Battery and reverse polarity protection

Q1
AO3401A
PWR_FLAG   VCC

BT1
Battery_Cell
DISABL_BAT
PWR_FLAG
R2
100kΩ
GND
GND

nRF52832

C7
1.0µF
C8
100pF
C9
DNP
VCC
C4
100nF
C5
100nF
C6
4.7µF
C10
100nF
GND   GND   GND   GND

AE1
Antenna_Shield
R6
0Ω   GND

Y1
32.768kHz

C2
16pF   C3
16pF
GND   GND

A1 TP1
WAKEUP
TX
RX

D1 TP2
D2 TP3

CS TP4
MOSI TP5
MISO TP6
SCK TP8

A2 TP7
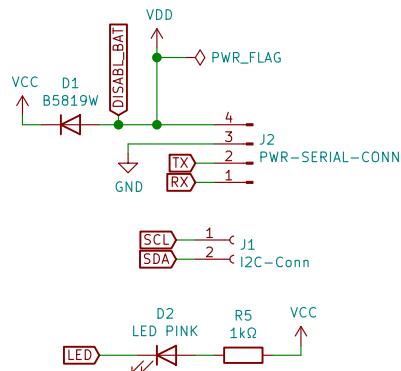V_SENSE

2 P0.00/XL1
3 P0.01/XL2
4 P0.02/AIN0
5 P0.03/AIN1
6 P0.04/AIN2
7 P0.05/AIN3
8 P0.06
9 P0.07
10 P0.08
11 NFC1/P0.09
12 NFC2/P0.10
14 P0.11
15 P0.12
16 P0.13
17 P0.14
18 P0.15
19 P0.16
20 P0.17
21 P0.18/SWO
22 P0.19
23 P0.20
27 P0.22
28 P0.23
29 P0.24
37 P0.25
38 P0.26
39 P0.27
40 P0.28/AIN4
41 P0.29/AIN5
42 P0.30/AIN6
43 P0.31/AIN7

DCC VDD DEC4 DEC3 DEC2 DEC1

ANT 30
L1
3.9nH
C11
0.8pF
GND

C12
16pF
XC1 34
Y2
32MHz
XC2 35
C13
16pF   GND

P0.21/RESET 24 RESET
SWDCLK 25 SWDCLK
SWDIO 26 SWDIO

VSS 31
GND

U1   nRF52832-QFxx

R7
DNP
J5
U.FL
GND

LED
SWO
SDA
SCL

Program and debug connectors

VCC
R1
10kΩ
VDD
J3
TC2030
RESET
1 2 SWDIO
3 4 SWDCLK
5 6 SWO
C14
DNP
GND
GND

- The capacitor is only really
  needed when a button is used.
- TX/RX under "IO Pins".
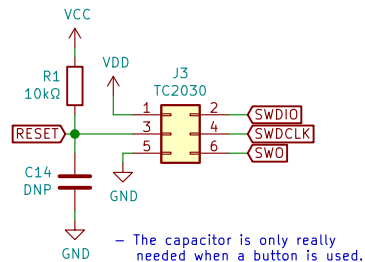
REED, BUTTON and circuitry

VCC
R8
1MΩ
R9
1kΩ
WAKEUP
C15
100nF
SW2
SW_SPST
SW1
SW_Reed
GND
GND

IO Pins

DISABL_BAT
VDD
PWR_FLAG
VCC D1
B5819W
GND

4
3
TX 2
RX 1
J2
PWR-SERIAL-CONN

SCL 1
SDA 2
J1
I2C-Conn

D2
LED PINK
R5
1kΩ
VCC
LED

Voltage divider

VCC
R3
4.7MΩ
V_SENSE
C1
10nF
R4
10MΩ
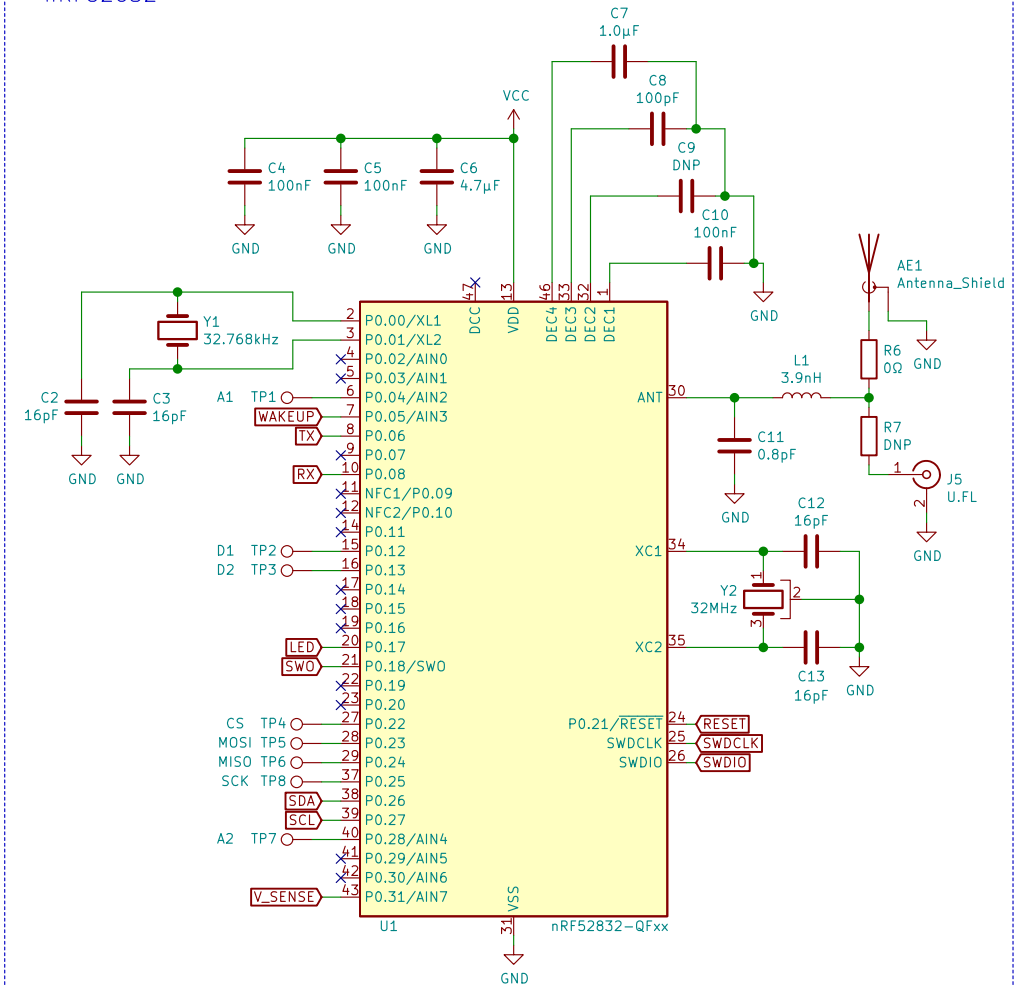GND   GND
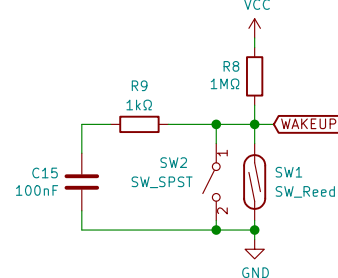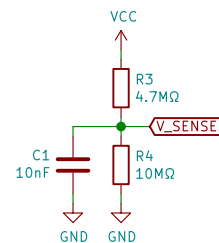
Only 0603 package available at JLCPCB

https://devzone.nordicsemi.com/nordic/
nordic-blog/b/blog/posts/measuring-
lithium-battery-voltage-with-nrf52

Basically just an nRF52832 Board with antenna that sends a message when the reed switch or the button is actuated.
The board is also able to be used as a very basic dev board for the nRF as an home automation node.