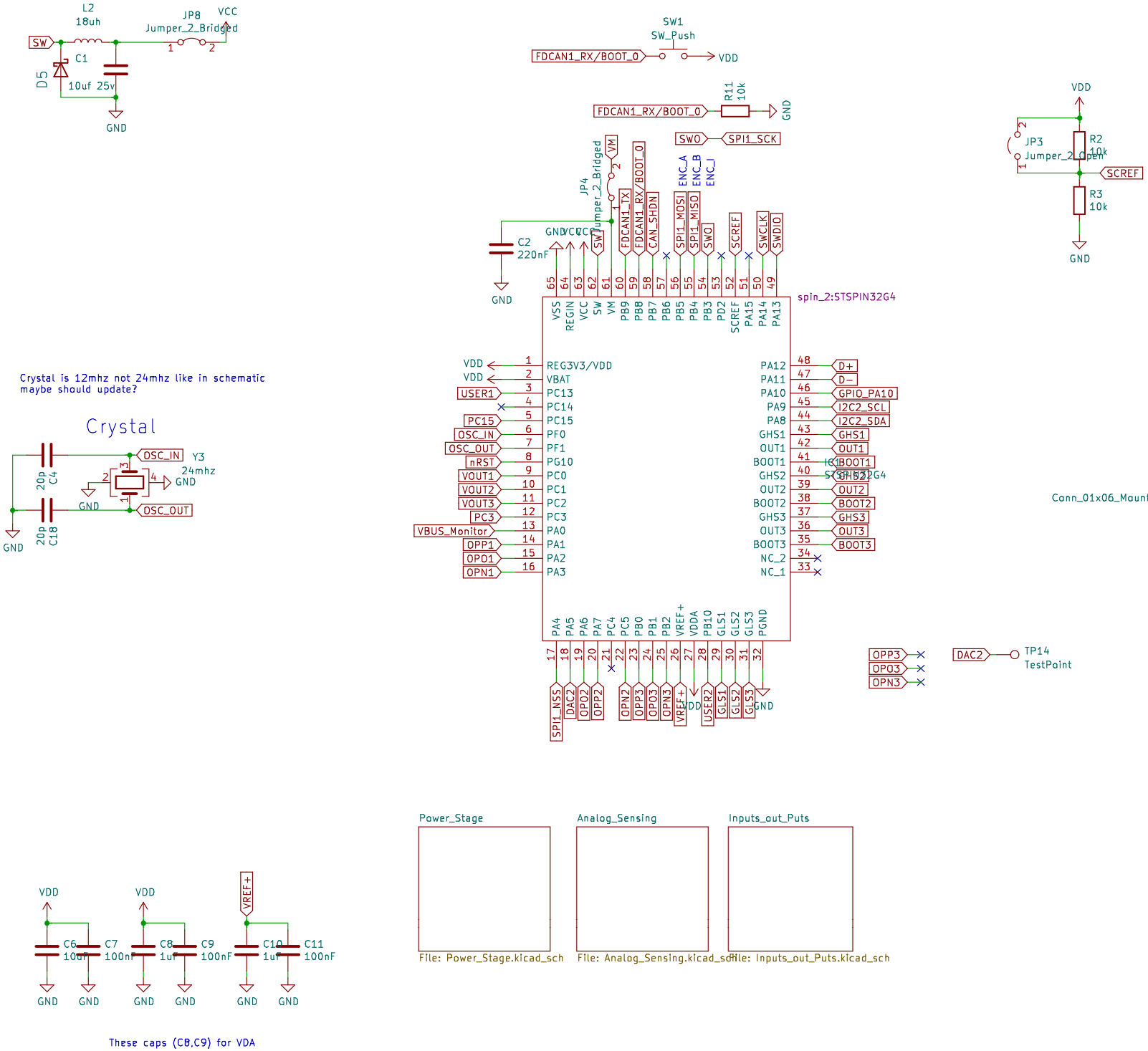
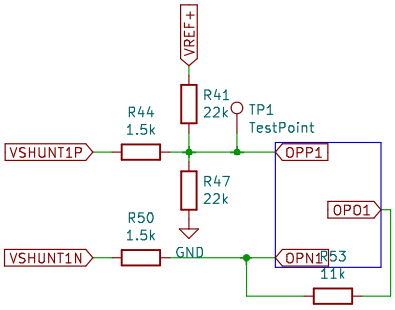
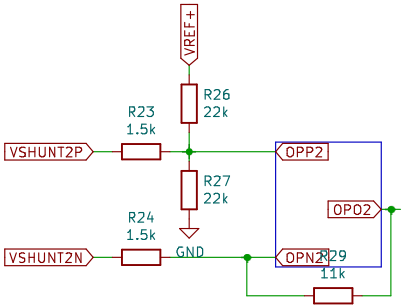
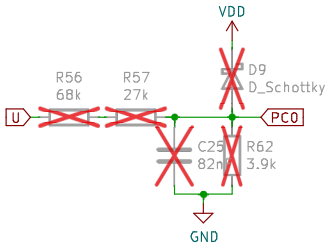
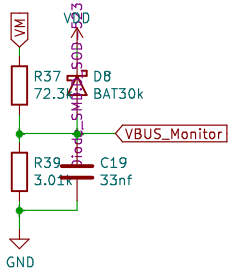

L2
18uh
JP8
Jumper_2_Bridged
VCC
SW
C1
D5
10uf 25v
GND
SW1
SW_Push
FDCAN1_RX/BOOT_0
VDD
R11
10k
GND
SWO
SPI1_SCK
JP4
Jumper_2_Bridged
VM
ENC_A
ENC_B
ENC_I
FDCAN1_TX
FDCAN1_RX/BOOT_0
CAN_SHDN
SPI1_MOSI
SPI1_MISO
SWO
SCREF
SWCLK
SWDIO
C2
220nF
GND
spin_2:STSPIN32G4
VSS
REGIN
VCC
SW
VM
PB9
PB8
PB7
PB6
PB5
PB4
PB3
PD2
SCREF
PA15
PA14
PA13
VDD
VDD
USER1
PC15
OSC_IN
OSC_OUT
nRST
VOUT1
VOUT2
VOUT3
PC3
VBUS_Monitor
OPP1
OPO1
OPN1
REG3V3/VDD
VBAT
PC13
PC14
PC15
PF0
PF1
PG10
PC0
PC1
PC2
PC3
PA0
PA1
PA2
PA3
PA12
PA11
PA10
PA9
PA8
GHS1
OUT1
BOOT1
GHS2
OUT2
BOOT2
GHS3
OUT3
BOOT3
NC_2
NC_1
D+
D-
GPIO_PA10
I2C2_SCL
I2C2_SDA
GHS1
OUT1
IBOOT1
GHS2
OUT2
BOOT2
GHS3
OUT3
BOOT3
PA4
PA5
PA6
PA7
PC4
PC5
PB0
PB1
PB2
VREF+
VDDA
PB10
GLS1
GLS2
GLS3
PGND
SPI1_NSS
DAC2
OPO2
OPP2
OPN2
OPP3
OPO3
OPN3
VREF+
VDD
USER2
GLS1
GLS2
GLS3
GND
OPP3
OPO3
OPN3
DAC2
TP14
TestPoint
VDD
R2
10k
JP3
Jumper_2_Open
SCREF
R3
10k
GND
Crystal is 12mhz not 24mhz like in schematic
maybe should update?
Crystal
OSC_IN
Y3
24mhz
GND
OSC_OUT
20p
C4
20p
C18
GND
GND
SCL is not connected
J9
Conn_01x06_MountingPin
MP
VDD
SWCLK
GND
SWDIO
nRST
SWO
VDD
VDD
VREF+
C6
10uF
C7
100nF
C8
1uF
C9
100nF
C10
1uF
C11
100nF
GND
GND
GND
GND
GND
GND
These caps (C8,C9) for VDA
Power_Stage
File: Power_Stage.kicad_sch
Analog_Sensing
File: Analog_Sensing.kicad_sch
Inputs_out_Puts
File: Inputs_out_Puts.kicad_sch

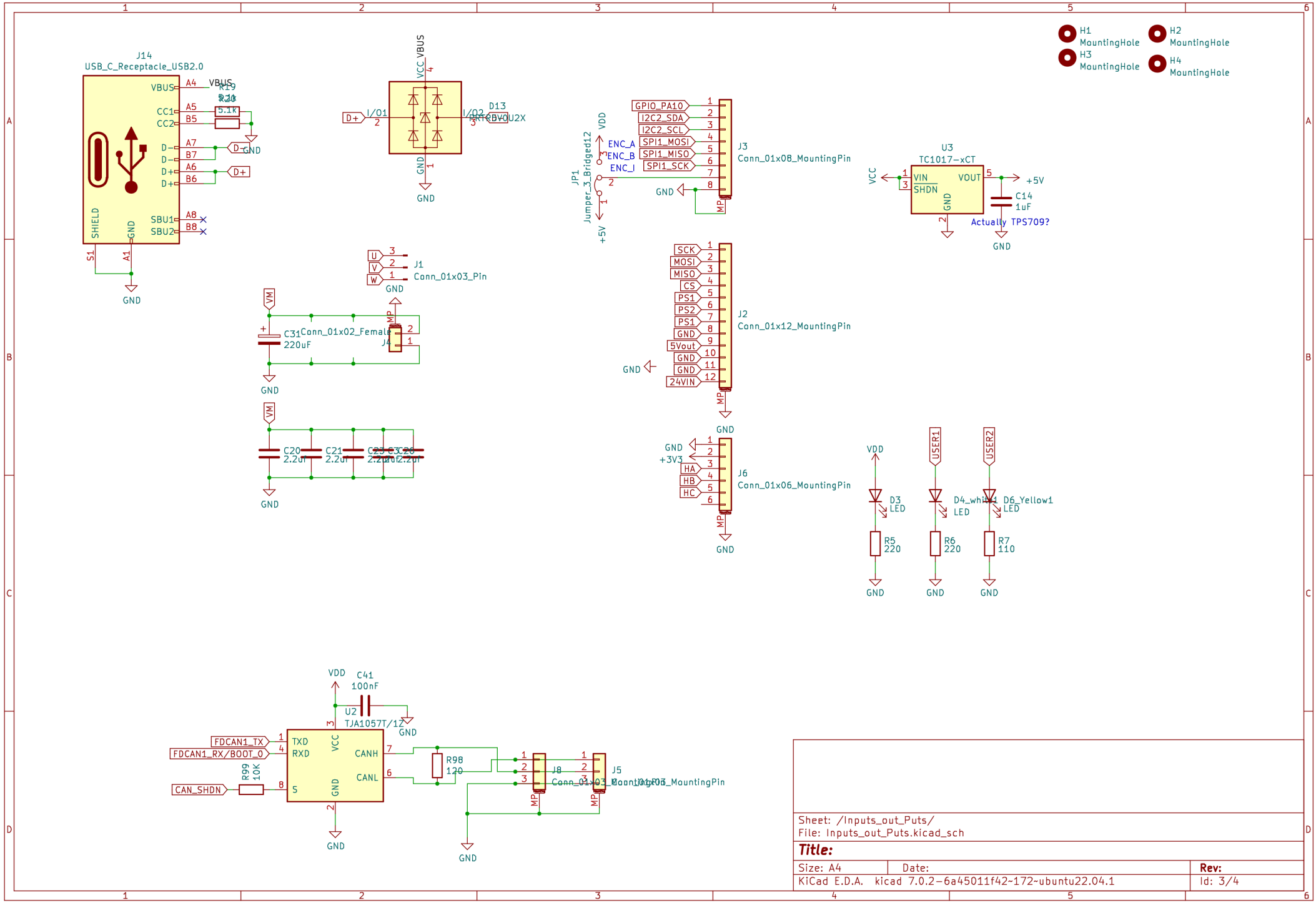






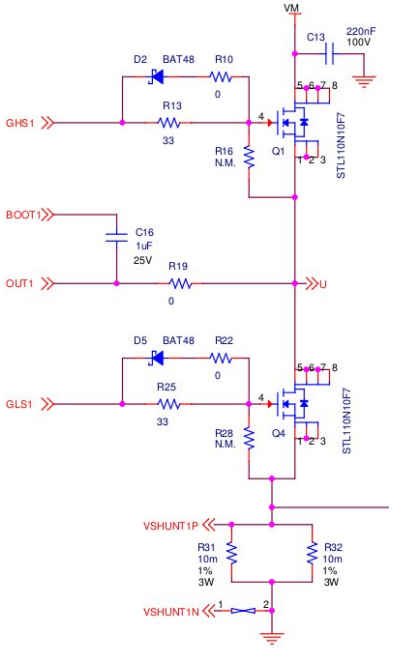
VBUS monitoring

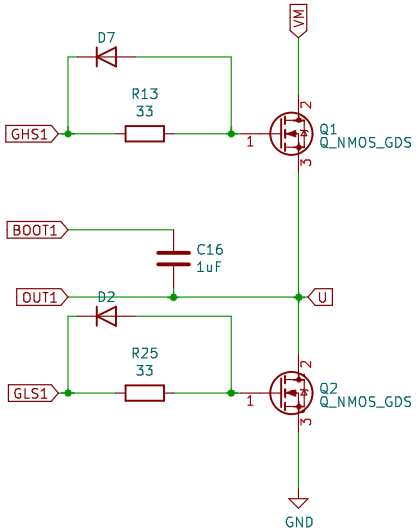



H1
MountingHole
H2
MountingHole
H3
MountingHole
H4
MountingHole
J14
USB_C_Receptacle_USB2.0
VBUS
CC1
CC2
D-
D-
D+
D+
SHIELD
GND
SBU1
SBU2
S1
A1
R19
5.1K
D-
D+
GND
VCC_VBUS
D+
I/O1
I/O2
GND
D13
GND
GPIO_PA10
I2C2_SDA
I2C2_SCL
SPI1_MOSI
SPI1_MISO
SPI1_SCK
GND
J3
Conn_01x08_MountingPin
VDD
ENC_A
ENC_B
ENC_I
JP1
Jumper_3_Bridged12
+5V
U3
TC1017-xCT
VCC
VIN
SHDN
VOUT
GND
+5V
C14
1uF
Actually TPS709?
GND
U
V
W
J1
Conn_01x03_Pin
GND
VM
C31
220uF
Conn_01x02_Female
J4
GND
VM
C20
2.2uF
C21
2.2uF
GND
SCK
MOSI
MISO
CS
PS1
PS2
PS1
GND
5Vout
GND
GND
24VIN
J2
Conn_01x12_MountingPin
GND
GND
GND
+3V3
HA
HB
HC
J6
Conn_01x06_MountingPin
GND
VDD
D3
LED
R5
220
GND
USER1
D4_white1
LED
R6
220
GND
USER2
D6_Yellow1
LED
R7
110
GND
VDD
C41
100nF
U2
TJA1057T/12
GND
FDCAN1_TX
FDCAN1_RX/BOOT_0
CAN_SHDN
R99
10K
TXD
RXD
VCC
CANH
CANL
GND
R98
120
J8
J5
Conn_01x03_MountingPin
GND
Sheet: /Inputs_out_Puts/
File: Inputs_out_Puts.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad 7.0.2-6a45011f42~172~ubuntu22.04.1
Id: 3/4

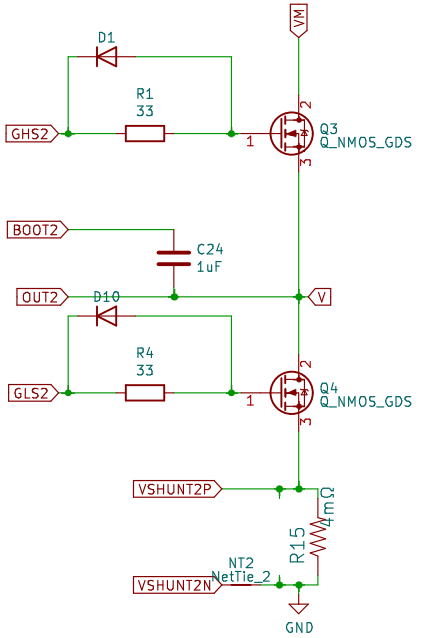
Have removed jumpers for space

Diode
transitor
current sense
from rp2040 motor driver

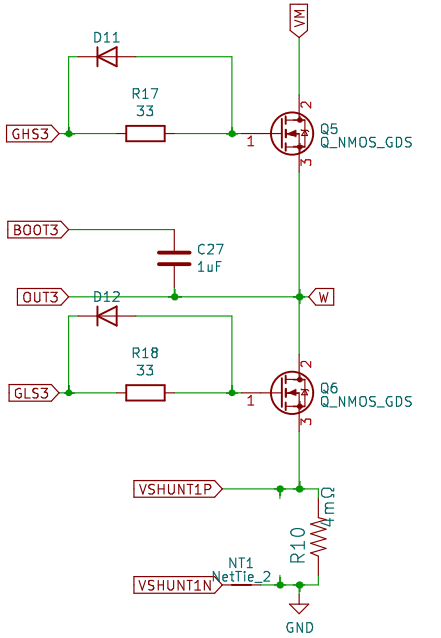




Replace jumper with pass throuhg



Replace jumper with pass throuhg



Replace jumper with pass throuhg