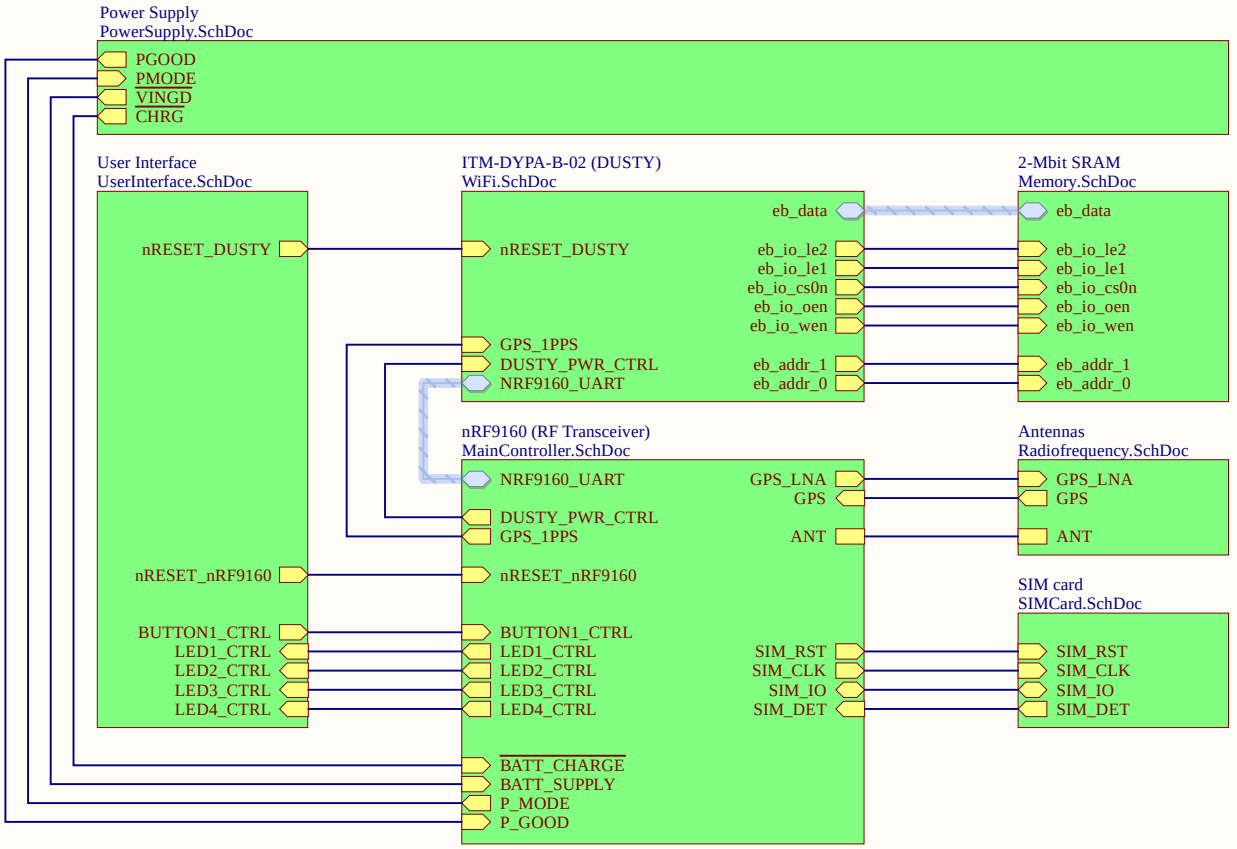

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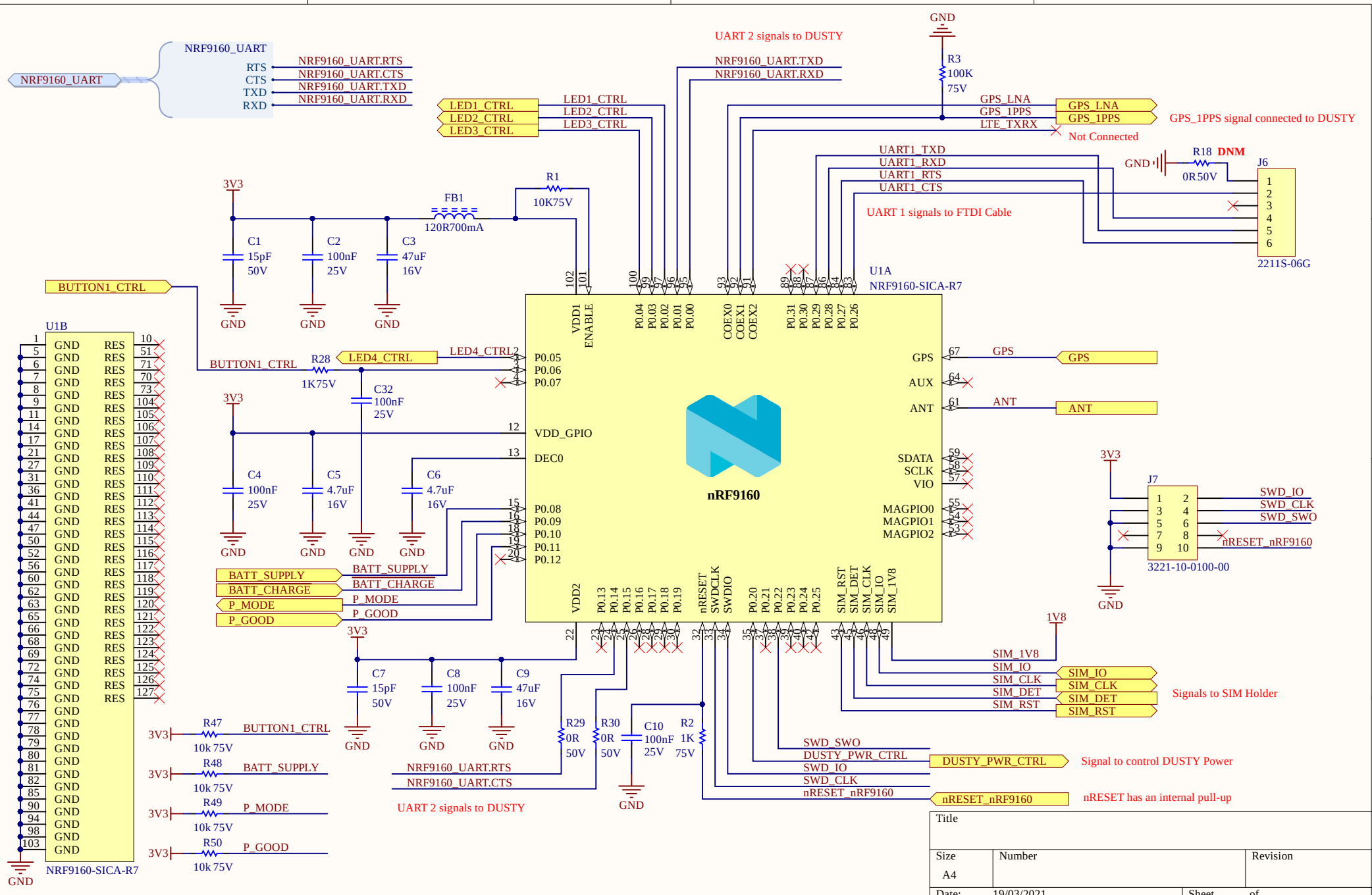
NRF9160_UART
RTS
CTS
TXD
RXD
NRF9160_UART.RTS
NRF9160_UART.CTS
NRF9160_UART.TXD
NRF9160_UART.RXD
UART 2 signals to DUSTY
LED1_CTRL
LED2_CTRL
LED3_CTRL
GPS_LNA
GPS_1PPS
LTE_TXRX
Not Connected
GPS_1PPS signal connected to DUSTY
R3
100K
75V
GND
R18 DNM
0R50V
J6
2211S-06G
UART1_TXD
UART1_RXD
UART1_RTS
UART1_CTS
UART 1 signals to FTDI Cable
3V3
R1
10K75V
FB1
120R700mA
C1
15pF
50V
C2
100nF
25V
C3
47uF
16V
BUTTON1_CTRL
U1A
NRF9160-SICA-R7
nRF9160
VDD1
ENABLE
P0.04
P0.03
P0.02
P0.01
P0.00
COEX0
COEX1
COEX2
P0.31
P0.30
P0.29
P0.28
P0.27
P0.26
P0.05
P0.06
P0.07
VDD_GPIO
DEC0
P0.08
P0.09
P0.10
P0.11
P0.12
GPS
AUX
ANT
SDATA
SCLK
VIO
MAGPIO0
MAGPIO1
MAGPIO2
VDD2
P0.13
P0.14
P0.15
P0.16
P0.17
P0.18
P0.19
nRESET
SWDCLK
SWDIO
P0.20
P0.21
P0.22
P0.23
P0.24
P0.25
SIM_RST
SIM_DET
SIM_CLK
SIM_IO
SIM_1V8
R28
1K75V
LED4_CTRL
LED4_CTRL2
C32
100nF
25V
C4
100nF
25V
C5
4.7uF
16V
C6
4.7uF
16V
BATT_SUPPLY
BATT_CHARGE
P_MODE
P_GOOD
J7
3221-10-0100-00
SWD_IO
SWD_CLK
SWD_SWO
nRESET_nRF9160
1V8
SIM_1V8
SIM_IO
SIM_CLK
SIM_DET
SIM_RST
Signals to SIM Holder
C7
15pF
50V
C8
100nF
25V
C9
47uF
16V
R29
0R
50V
R30
0R
50V
C10
100nF
25V
R2
1K
75V
SWD_SWO
DUSTY_PWR_CTRL
SWD_IO
SWD_CLK
nRESET_nRF9160
Signal to control DUSTY Power
nRESET has an internal pull-up
U1B
NRF9160-SICA-R7
R47
10k 75V
R48
10k 75V
R49
10k 75V
R50
10k 75V
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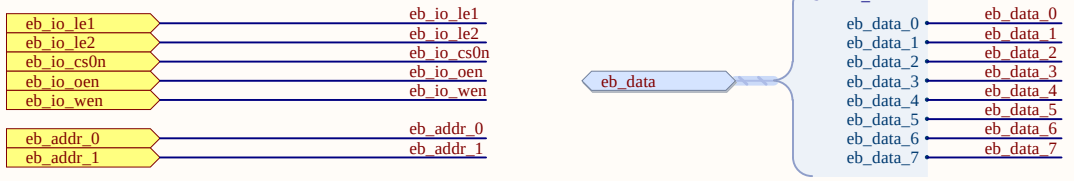
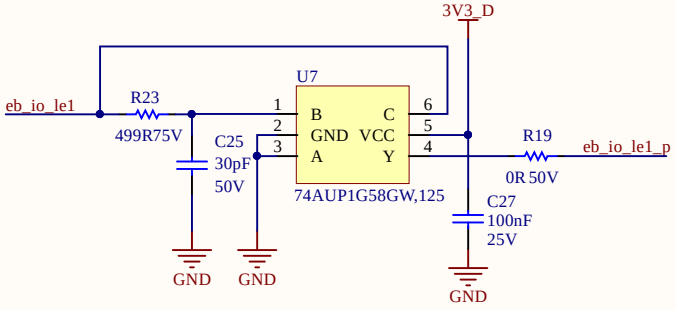
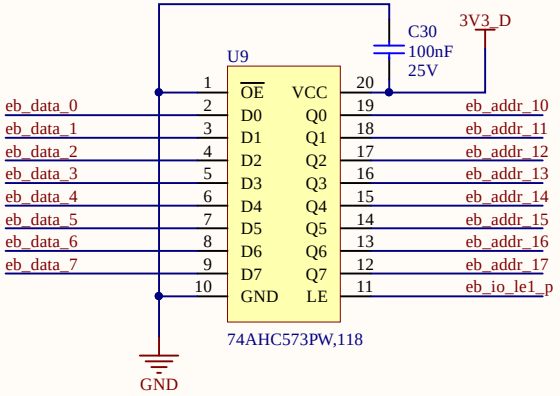
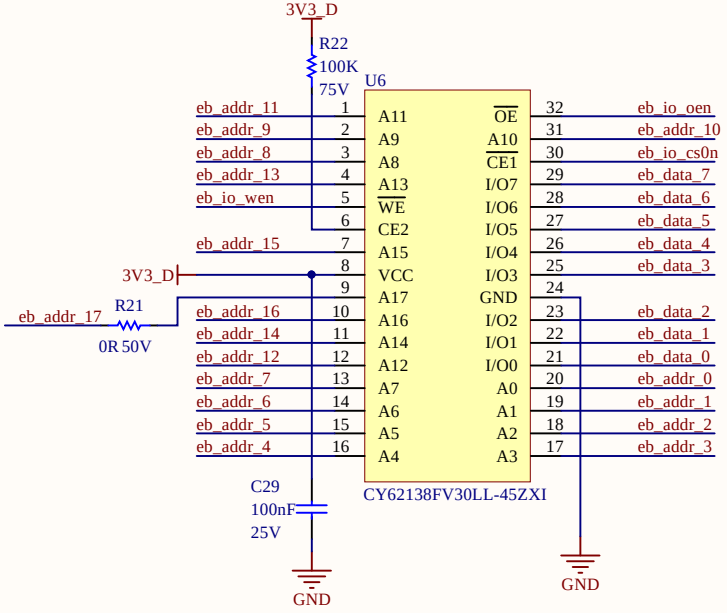
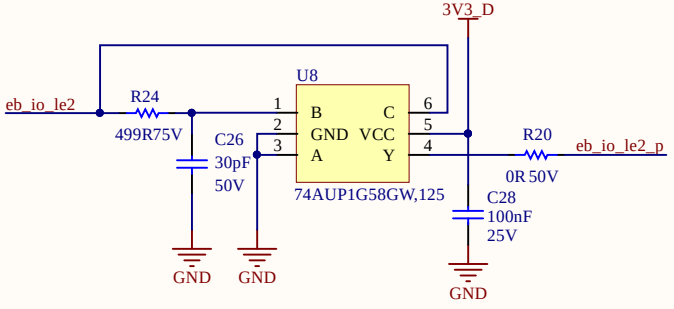
INPUTS / OUTPUTS

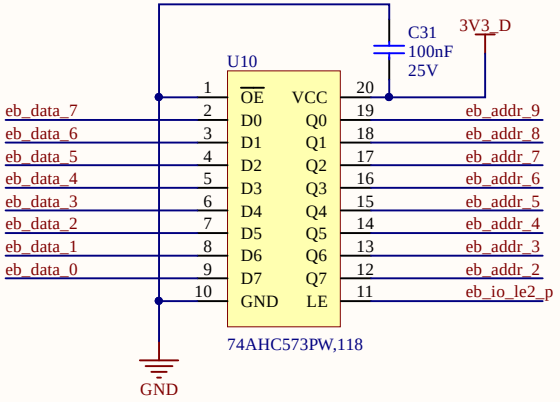












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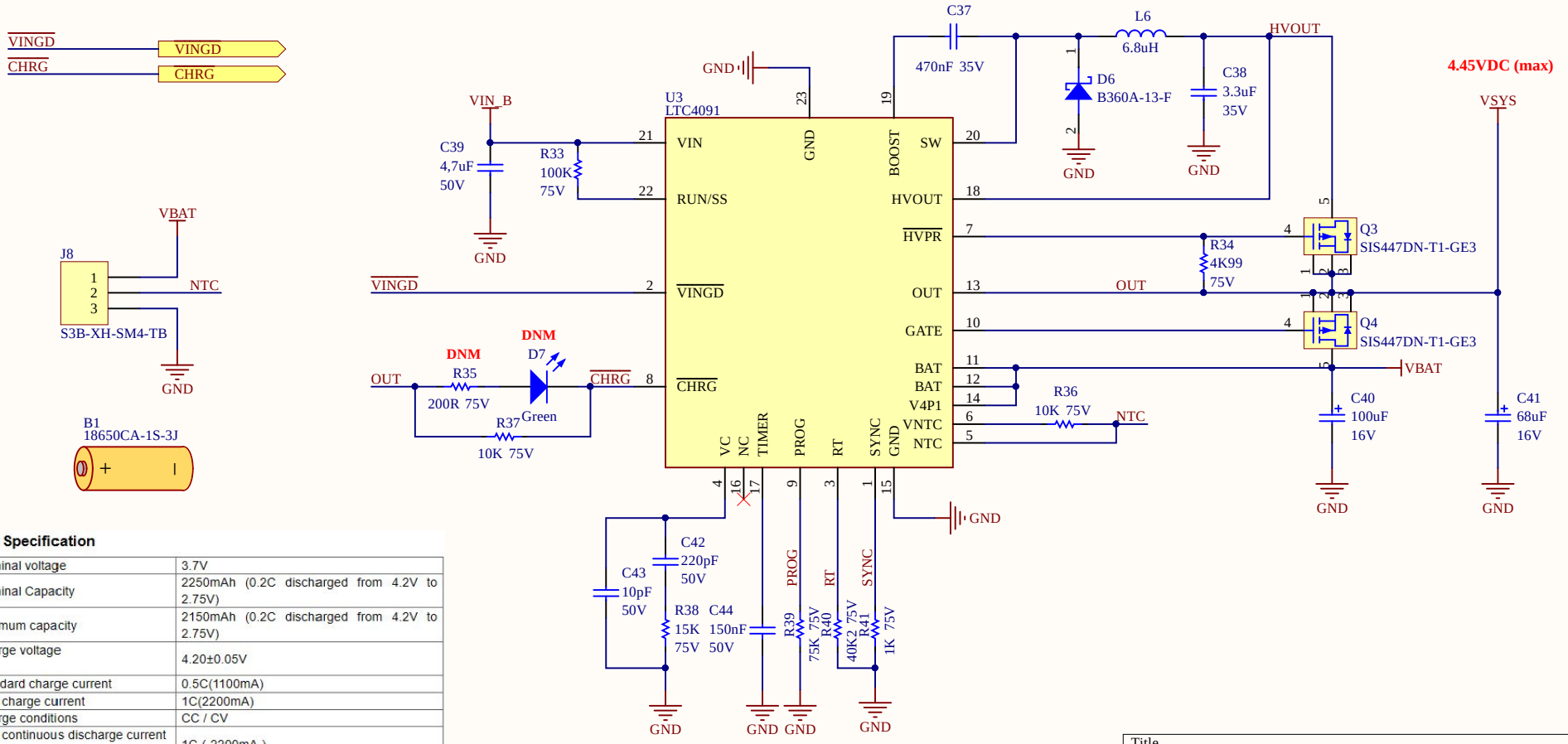
$\overline{\text{VINGD}}$ (Pin 2): The $\overline{\text{VINGD}}$ pin is the open collector output of an internal comparator. $\overline{\text{VINGD}}$ remains high impedance until sufficient voltage is present on V_{IN} to enable the switching regulator and RUN/SS is high.

$\overline{\text{CHRG}}$ (Pin 8): Open-Drain Charge Status Output. When the battery is being charged, the $\overline{\text{CHRG}}$ pin is pulled low by an internal N-channel MOSFET. When the timer runs out or the charge current drops below 10% of the programmed charge current or the input supply is removed, the $\overline{\text{CHRG}}$ pin is forced to a high impedance state.



3. Basic Specification

3.1	Nominal voltage	3.7V
3.2	Nominal Capacity	2250mAh (0.2C discharged from 4.2V to 2.75V)
	Minimum capacity	2150mAh (0.2C discharged from 4.2V to 2.75V)
3.3	Charge voltage	4.20±0.05V
3.4	Standard charge current	0.5C(1100mA)
	Max charge current	1C(2200mA)
3.5	Charge conditions	CC / CV
3.6	Max continuous discharge current	1C (2200mA)
3.7	Max peak discharge current	1C (2200mA)
3.8	Discharge cut-off voltage	2.3V±0.075V
3.9	Internal Impedance	≤180mohm (after charged)
3.10	Thermistor	10K NTC

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Size: A4	Number	Revision
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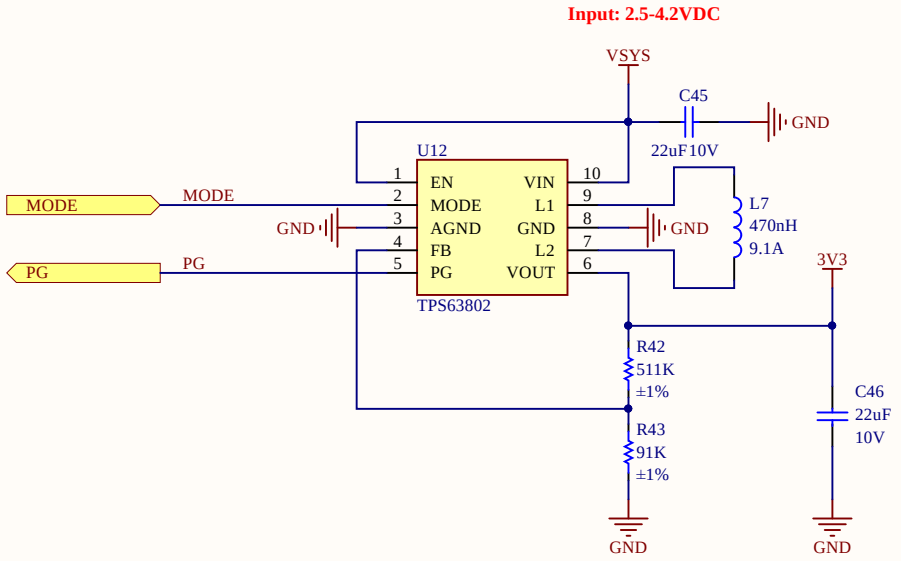

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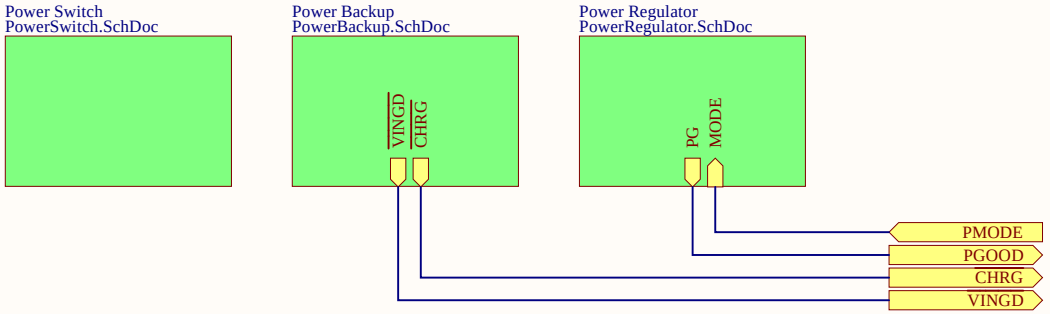

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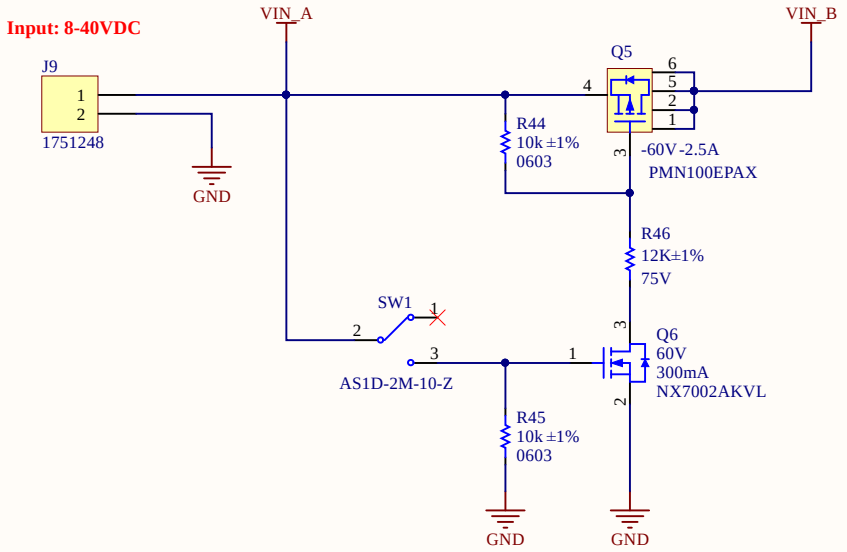

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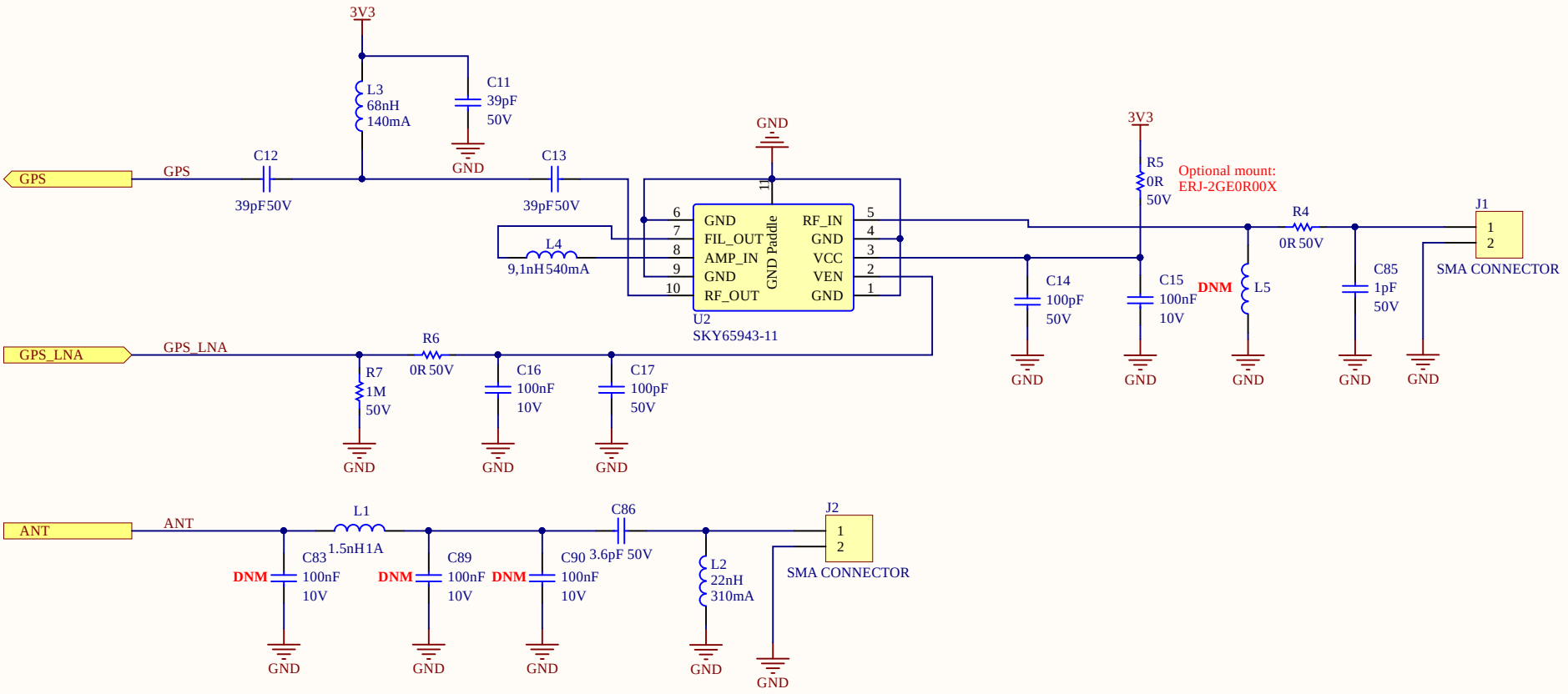

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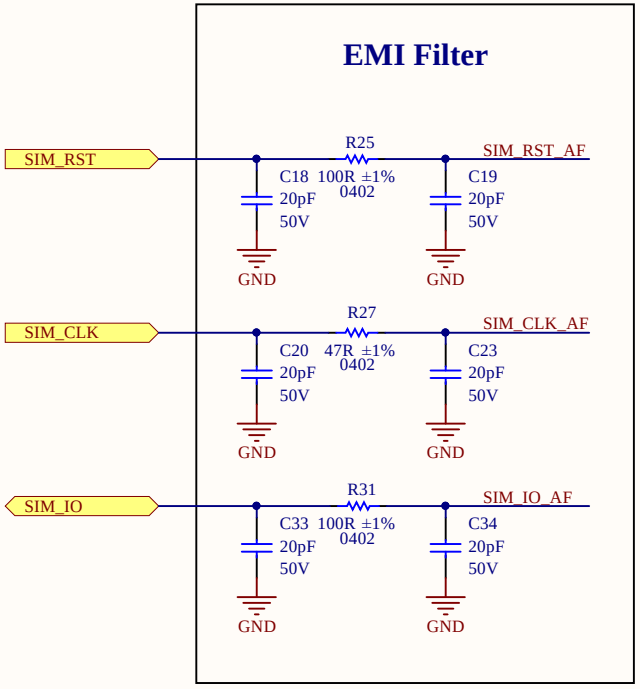

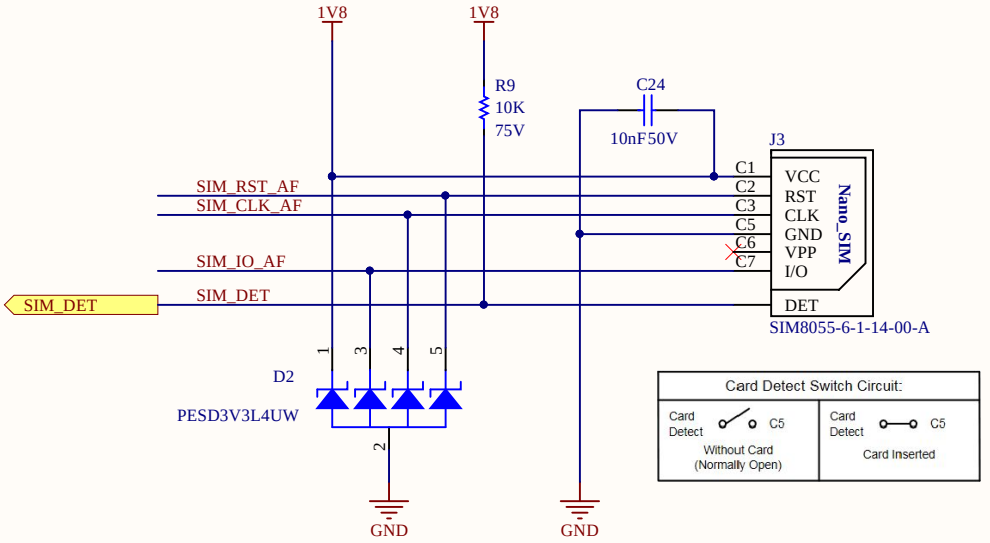

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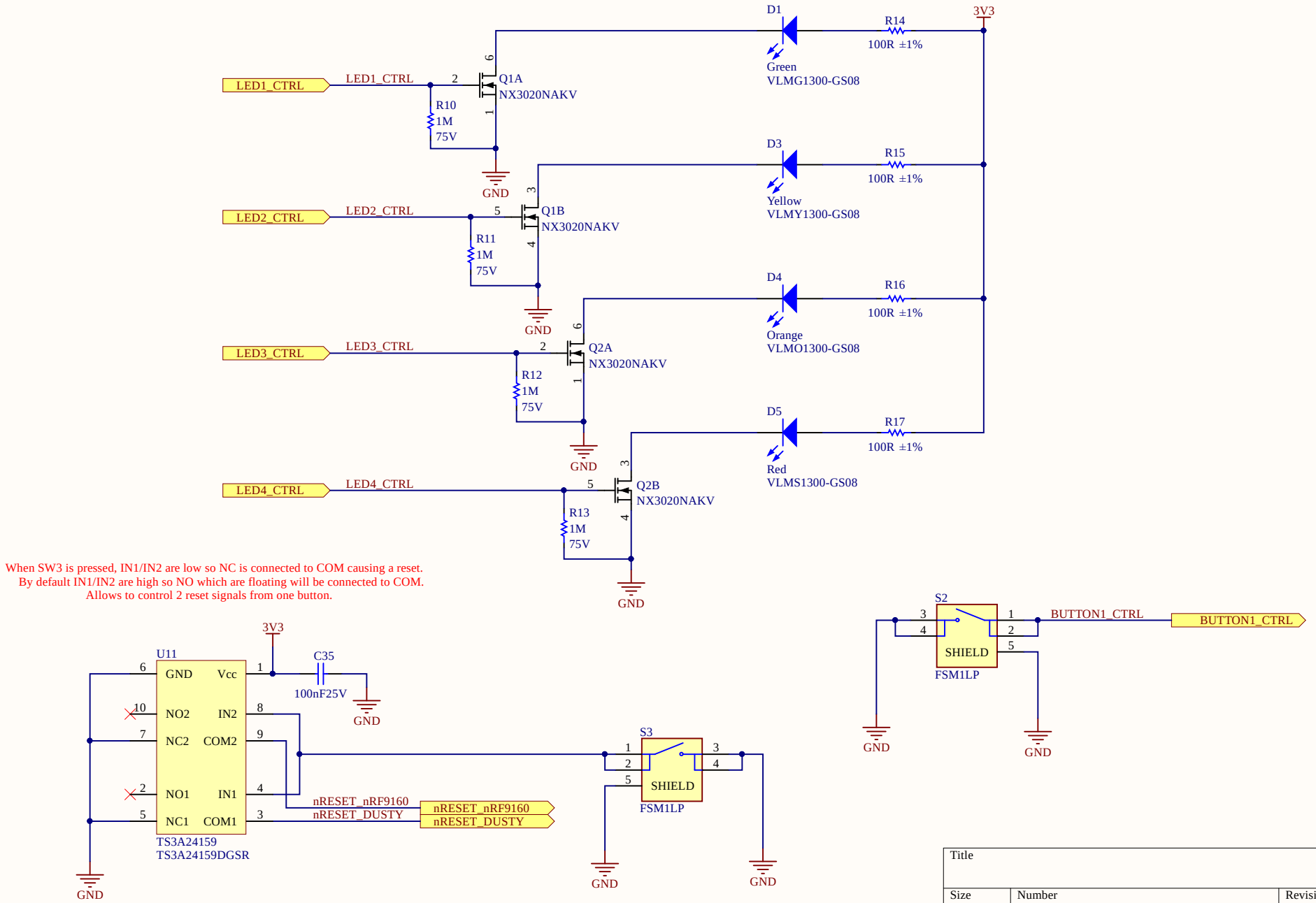

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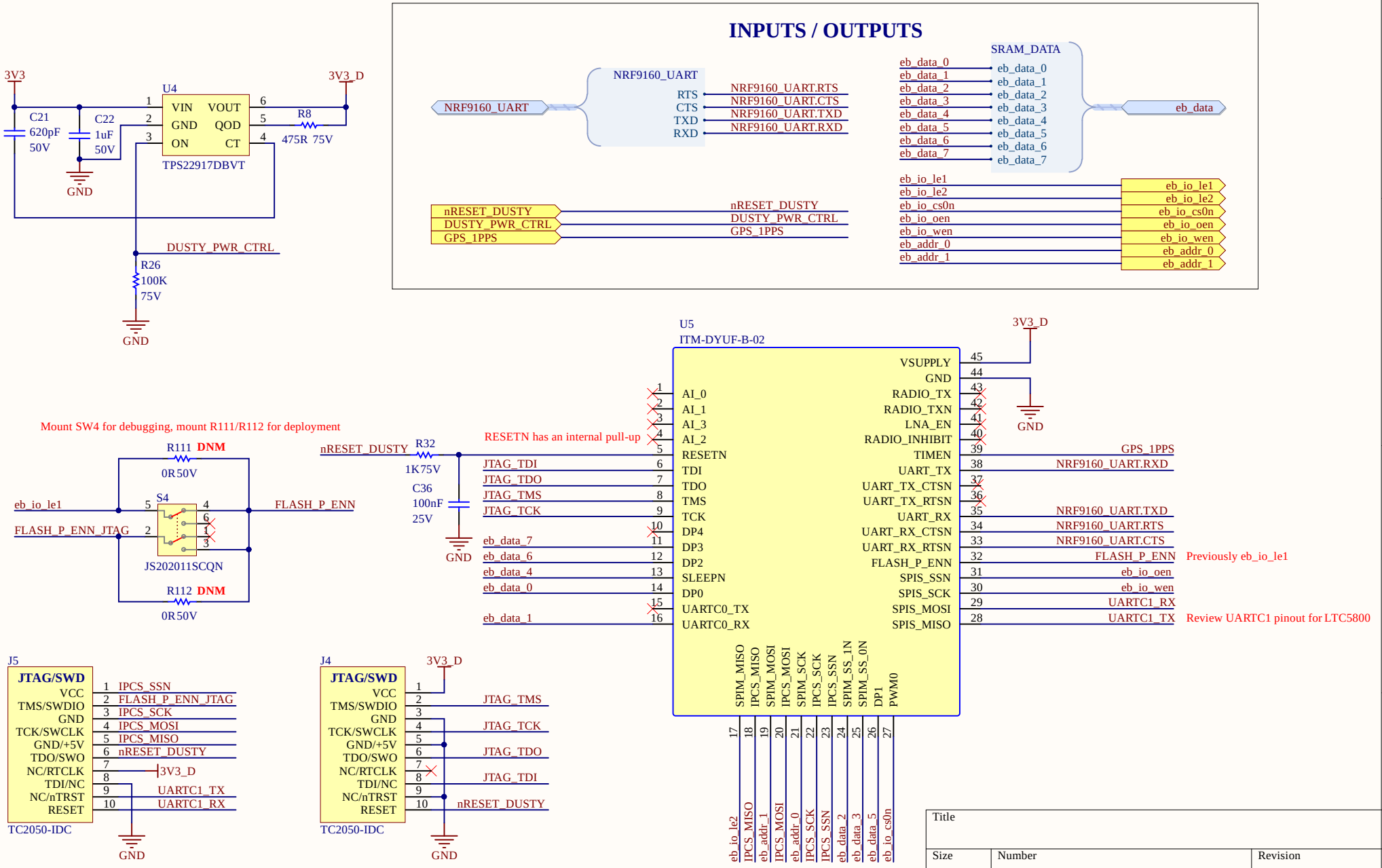
INPUTS / OUTPUTS
NRF9160_UART
RTS
CTS
TXD
RXD
NRF9160_UART.RTS
NRF9160_UART.CTS
NRF9160_UART.TXD
NRF9160_UART.RXD
SRAM_DATA
eb_data_0
eb_data_1
eb_data_2
eb_data_3
eb_data_4
eb_data_5
eb_data_6
eb_data_7
eb_data
eb_io_le1
eb_io_le2
eb_io_cs0n
eb_io_oen
eb_io_wen
eb_addr_0
eb_addr_1
nRESET_DUSTY
DUSTY_PWR_CTRL
GPS_1PPS
3V3
3V3_D
U4
VIN
VOUT
GND
QOD
ON
CT
TPS22917DBVT
C21
620pF
50V
C22
1uF
50V
R8
475R 75V
GND
DUSTY_PWR_CTRL
R26
100K
75V
GND
U5
ITM-DYUF-B-02
AI_0
AI_1
AI_3
AI_2
RESETN
TDI
TDO
TMS
TCK
DP4
DP3
DP2
SLEEPN
DP0
UARTC0_TX
UARTC0_RX
VSUPPLY
GND
RADIO_TX
RADIO_TXN
LNA_EN
RADIO_INHIBIT
TIMEN
UART_TX
UART_TX_CTSN
UART_TX_RTSN
UART_RX
UART_RX_CTSN
UART_RX_RTSN
FLASH_P_ENN
SPIS_SSN
SPIS_SCK
SPIS_MOSI
SPIS_MISO
GPS_1PPS
NRF9160_UART.RXD
NRF9160_UART.TXD
NRF9160_UART.RTS
NRF9160_UART.CTS
FLASH_P_ENN
Previously eb_io_le1
eb_io_oen
eb_io_wen
UARTC1_RX
UARTC1_TX
Review UARTC1 pinout for LTC5800
SPIM_MISO
IPCS_MISO
SPIM_MOSI
IPCS_MOSI
SPIM_SCK
IPCS_SCK
IPCS_SSN
SPIM_SS_1N
SPIM_SS_0N
DP1
PWM0
eb_io_le2
IPCS_MISO
eb_addr_1
IPCS_MOSI
eb_addr_0
IPCS_SCK
IPCS_SSN
eb_data_2
eb_data_3
eb_data_5
eb_io_cs0n
Mount SW4 for debugging, mount R111/R112 for deployment
R111 DNM
0R50V
eb_io_le1
S4
FLASH_P_ENN_JTAG
FLASH_P_ENN
JS202011SCQN
R112 DNM
0R50V
nRESET_DUSTY
R32
1K75V
C36
100nF
25V
GND
RESETN has an internal pull-up
JTAG_TDI
JTAG_TDO
JTAG_TMS
JTAG_TCK
eb_data_7
eb_data_6
eb_data_4
eb_data_0
eb_data_1
J5
JTAG/SWD
VCC
TMS/SWDIO
GND
TCK/SWCLK
GND/+5V
TDO/SWO
NC/RTCLK
TDI/NC
NC/nTRST
RESET
IPCS_SSN
FLASH_P_ENN_JTAG
IPCS_SCK
IPCS_MOSI
IPCS_MISO
nRESET_DUSTY
3V3_D
UARTC1_TX
UARTC1_RX
TC2050-IDC
GND
J4
JTAG/SWD
3V3_D
JTAG_TMS
JTAG_TCK
JTAG_TDO
JTAG_TDI
nRESET_DUSTY
TC2050-IDC
GND
Title
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A4
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Revision
Date:
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