

Sheet: /
File: bldc.kicad_sch

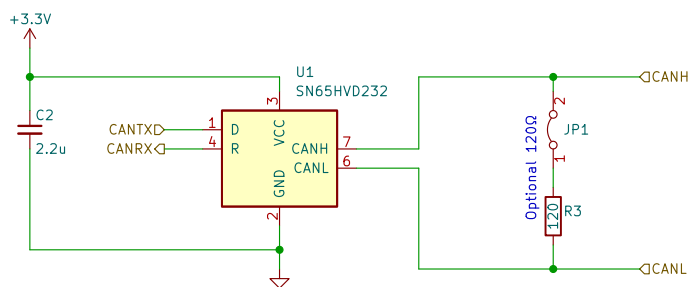
Title: BLDC motor controller

Size: A4 Date: 2022-12-11

KiCad E.D.A. kicad (6.0.9)

Rev: 1.0.0

Id: 1/6



Sheet: /CAN Bus Transceiver/
File: CAN.kicad_sch

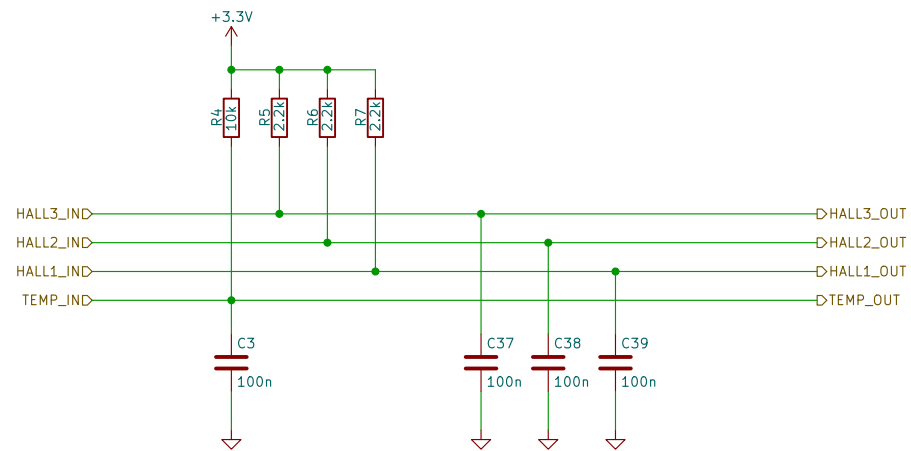
Title: BLDC motor controller

Size: A4 Date: 2022-12-11

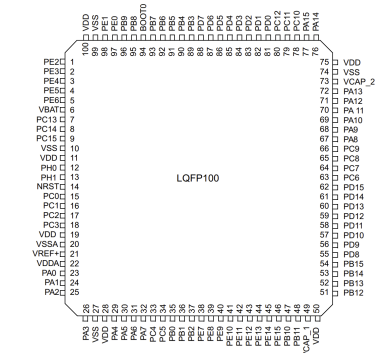
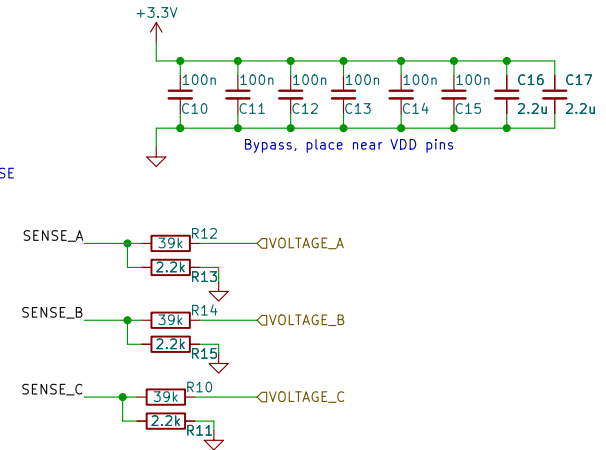
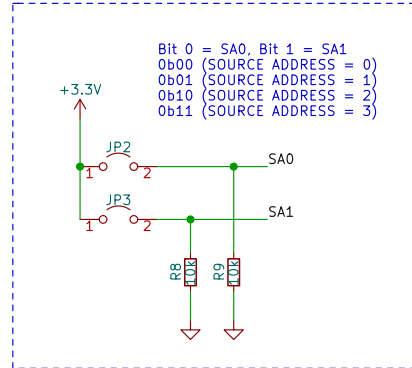
KiCad E.D.A. kicad (6.0.9)

Rev: 1.0.0

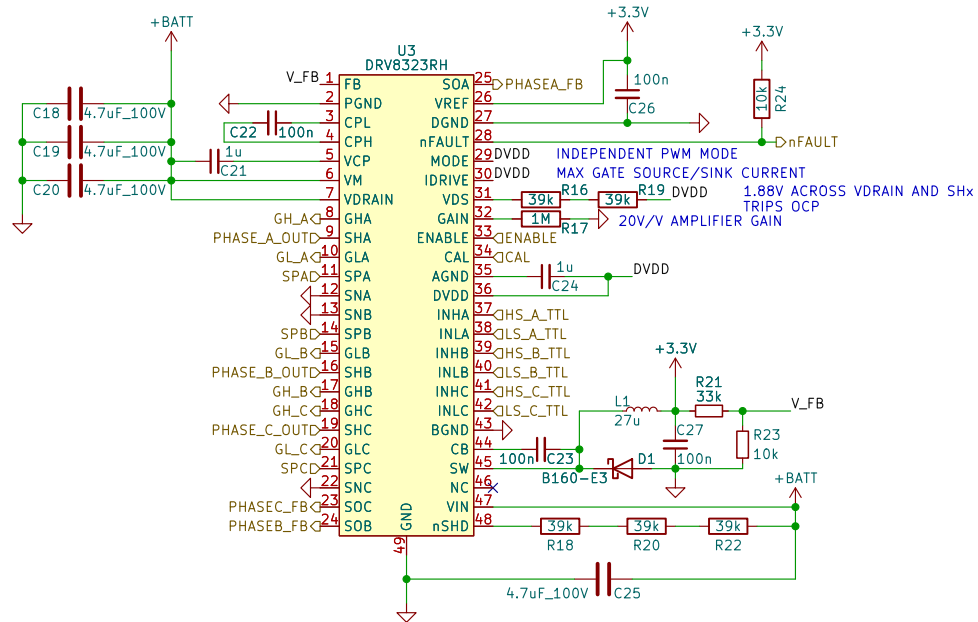
Id: 2/6



Sheet: /Filters/ File: hall_filters.kicad_sch		
Title: BLDC motor controller		
Size: A4	Date: 2022-12-11	Rev: 1.0.0
KiCad E.D.A. kicad (6.0.9)		Id: 3/6



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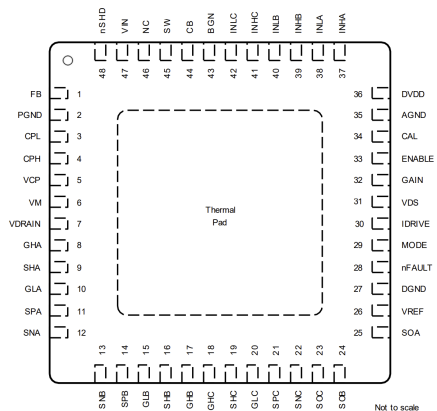
schottkey diode:
 $V_{breakdown} = 62.5 \text{ V}$
 $I_{rate} = 0.5\text{A to } 1\text{A}$

$C_{out} > 16.4\mu\text{F}$ per EQ. 5
 $C_{out} > 12.8\mu\text{F}$ per EQ. 6
 $C_{out} > 0.99\mu\text{F}$ per EQ. 7
 $Resr < 0.180\Omega$ per EQ. 8

$24\mu\text{H}$ L_o min
 183mA ripple
 $0.69 \text{ I}_L\text{-peak}$
 $0.602 \text{ I}_L\text{-RMS}$

$C_{in} = 4.7\mu\text{F} @ 100\text{V}$

$C_{bootstrap} = 200\text{nF} @ \geq 10\text{V}$ rating



Sheet: /Gate Drivers/
 File: gate_drivers.kicad_sch

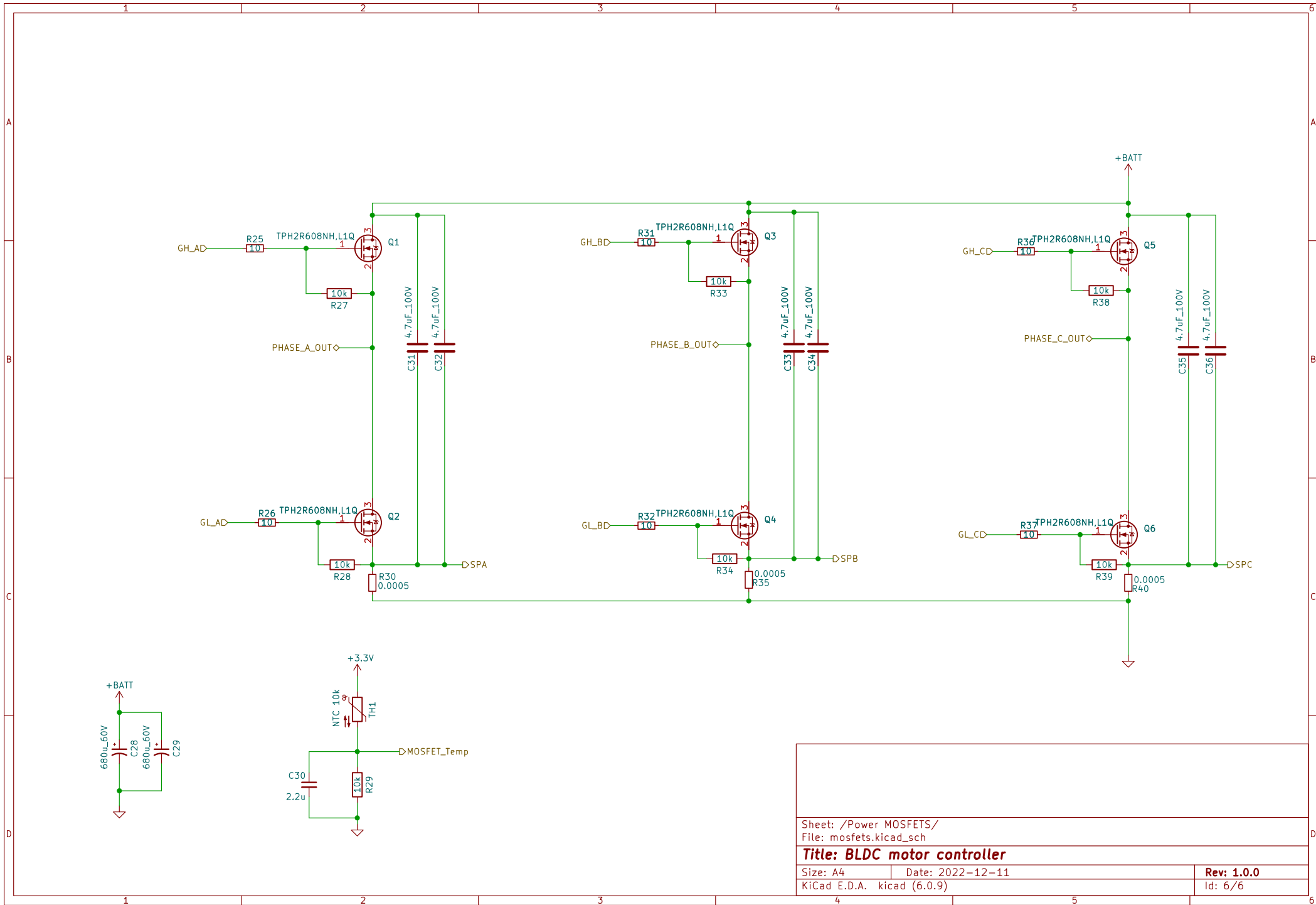
Title: BLDC motor controller

Size: A4 Date: 2022-12-11

KiCad E.D.A. kicad (6.0.9)

Rev: 1.0.0

Id: 5/6



Sheet: /Power MOSFETS/		
File: mosfets.kicad_sch		
Title: BLDC motor controller		
Size: A4	Date: 2022-12-11	Rev: 1.0.0
KiCad E.D.A. kicad (6.0.9)		Id: 6/6