

matei repair lab

Sheet: /
File: lemon-pepper.kicad_sch

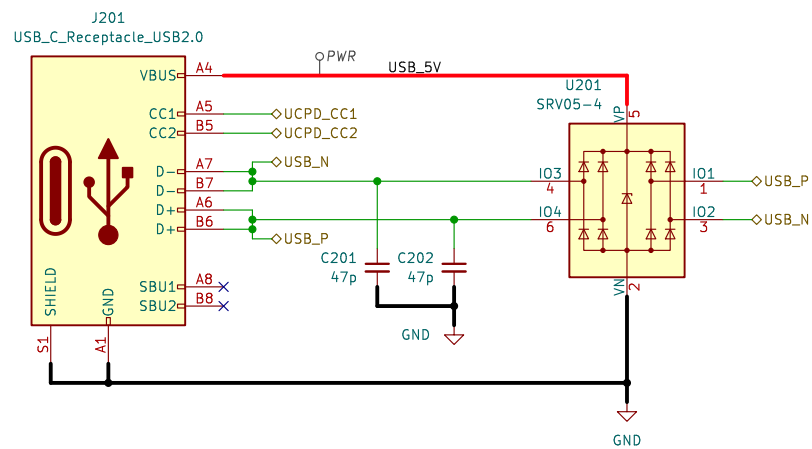
Title: LEMON PEPPER STEPPER

Size: A4 Date: 2023-10-11

KiCad E.D.A. kicad 7.0.9

Rev: 0.1

Id: 1/7



matei repair lab

Sheet: /usb/
File: usb.kicad_sch

Title: USB & ESD

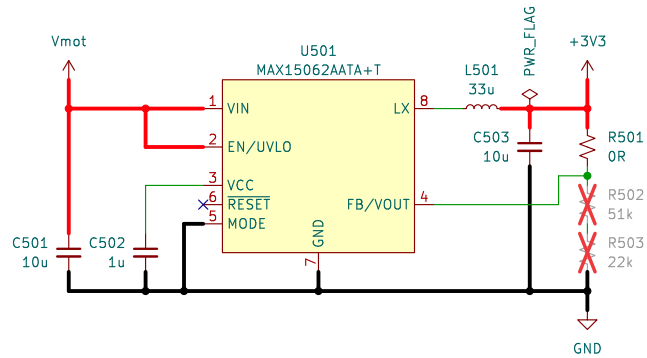
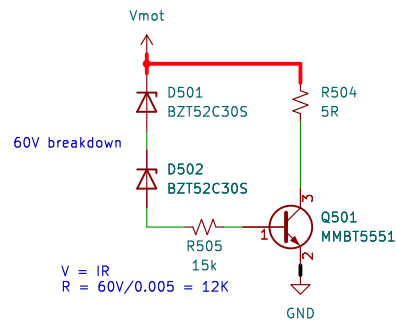
Size: A4 Date: 2023-10-11

KiCad E.D.A. kicad 7.0.9

Rev: 0.1

Id: 2/7

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

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

$R_a = R_b(V_{out}/0.9 - 1)$
 3.36V (closest to 3v3 with basic parts)

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Sheet: /psu/
 File: psu.kicad_sch

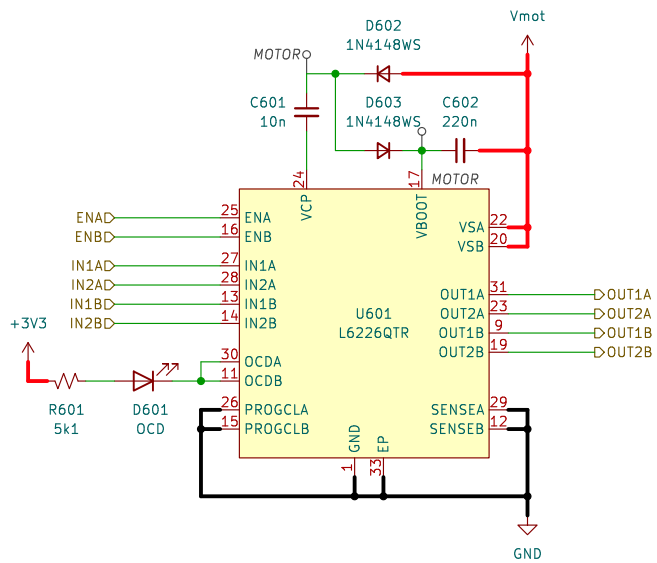
Title: POWER SUPPLY & FILTERING

Size: A4 Date: 2023-10-11

KiCad E.D.A. kicad 7.0.9

Rev: 0.1

Id: 6/7



Sheet: /half bridges/
File: halfbridges.kicad_sch

Title:

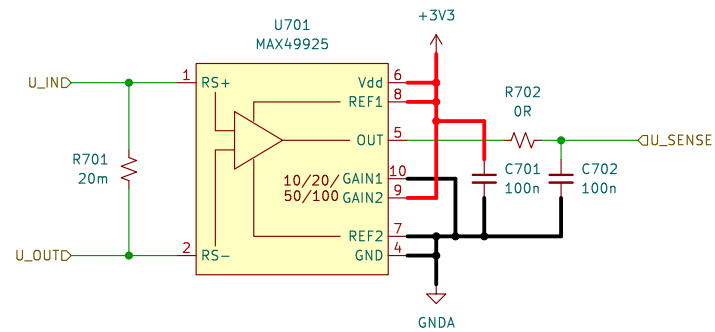
Size: A4

Date:

KiCad E.D.A. kicad 7.0.9

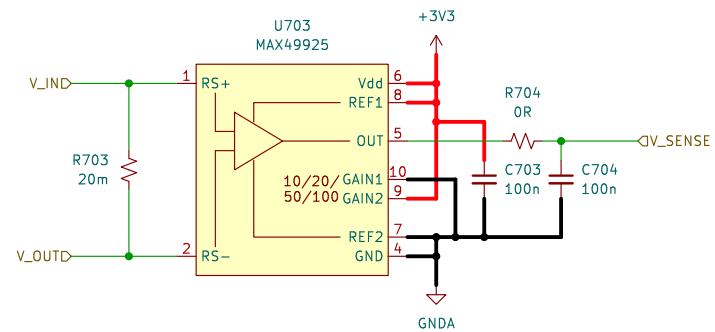
Rev:

Id: 7/7



$V = IR$
 $2.9V \text{ ADC } V_{RefBuff} / 20 \Rightarrow 0.145V \text{ input}$
 $R = 0.145V / 2A \Rightarrow 72m \text{ sense resistor}$
 $P = 0.145 * 2 \Rightarrow 300mW \text{ rating}$

Gain 50V/V
 $2.9 / 50 \Rightarrow 58mV \text{ full range}$
 $2 * 0.020 \Rightarrow 40mV$
 $0.04 * 2 = 80mW$



join at power connector

