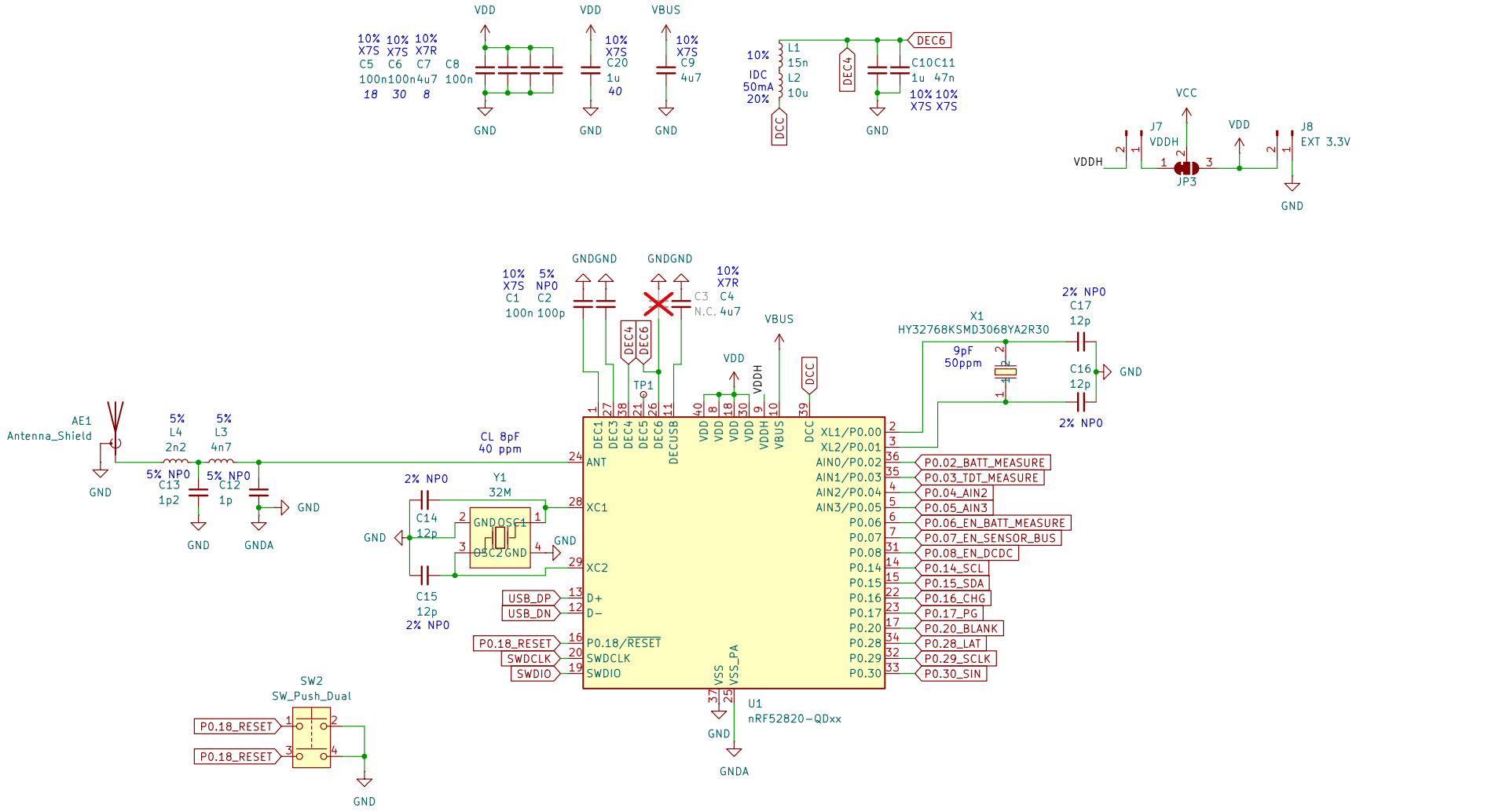


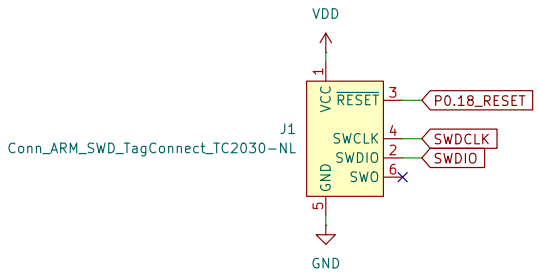
Example Schematic for nRF52820 Dxx from Config 2:
https://infocenter.nordicsemi.com/index.jsp?topic=%2Fstruct_nrf52%2Fstruct%2Fnrf52820.html
With USB Support and DC/DC Enabled

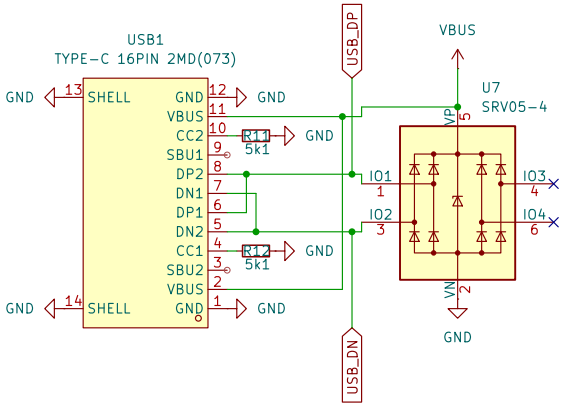
IO
File: io.kicad_sch

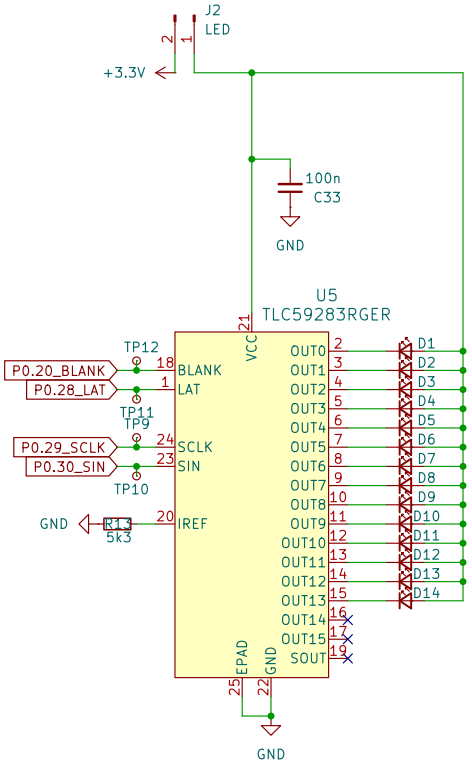
Power
File: power.kicad_sch

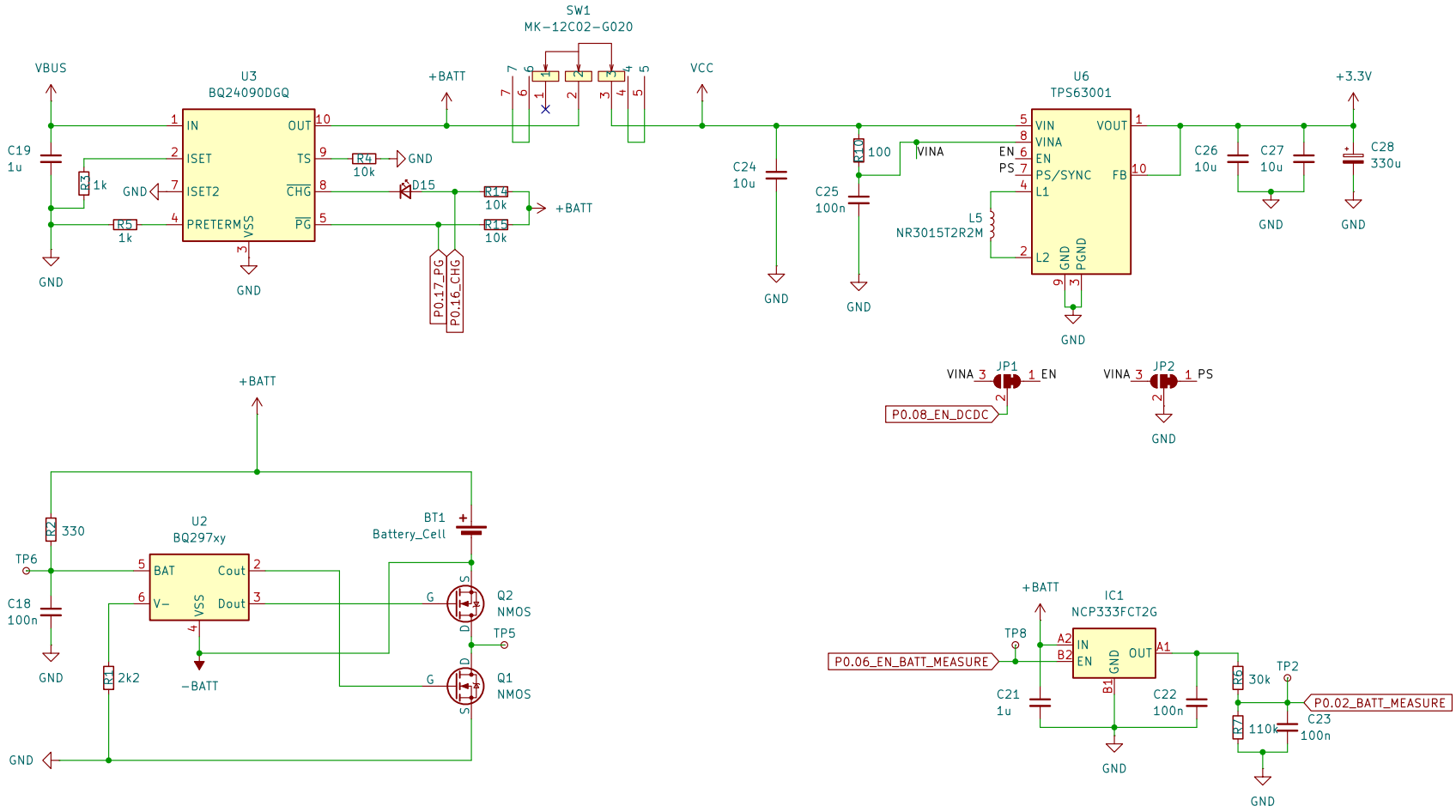
Sensors
File: sensors.kicad_sch

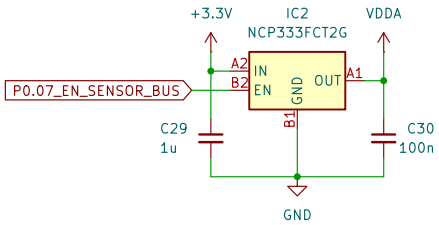
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

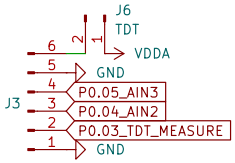

VDD
J1
Conn_ARM_SWD_TagConnect_TC2030-NL
VCC
RESET
SWCLK
SWDIO
SWO
GND
P0.18_RESET
SWDCLK
SWDIO
GND

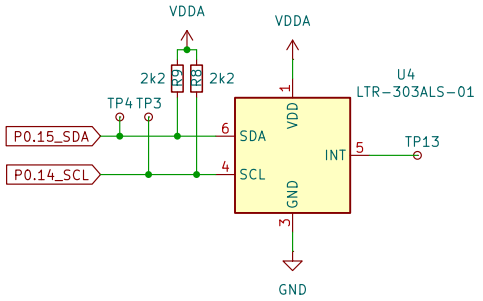

USB1
TYPE-C 16PIN 2MD(073)
SHELL
GND
VBUS
CC2
SBU1
DP2
DN1
DP1
DN2
CC1
SBU2
R11
5k1
R12
5k1
USB_DP
USB_DN
VBUS
U7
SRV05-4
IO1
IO2
IO3
IO4
VP
VN
GND


J2
LED
+3.3V
100n
C33
GND
U5
TLC59283RGER
VCC
BLANK
LAT
SCLK
SIN
IREF
R13
5k3
TP12
TP11
TP9
TP10
P0.20_BLANK
P0.28_LAT
P0.29_SCLK
P0.30_SIN
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
OUT7
OUT8
OUT9
OUT10
OUT11
OUT12
OUT13
OUT14
OUT15
SOUT
EPAD
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14


SW1
MK-12C02-G020
VBUS
U3
BQ24090DGQ
+BATT
VCC
U6
TPS63001
+3.3V
C19
1u
R3
1k
R5
1k
GND
IN
ISET
ISET2
PRETERM
VSS
OUT
TS
CHG
PG
R4
10k
D15
R14
10k
R15
10k
P0.17_PG
P0.16_CHG
C24
10u
C25
100n
R10
100
VINA
L5
NR3015T2R2M
VIN
EN
PS/SYNC
L1
L2
PGND
VOUT
FB
C26
10u
C27
10u
C28
330u
JP1
JP2
P0.08_EN_DCDC
U2
BQ297xy
BT1
Battery_Cell
R2
330
TP6
C18
100n
R1
2k2
BAT
V-
Cout
Dout
−BATT
Q2
NMOS
Q1
NMOS
TP5
IC1
NCP333FCT2G
TP8
P0.06_EN_BATT_MEASURE
C21
1u
C22
100n
R6
30k
R7
110k
C23
100n
TP2
P0.02_BATT_MEASURE


+3.3V
IC2
NCP333FCT2G
VDDA
A2
B2
IN
EN
GND
OUT
A1
B1
P0.07_EN_SENSOR_BUS
C29
1u
C30
100n
GND


J6
TDT
6
5
4
3
2
1
J3
VDDA
GND
P0.05_AIN3
P0.04_AIN2
P0.03_TDT_MEASURE
GND


VDDA
VDDA
2k2
R9
R8
2k2
U4
LTR-303ALS-01
TP4
TP3
P0.15_SDA
P0.14_SCL
SDA
SCL
VDD
GND
INT
TP13
GND