AMPWR

Inputs

PIC_SCL
PIC_SDA
From PIC16, bus is floated when PIC16 goes to sleep

ENSUREPSW
PIC16 GPIO, 1.8V ensures PICPWR will remain on

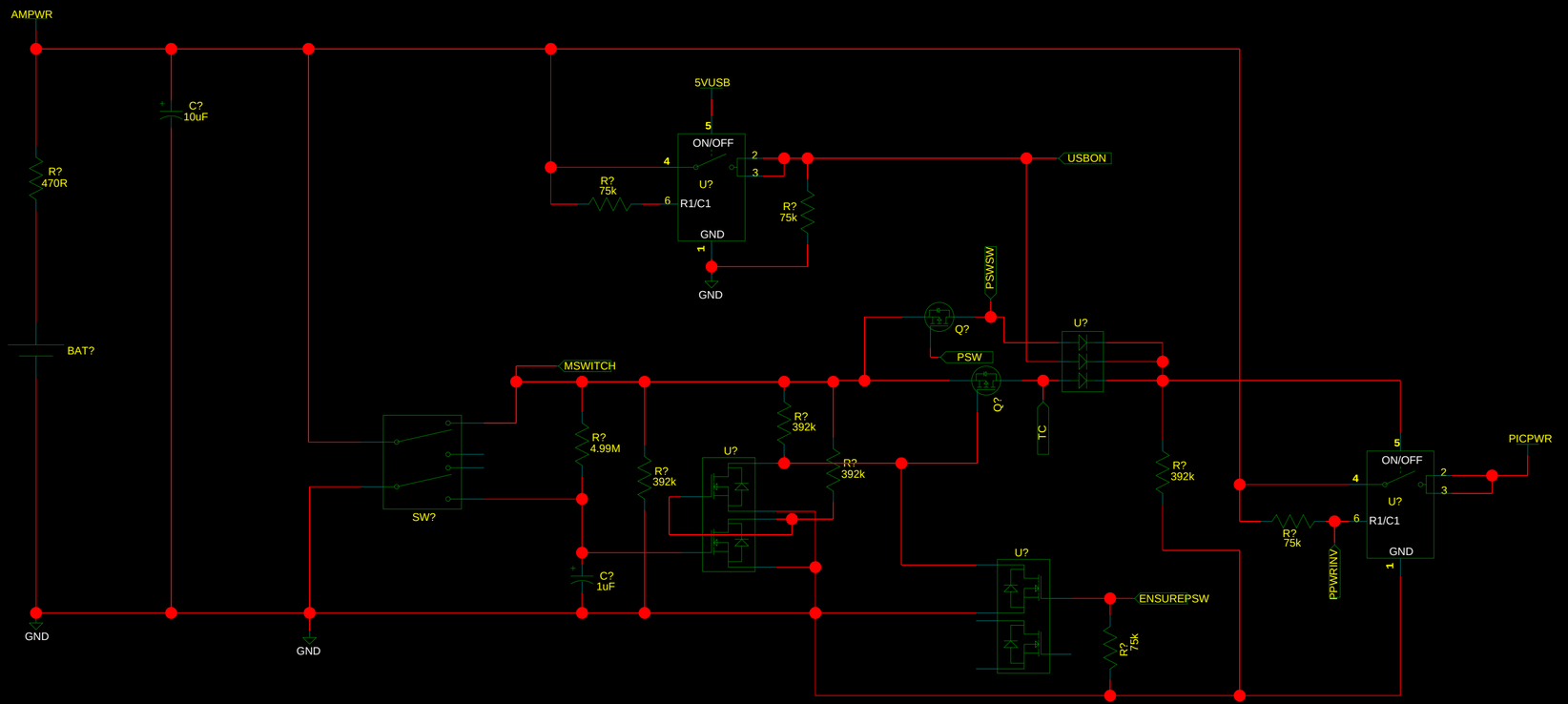
Outputs

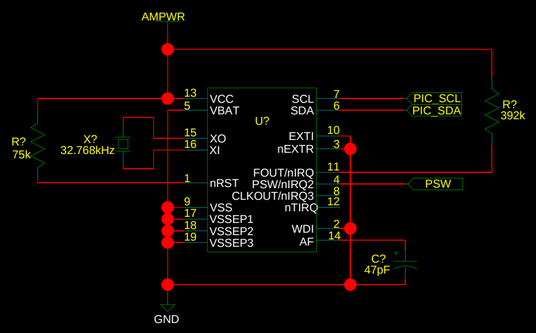
USBON
1.8V = USB is plugged in, 0V = USB unplugged
USBON forces on PICPWR

MSWITCH
1.8V = Main Switch is on, 0V = Main Switch is off
MSWITCH being on allows TC, PSW and ENSUREPSW to turn on PICPWR

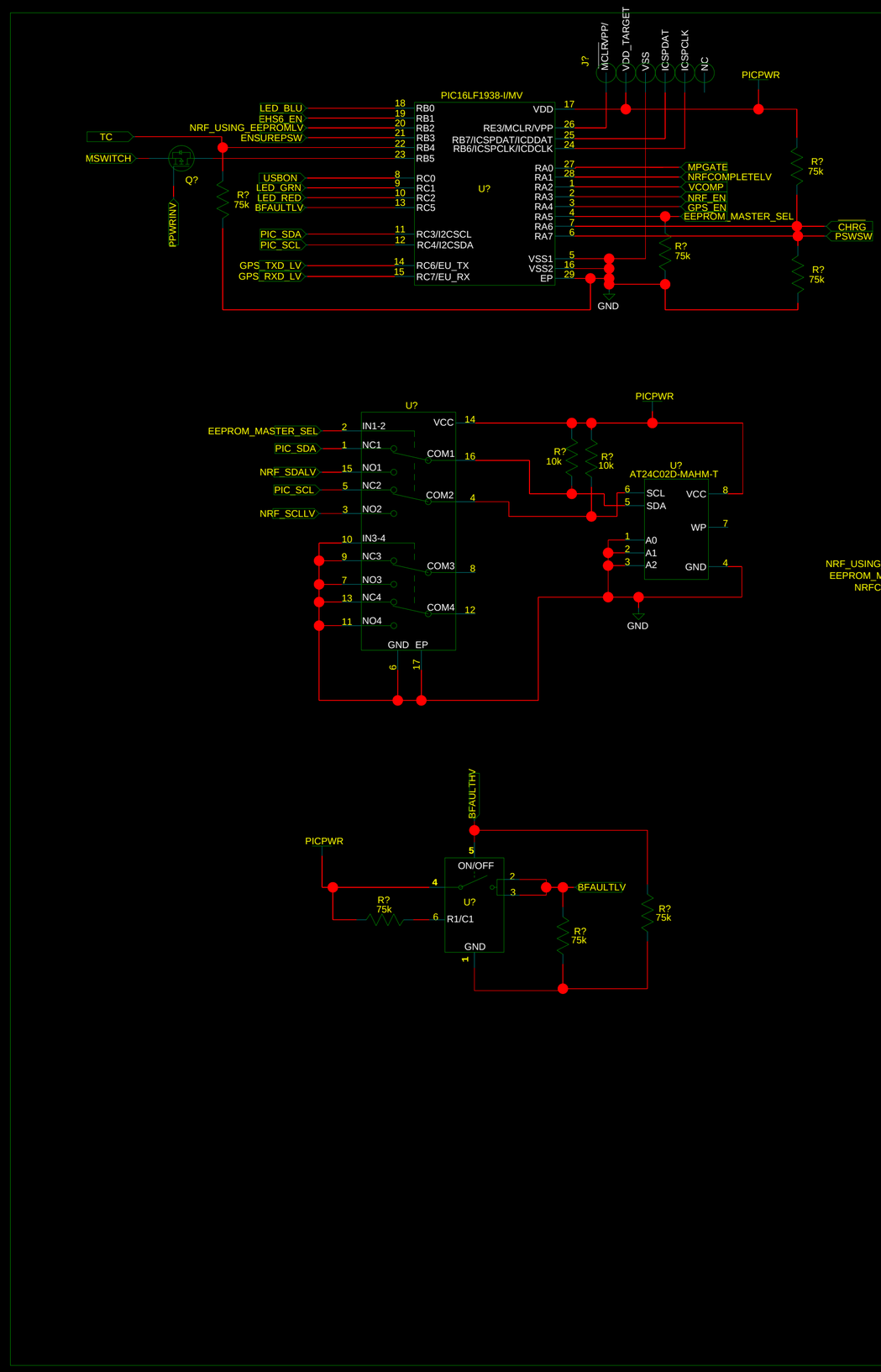
TC
1.8V = Main Switch was just turned on,
0V = Main Switch has been on for >4sec

PICPWR
PICPWR is on if:
USBON || (MSWITCH && (TC || PSW || ENSUREPSW))





PICPWR



VSYS

Bidirectional

- I2C_SCLHV
- I2C_SDAHV

3V3NRF

Ouputs

- EEPROM_IN_USE

Inputs

- NRF_USING_EEPROM
- NRFCOMPLETE

Bidirectional

- NRF_SDA
- NRF_SCL

VGPS

Bidirectional

- GPS_TXD
- GPS_RXD
- GPS_SDA
- GPS_SCL

Other

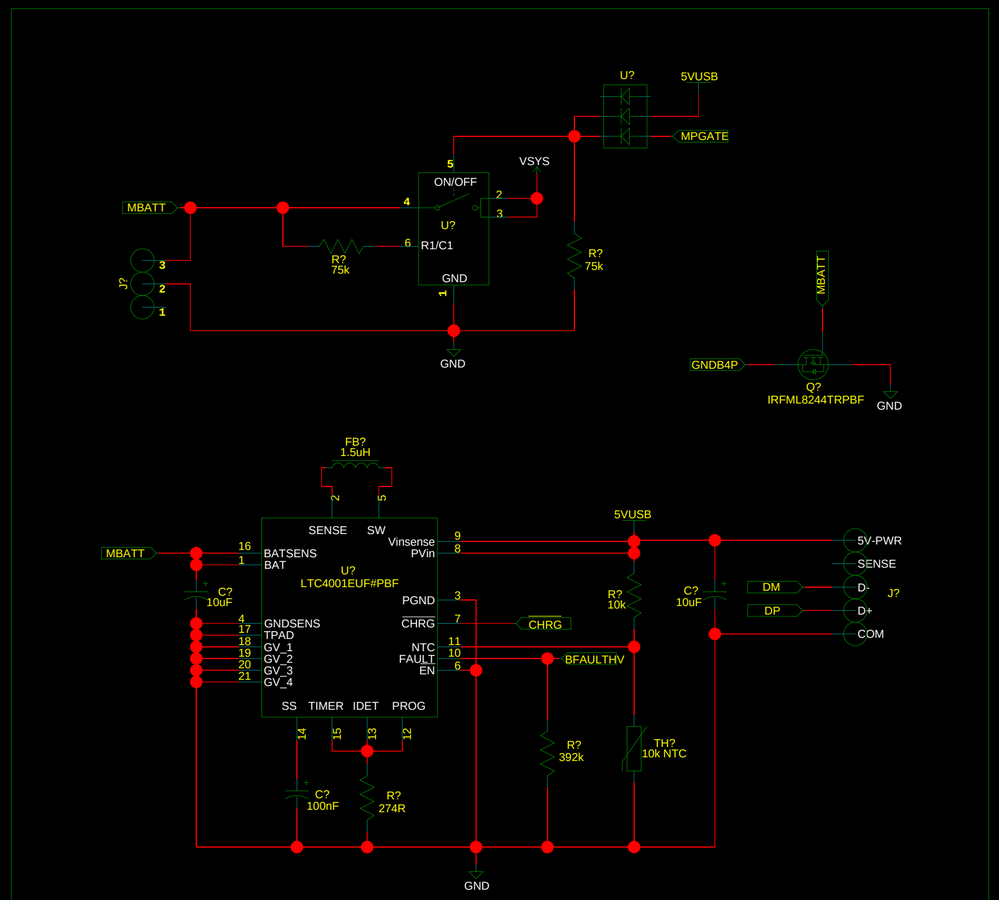
Inputs

- USBON
- TC
- MSWITCH
- BFAULTHV
- CHRG
- VCOMP

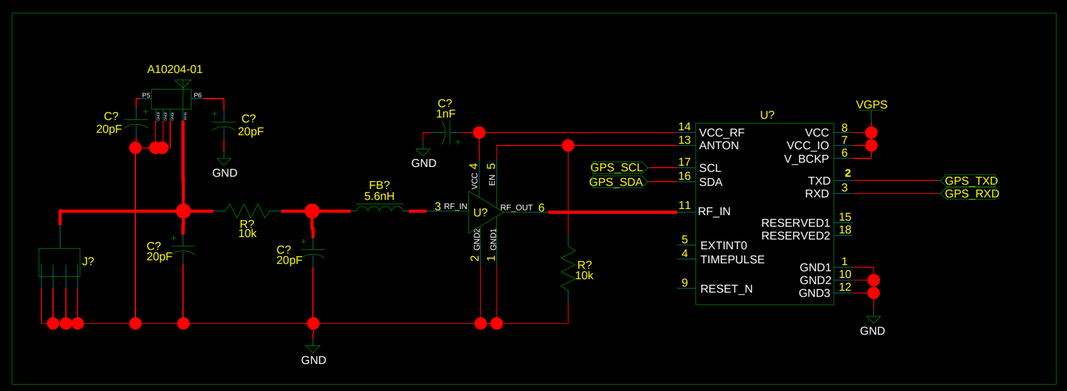
Ouputs

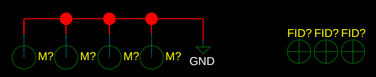
- ENSUREPSW
- LED_RED
- LED_GRN
- LED_BLU
- EHS6_EN
- NRF_EN
- GPS_EN
- MPGATE

MBATT



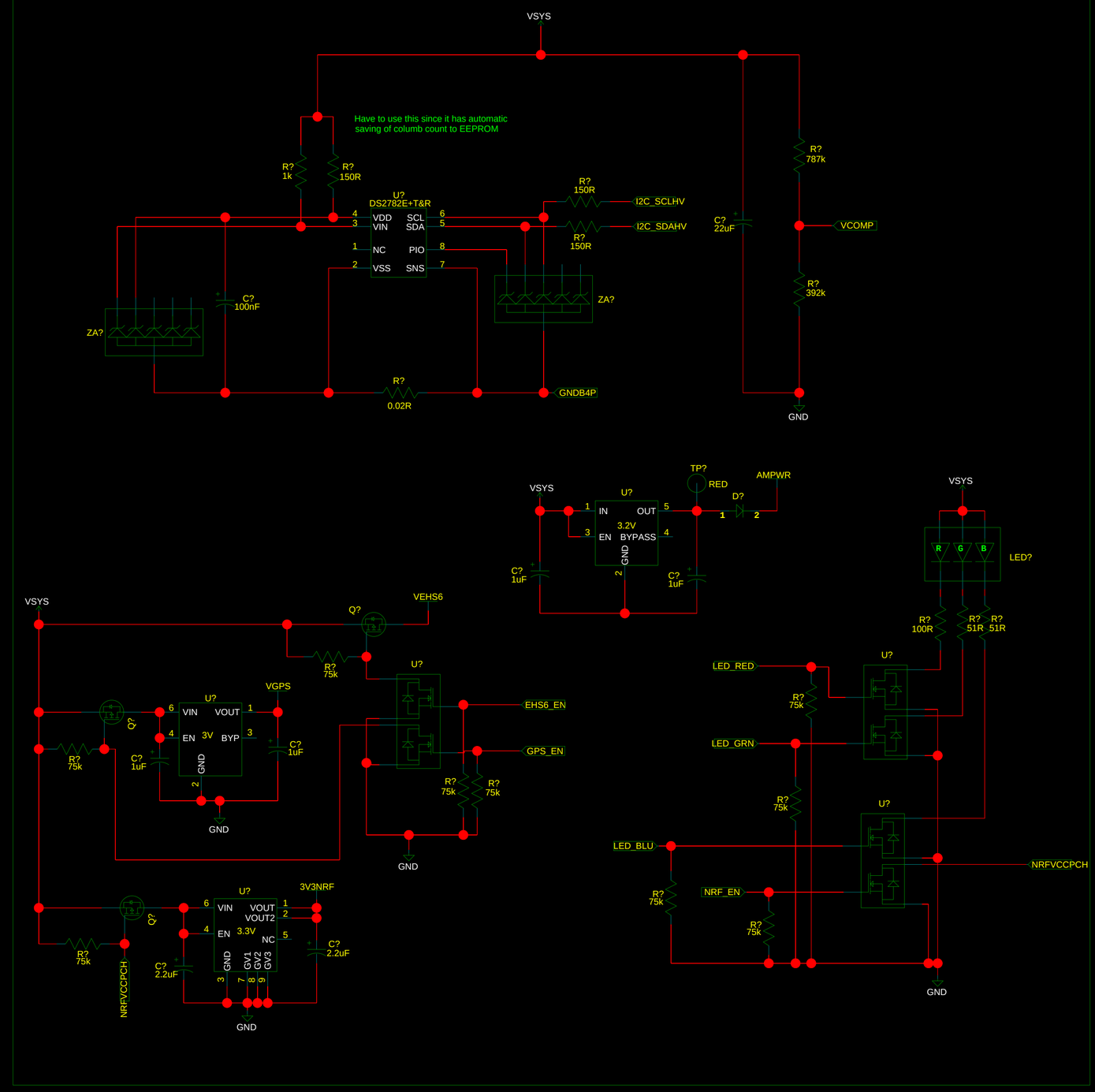
VGPS





FID? FID? FID?

VSYS



Inputs

- MPGATE
- EHS6_EN
- NRF_EN
- LED_RED
- LED_GRN
- LED_BLU
- GPS_EN

Ouputs

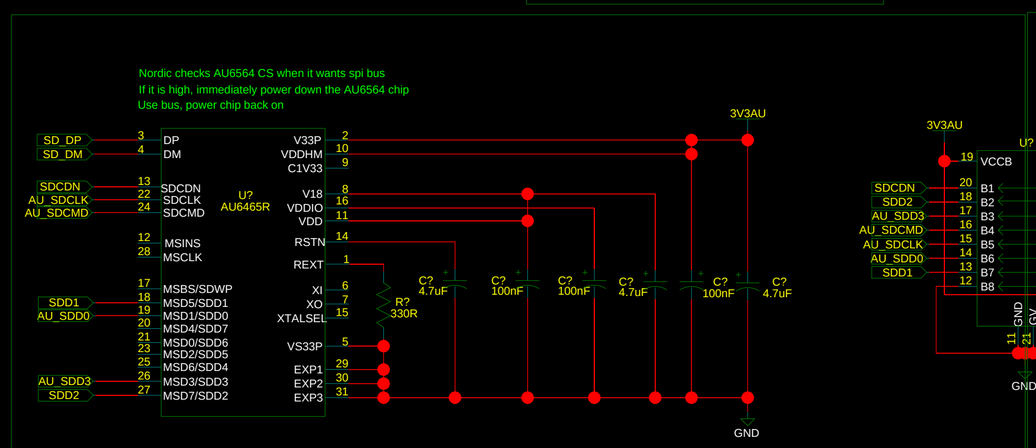
- 3V3NRF
- VEHS6
- AMPWR
- VGPS
- VCOMP
- CHRG
- BFAULTHV

Bidirectional

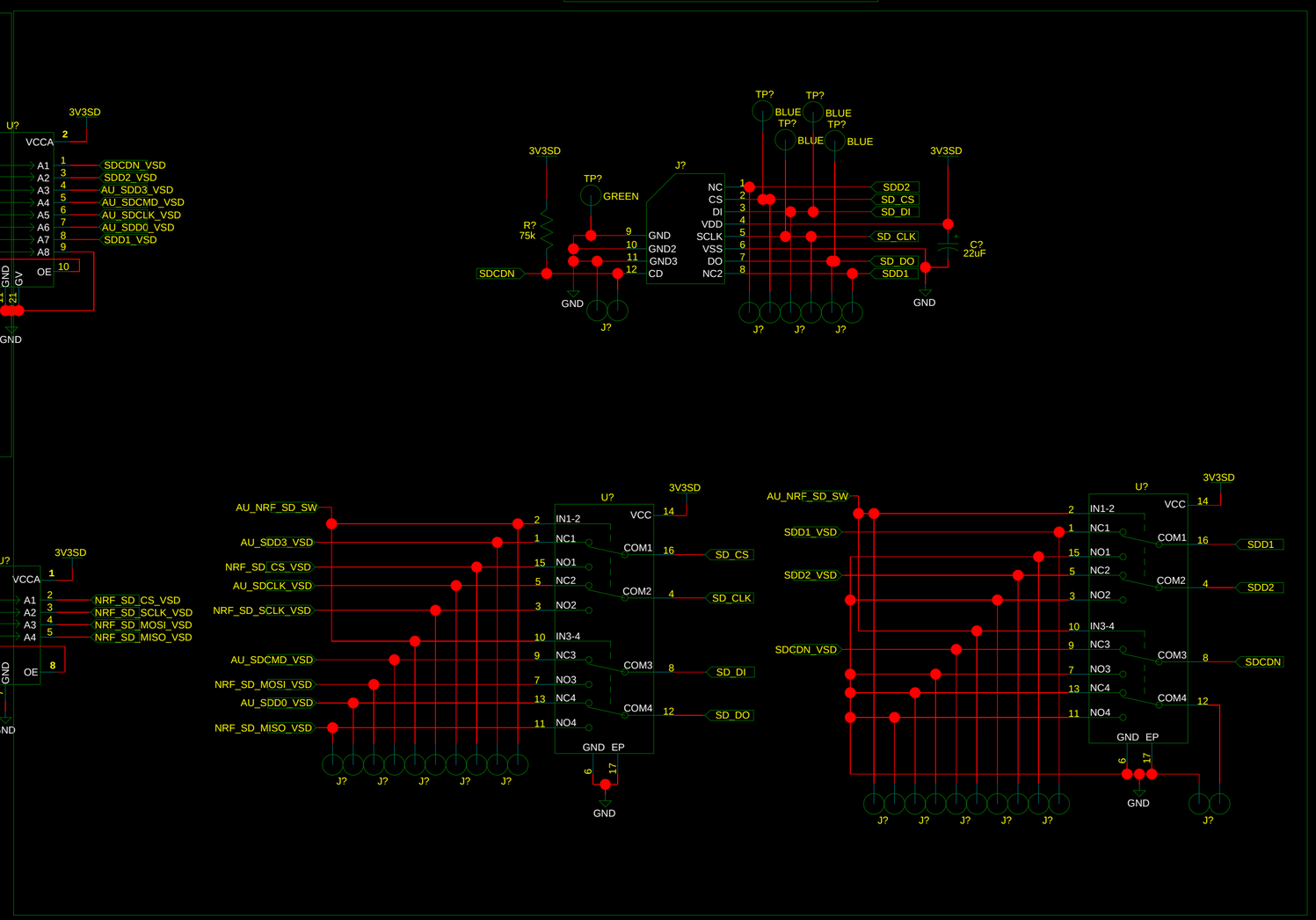
- GPS_TXD
- GPS_RXD
- GPS_SCL
- GPS_SDA
- I2C_SCLHV
- I2C_SDAHV
- DM
- DP

3V3USB

3V3AU



3V3SD



Inputs

3V3NRF

5VUSB

AU_ON_OFF
AU_NRF_SD_SW
NRF_SD_CS
NRF_SD_SCLK
NRF_SD_MOSI
NRF_SD_MISO

Ouputs

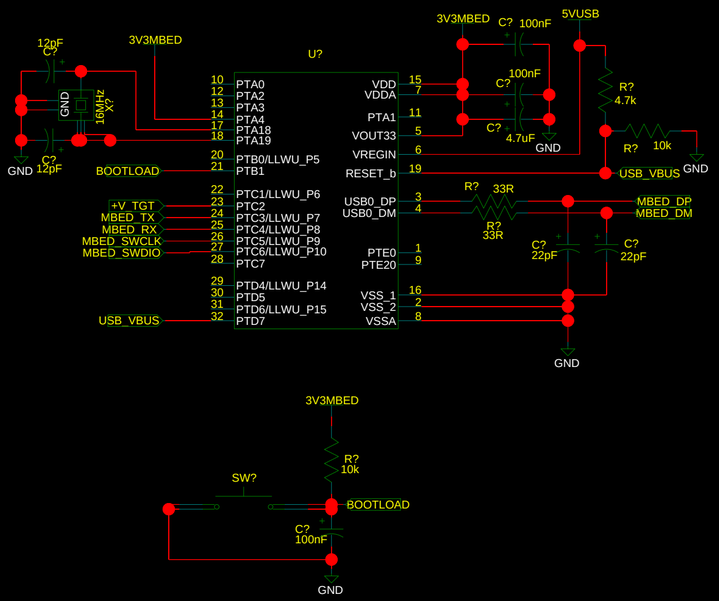
Bidirectional

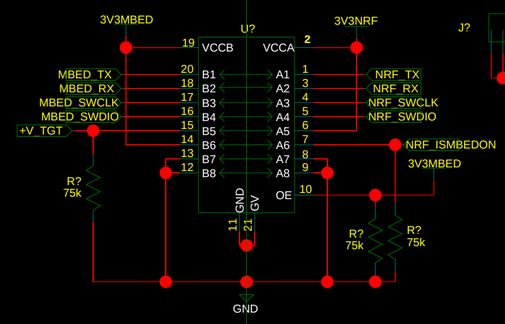
DP
DM

MBED_DP
MBED_DM

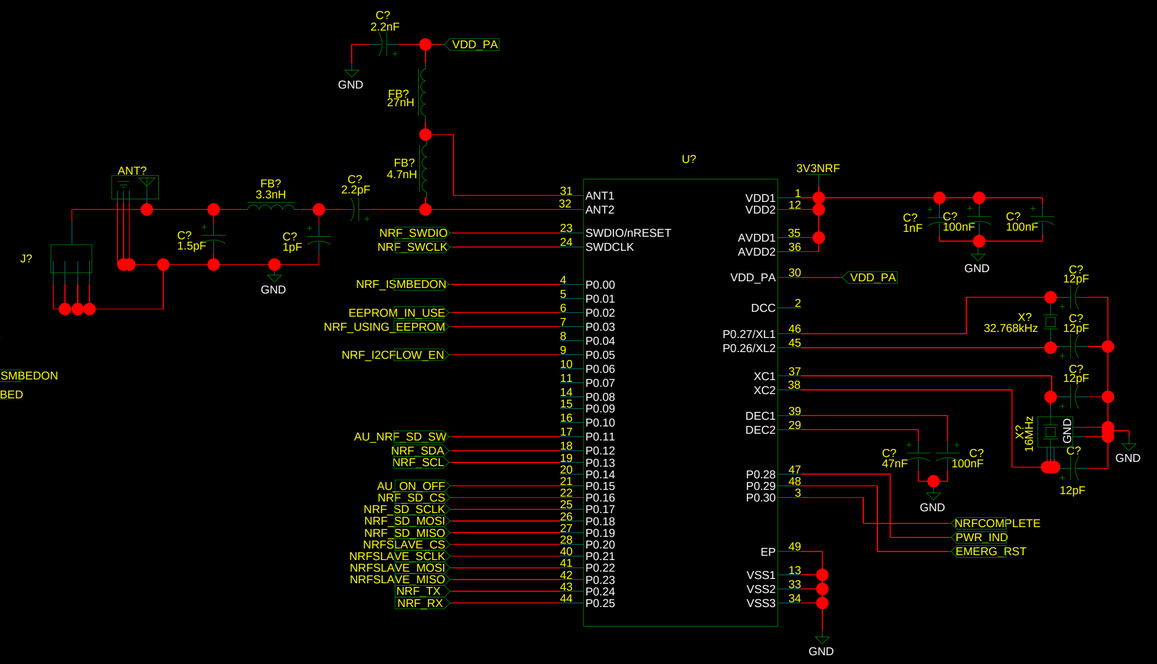
EHS6_DP
EHS6_DM

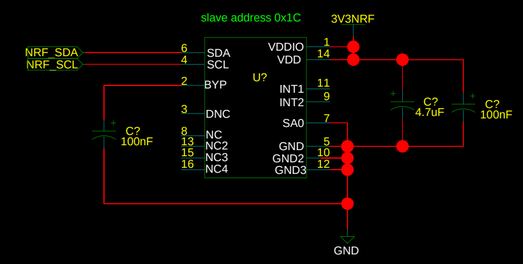
3V3MBED





3V3NRF





Inputs

5VUSB

MBED_DP
MBED_DM

EEPROM_IN_USE

NRFSLAVE_CS
NRFSLAVE_SCLK
NRFSLAVE_MOSI
NRFSLAVE_MISO

PWR_IND
EMERG_RST

Ouputs

NRF_USING_EEPROM

NRFCOMPLETE

AU_NRF_SD_SW

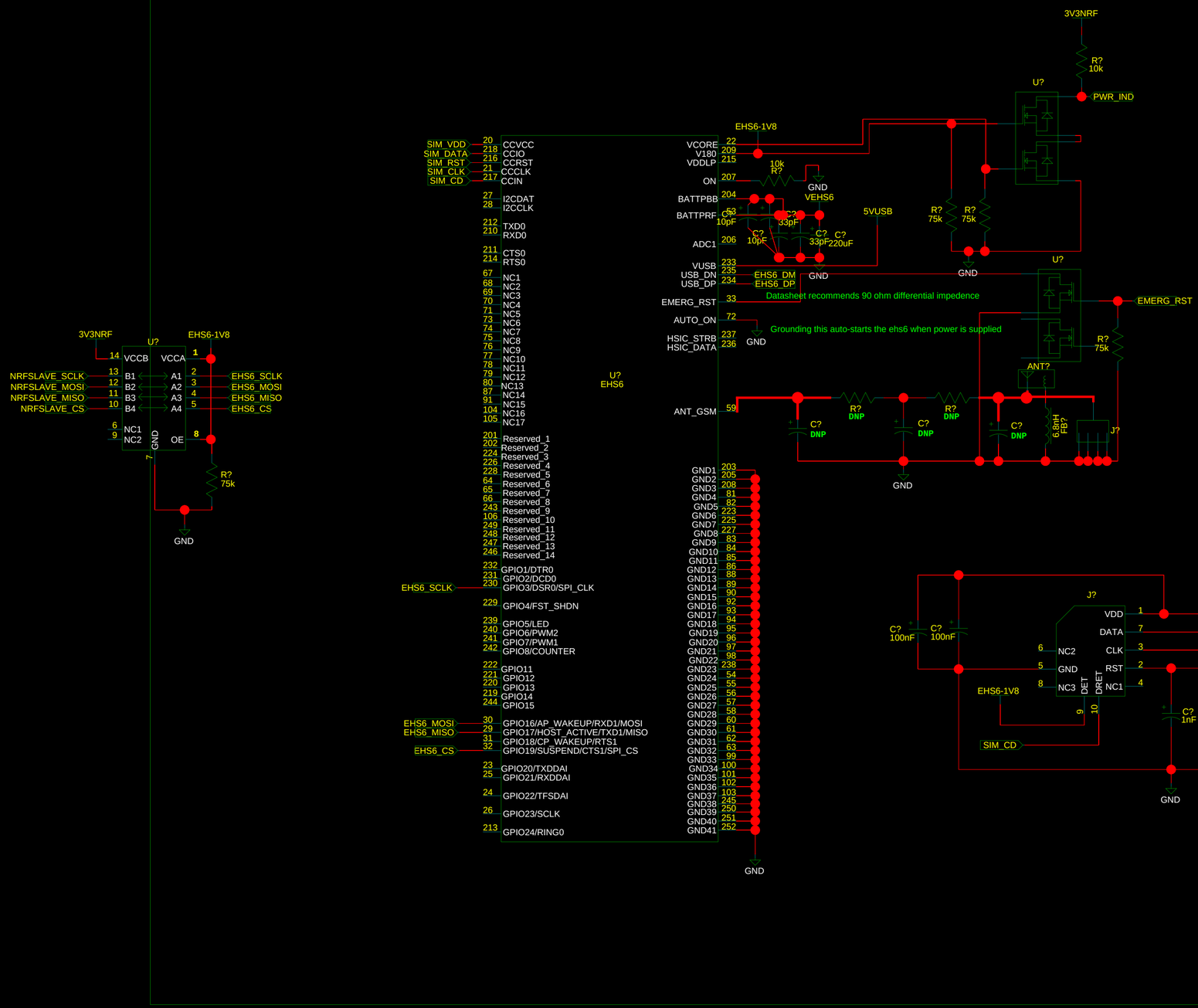
AU_ON_OFF

NRF_SD_CS
NRF_SD_SCLK
NRF_SD_MOSI
NRF_SD_MISO

Bidirectional

NRF_SDA
NRF_SCL

VEHS6



Inputs

3V3NRF

NRFSLAVE_SCLK
NRFSLAVE_MOSI
NRFSLAVE_MISO
NRFSLAVE_CS

EHS6_DM
EHS6_DP

PWR_IND

EMERG_RST

Ouputs

Bidirectional