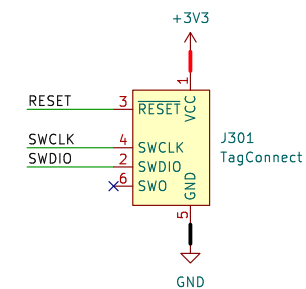
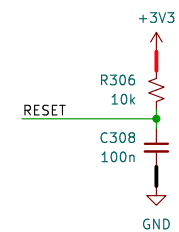
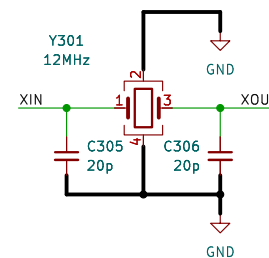
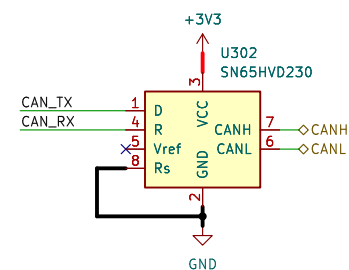
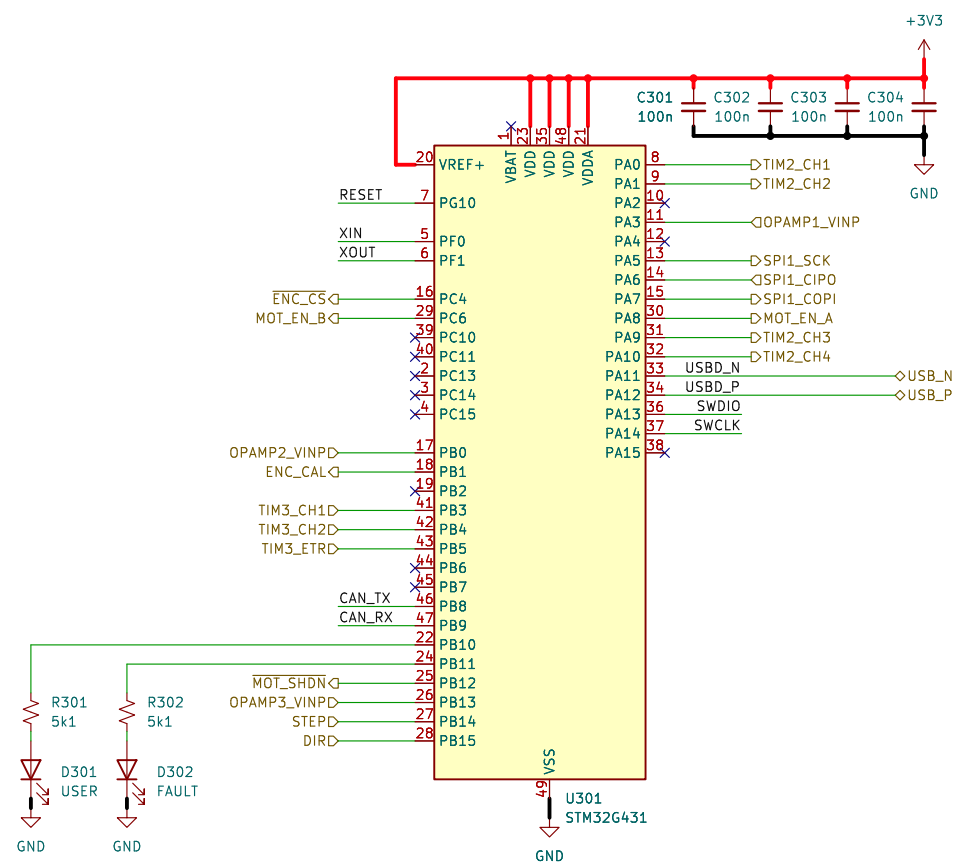


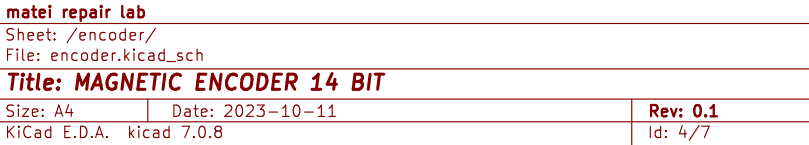
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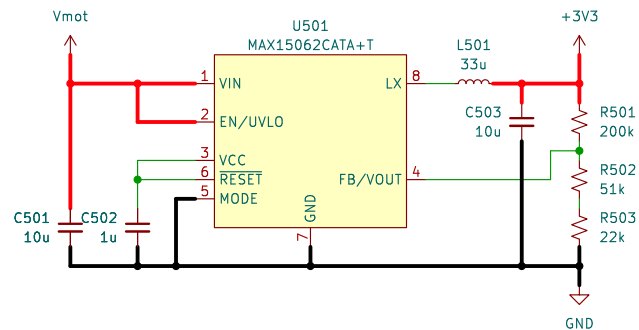
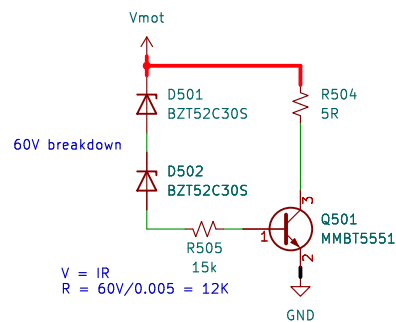


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File: mcu.kicad_sch

Size: A4	Date: 2023-10-11
KiCad E.D.A. kicad 7.0.8	

Rev: 0.1
Id: 3/7





$$R_a = R_b(V_{out}/0.9 - 1)$$

3.36V (closest to 3v3 with basic parts)

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Sheet: /psu/
 File: psu.kicad_sch

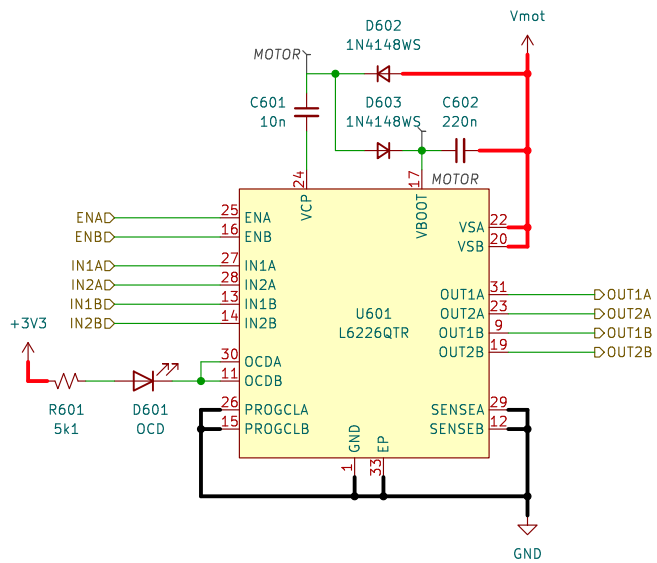
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Size: A4 Date: 2023-10-11

KiCad E.D.A. kicad 7.0.8

Rev: 0.1

Id: 6/7



Sheet: /half bridges/
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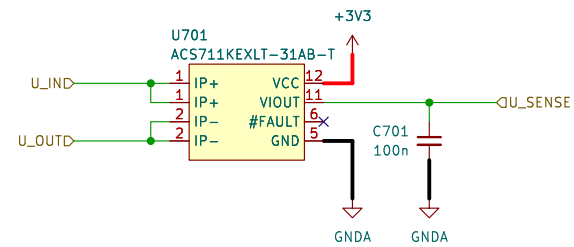
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Rev:

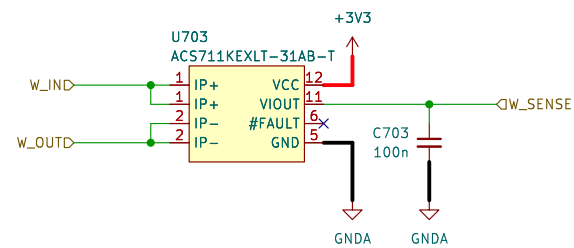
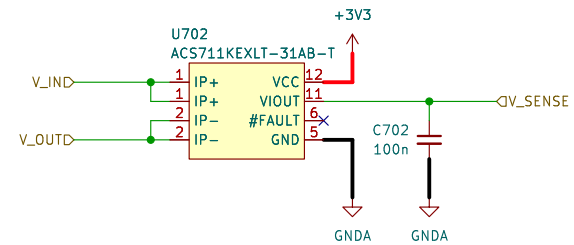
Id: 7/7



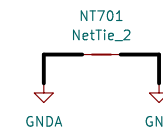
5A model
410mV/A sensitivity

expected current $\pm 1\text{A}$ (2A peak)
820mV range $\rightarrow 3.3\text{V}$
need gain of ~ 4 at G431 OP-AMP input
for full resolution

due to "hybrid" phase connection, it may be possible to have 8x gain on the independent phases, and just this 4x gain on the center tap.



join at power connector



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Sheet: /current sense/
File: currentsense.kicad_sch

Title: HALL CURRENT SENSING

Size: A4	Date: 2023-10-11
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Size: A4	Date: 2
KiCad E.D.A.	kicad 7.0.8

Rev: 0.1

Id: 8/7