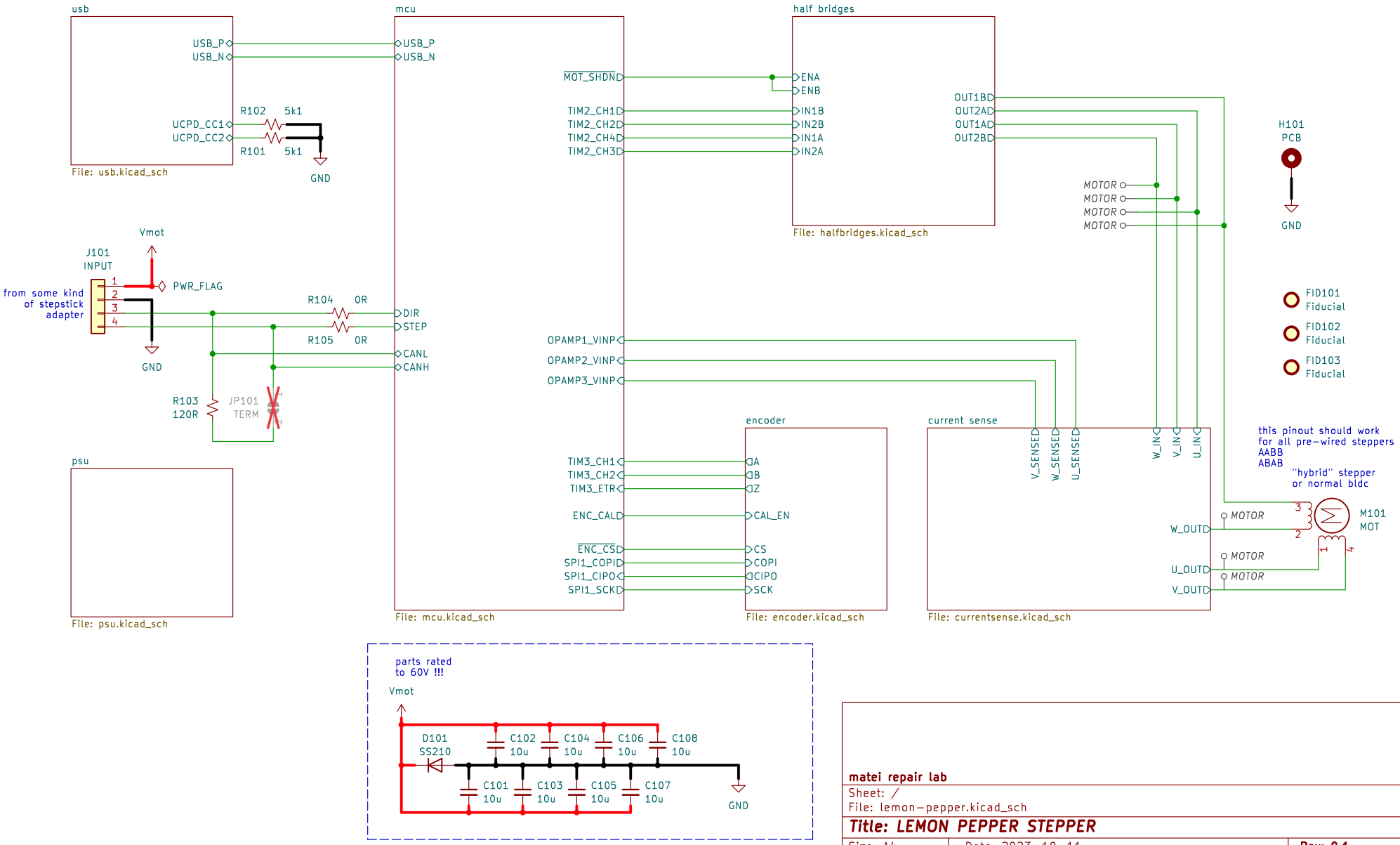


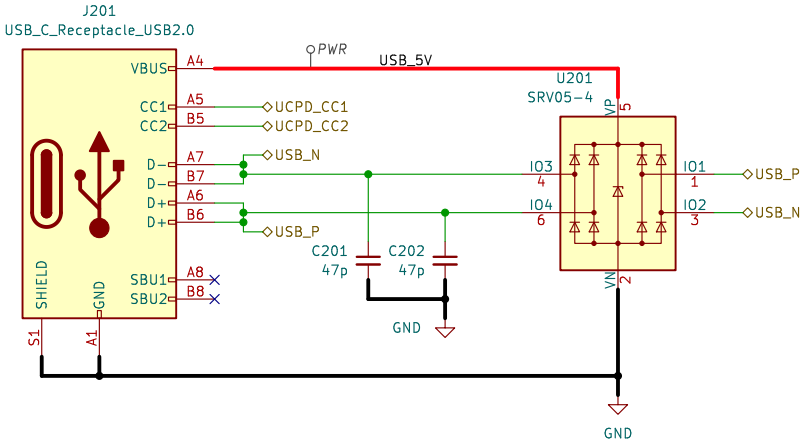
matei repair lab

Sheet: /

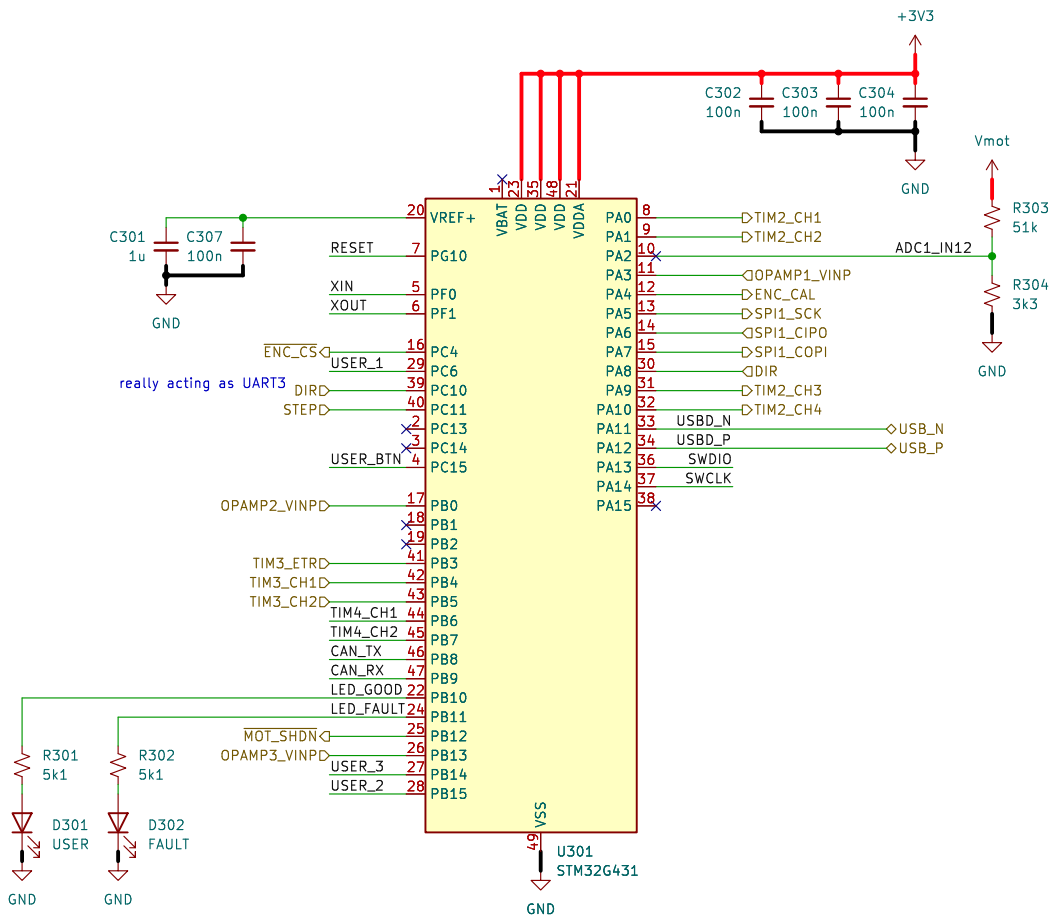
File: lemon-pepper.kicad_sch

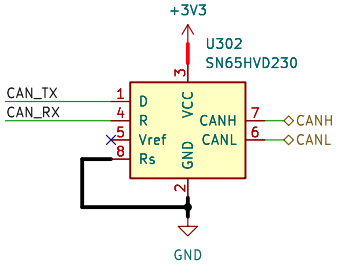
Title: LEMON PEPPER STEPPER

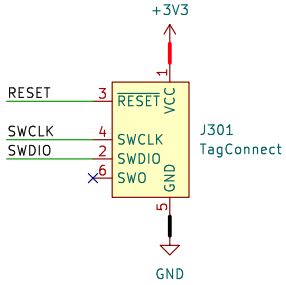
Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 1/7

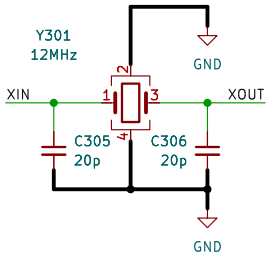


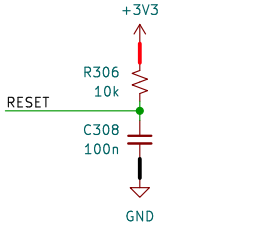
matei repair lab		
Sheet: /usb/		
File: usb.kicad_sch		
Title: USB & ESD		
Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 2/7

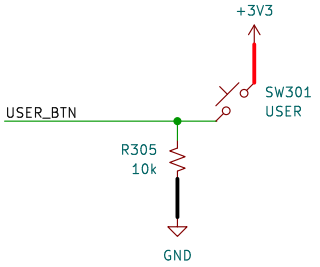










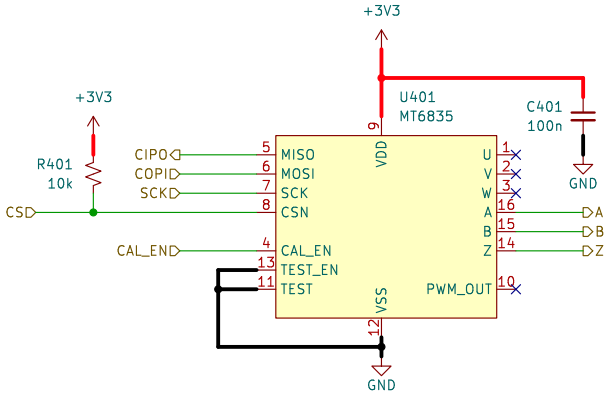


matei repair lab

Sheet: /mcu/
File: mcu.kicad_sch

Title: MICROCONTROLLER

Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 3/7



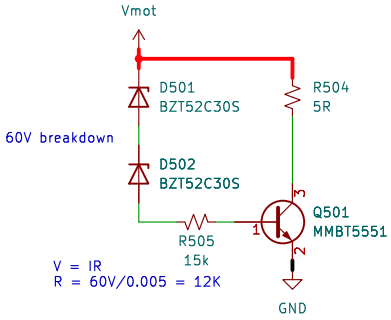
matei repair lab

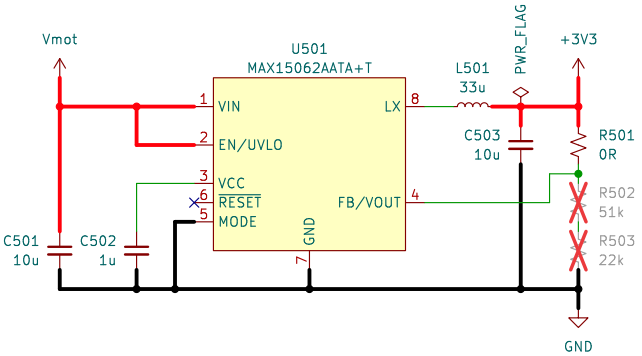
Sheet: /encoder/

File: encoder.kicad_sch

Title: MAGNETIC ENCODER 14 BIT

Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 4/7



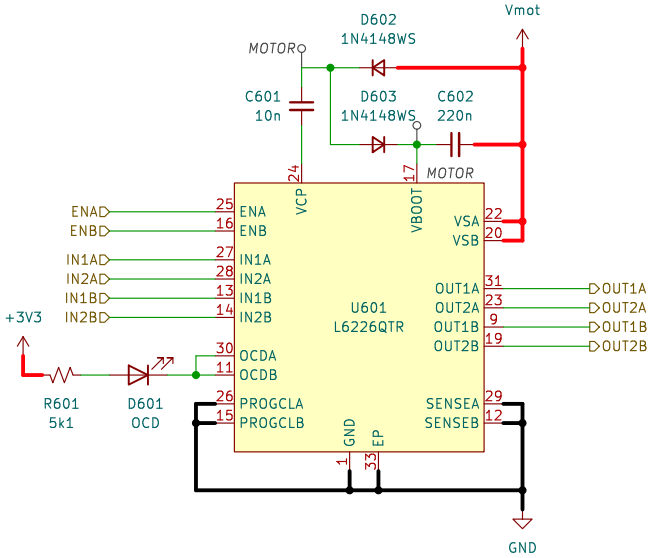


For MAX15062AATA+T (C2846801):
R501: 0R
R502, R503: DNP

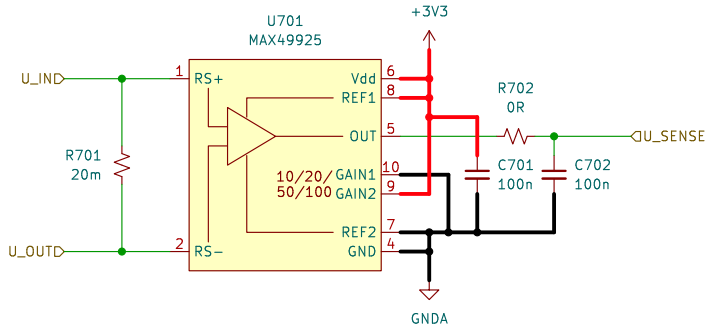
For MAX15062CATA+T (C1121853):
R501: 200k
R502, R503: 51k, 22k

Ra = Rb(Vout/0.9 − 1)
3.36V (closest to 3v3 with basic parts)

matei repair lab		
Sheet: /psu/		
File: psu.kicad_sch		
Title: POWER SUPPLY & FILTERING		
Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 6/7

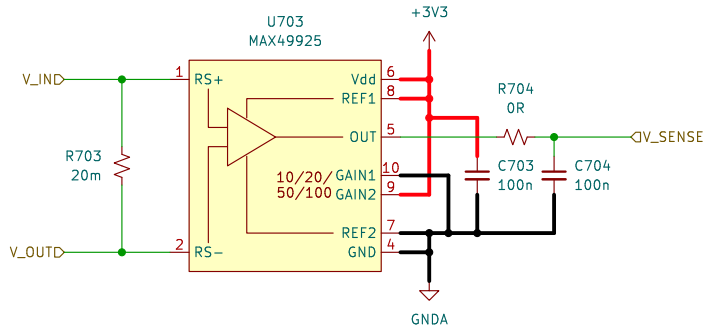


Sheet: /half bridges/ File: halfbridges.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.9		Id: 7/7

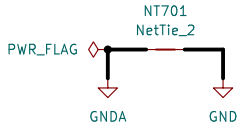


V = IR
2.9V ADC VRefBuff /20 => 0.145V input
R = 0.145V/2A => 72m sense resistor
P = 0.145 * 2 => 300mW rating

Gain 50V/V
2.9 / 50 => 58mV full range
2 * 0.020 => 40mV
0.04 * 2 = 80mW



join at power connector



matei repair lab
Sheet: /current sense/
File: currentsense.kicad_sch

Title: HALL CURRENT SENSING

Size: A4	Date: 2023-10-11	**Rev: 0.1**
KiCad E.D.A. kicad 7.0.9		Id: 8/7