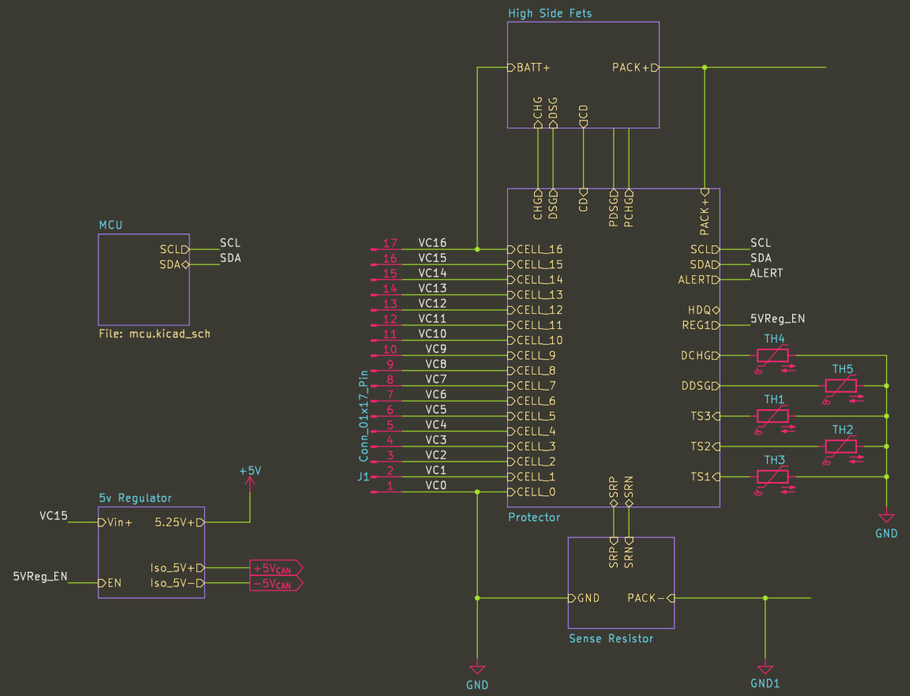

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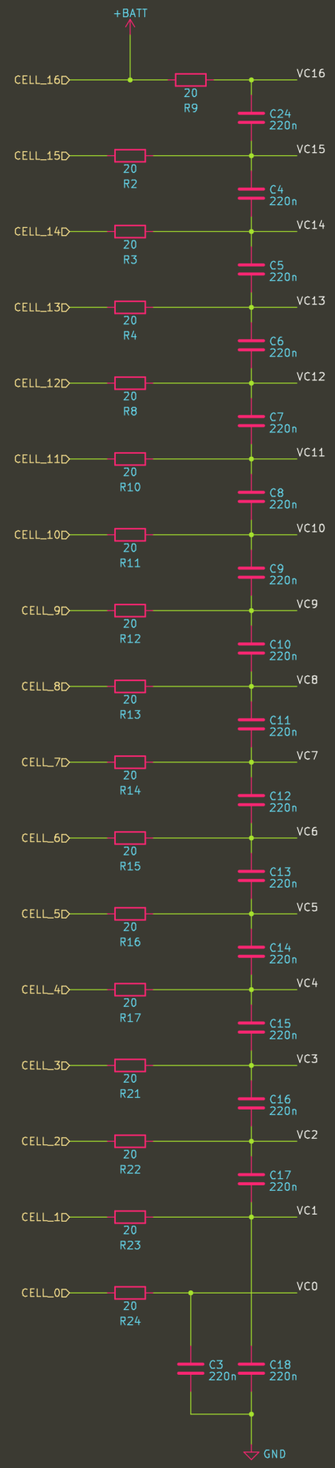
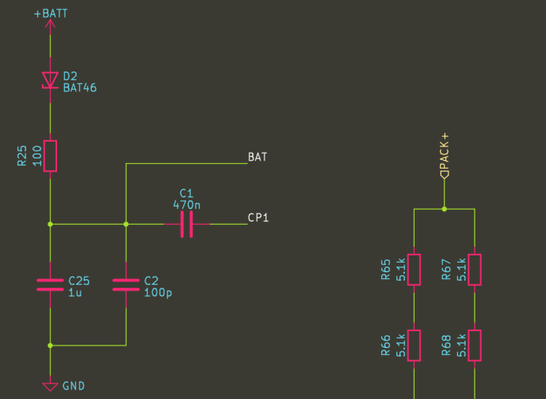
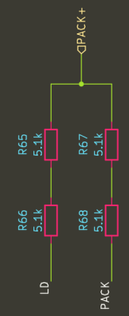
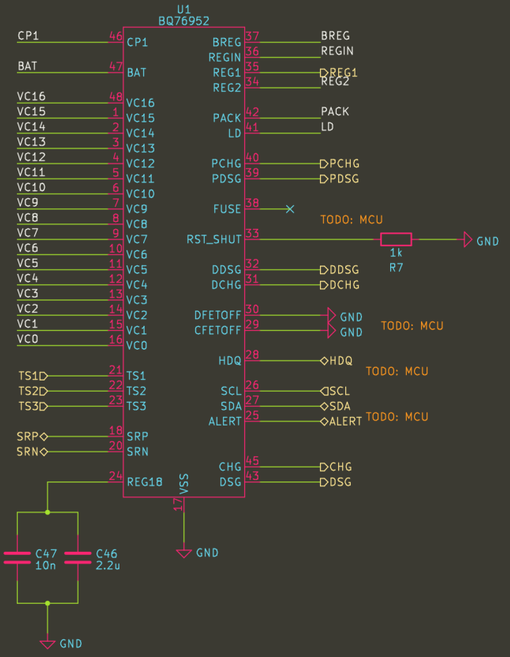
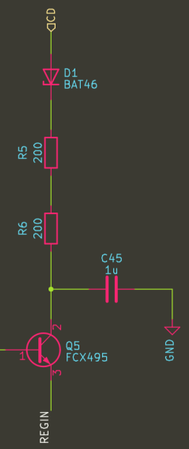
Size: B	Date: 2022-10-30	**Rev: Rev 0**
KiCad E.D.A. kicad 7.0.1		Id: 1/6











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Title: Protection and Balancing		
Size: B	Date: 2022-10-30	Rev: Rev 0
KiCad E.D.A. kicad 7.0.1		Id: 20/6

TODO: Consider page 19 of BQ76940 datasheet
Cal shit

U5
MCP1700x-330xxTT
+5V
+3.3V
GND1
C22 1u
C23 100n
C26 1u
C27 100n

U2
MCP100-270D
+3.3V
RST
GND1

R18 1M
Y1 8MHz
OSC_IN
OSC_OUT
GND1

Y2 32.768kHz
OSC32_IN
OSC32_OUT
GND1

+3.3V
VBAT
VSSA
VDDA
VSS_1
VSS_2
VSS_3
VDD_1/O_1
VDD_2
VDD_1/O_3
GND1

RST
BOOT0
OSC_IN
OSC_OUT

PA0 10
PA1 11
PA2 12
PA3 13
PA4 14
PA5 15
PA6 16
PA7 17
PA8 29
PA9 30
PA10 31
PA11 32 CAN_RX
PA12 33 CAN_TX
PA13 34 SWDIO
PA14 37 SWCLK
PA15 38

PB0 18
PB1 19
PB2 20 BOOT1
PB3 39
PB4 40
PB5 41
PB6 42 SCL
PB7 43 SDA
PB8 45
PB9 46
PB10 21
PB11 22
PB12 25
PB13 26
PB14 27
PB15 28

PC13 2
PC14 3 OSC32_IN
PC15 4 OSC32_OUT

+3.3V
C28 100n
C29 100n
C30 100n
C42 100n
C43 100n
GND1

J2 SWD
+3.3V
R19 10k
R20 10k
BOOT0
BOOT1
GND1

+3.3V
R54 10k
R55 10k
SCL
SDA

+5V
C51 100n
GND1

U6
ISO1044
+5V
CAN_TX
CAN_RX
VCC1
TXD
RXD
GND1
VCC2
CANH
CANL
GND2
+5VCAN
CAN_H
CAN_L
GND1

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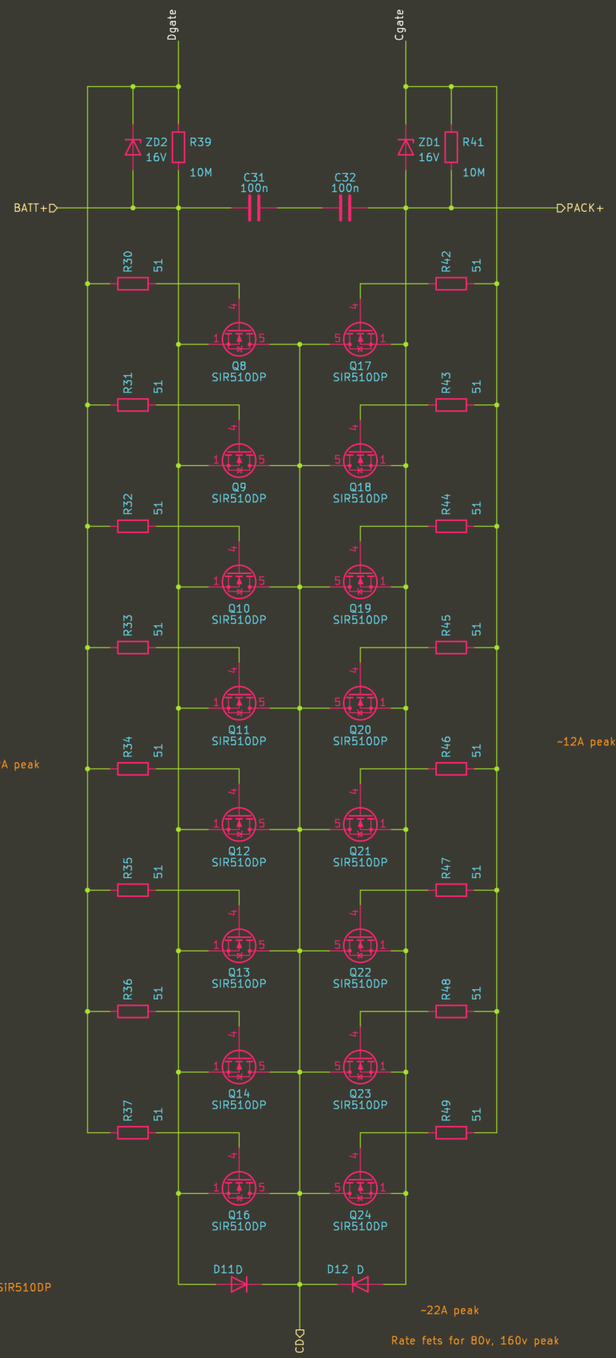
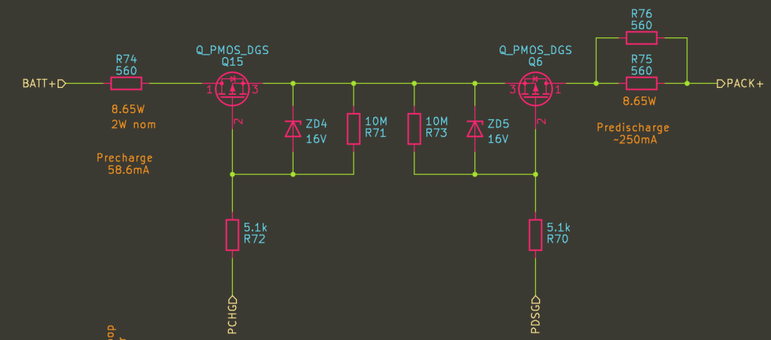
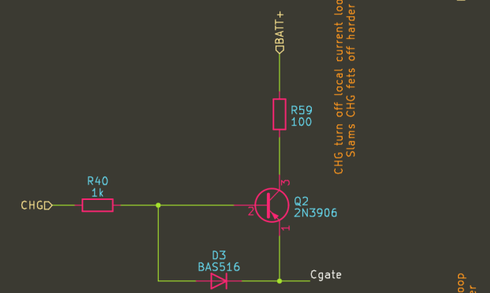
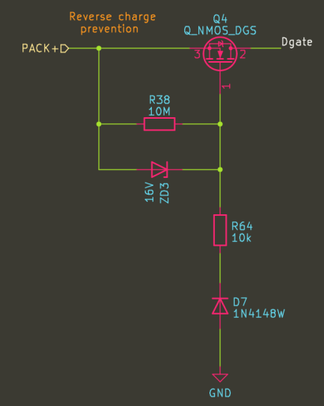
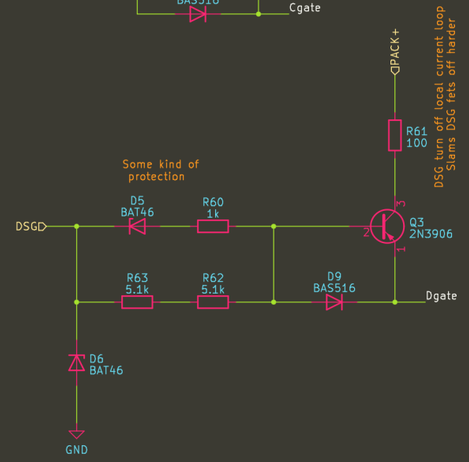
Title:
Size: B
Date:
Rev:
KiCad E.D.A. kicad 7.0.1
Id: 22/6











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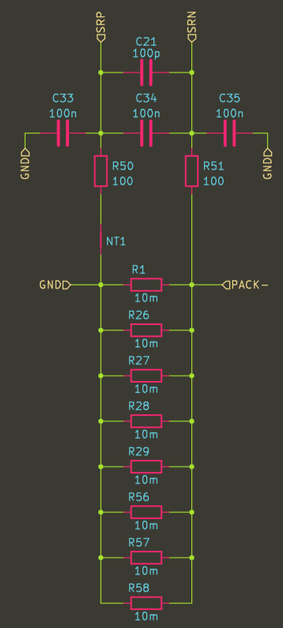
Title: High Side Fets		
Size: B	Date: 2022-10-30	Rev: Rev 0
KiCad E.D.A. kicad 7.0.1		Id: 26/6



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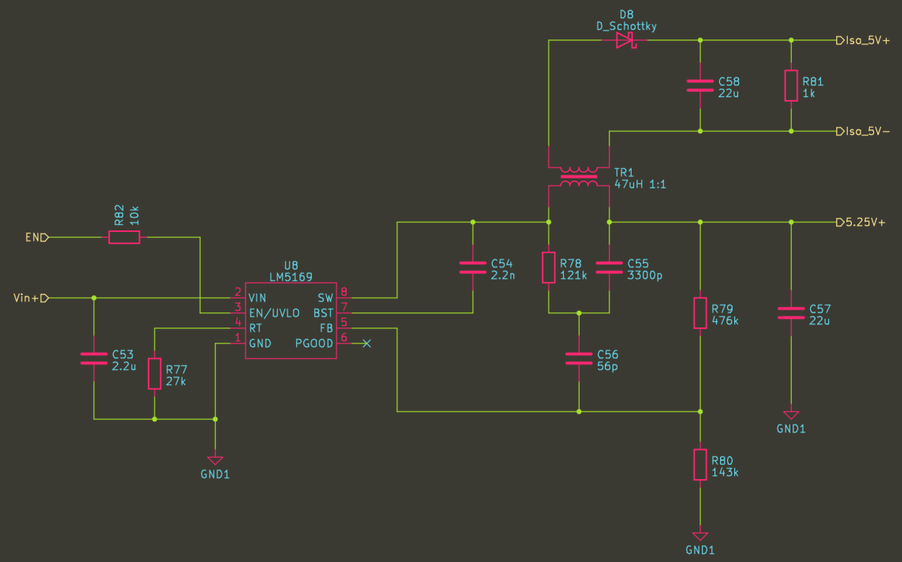
Size: B	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.1		Id: 27/6



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File: mcu_power.kicad_sch

Title:

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