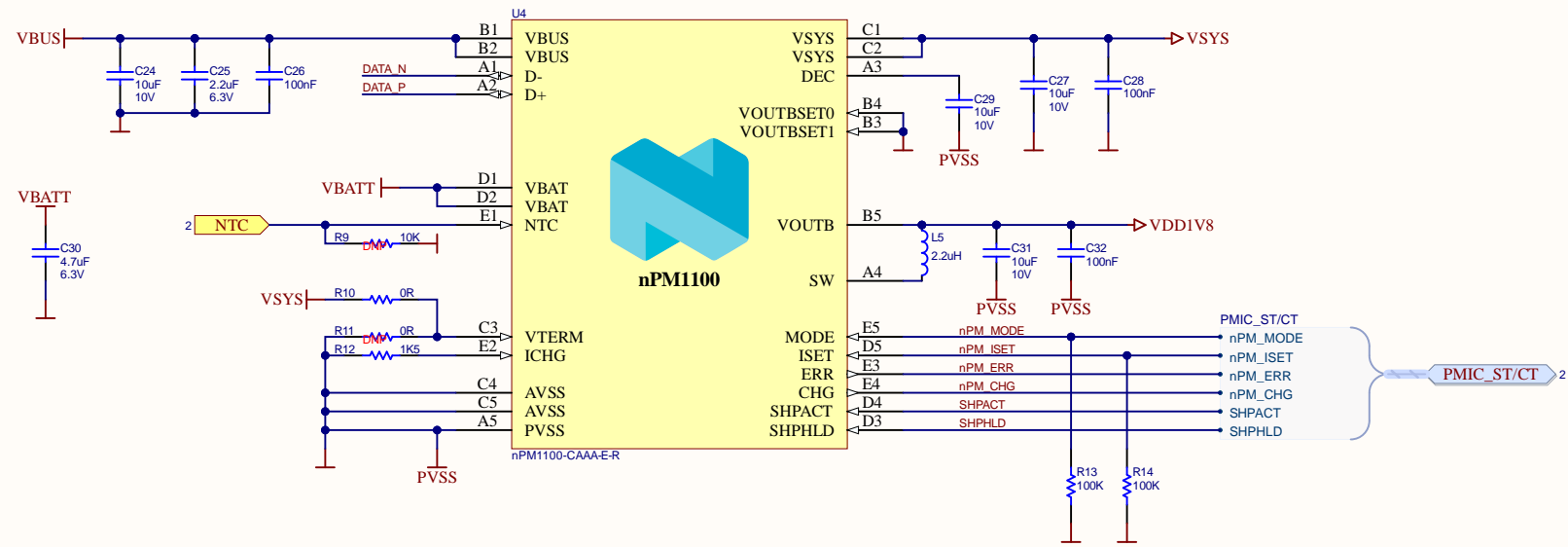
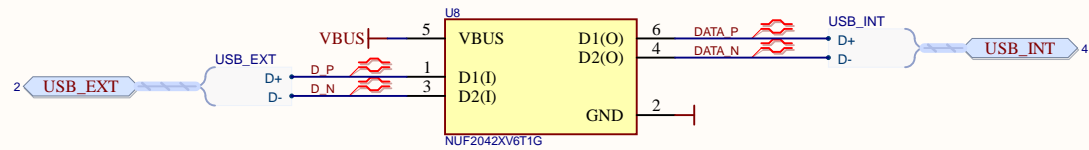


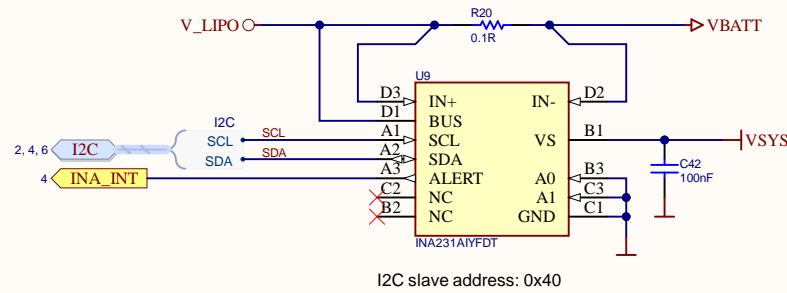
PMIC / CHARGE



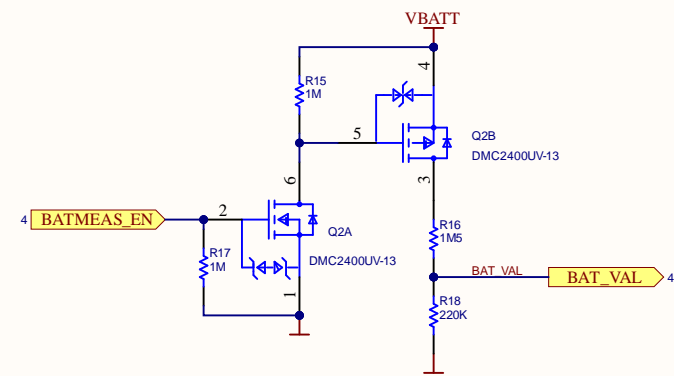
USB Upstream Terminator and ESD



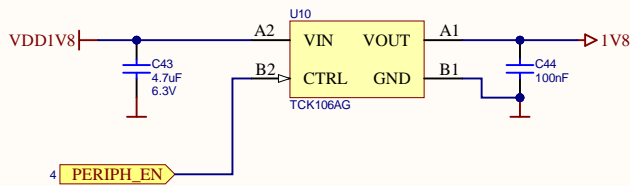
Battery Charge/Discharge Current Measurement



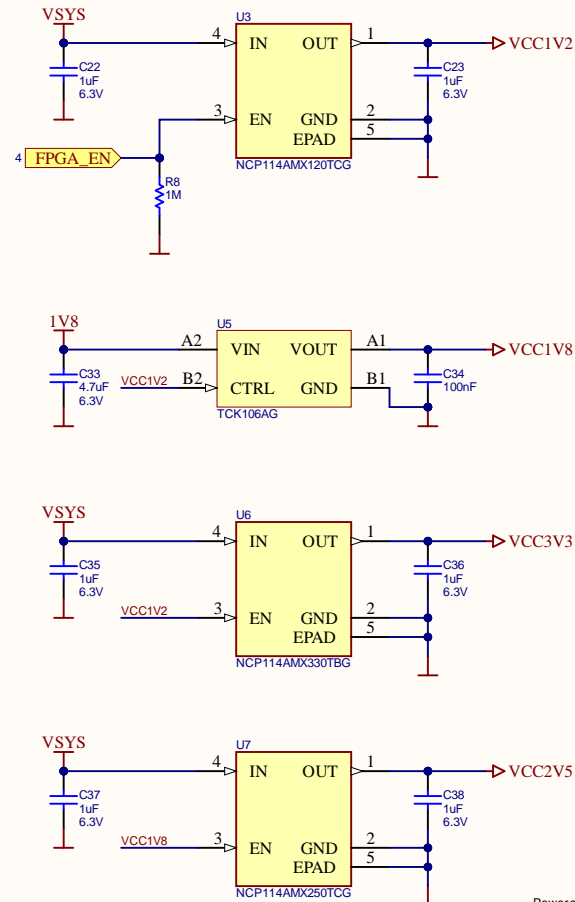
Battery Voltage Monitor



Peripheral Load Switch

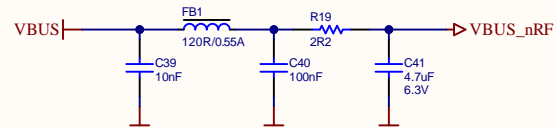


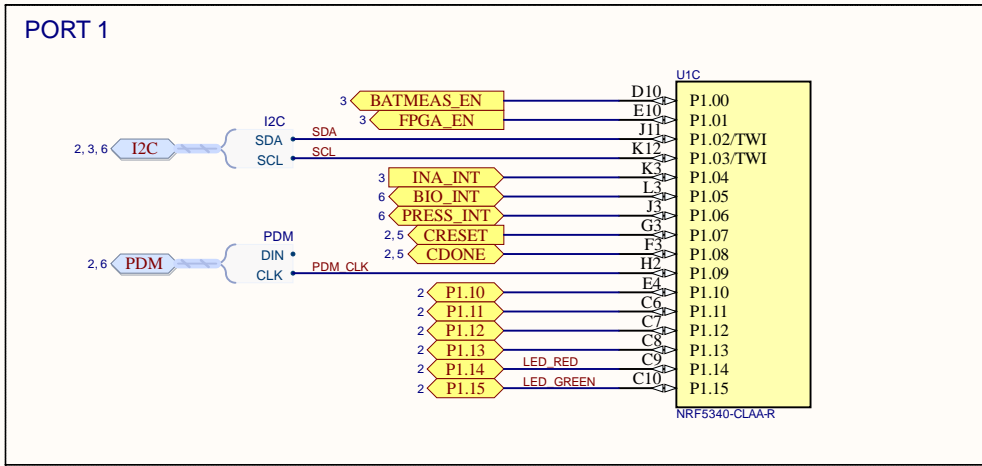
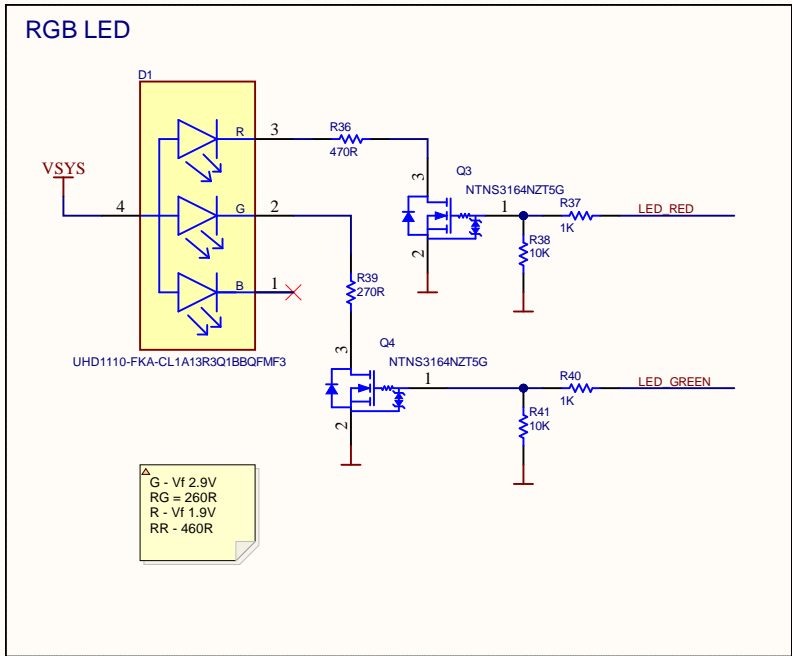
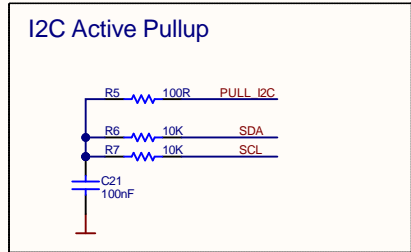
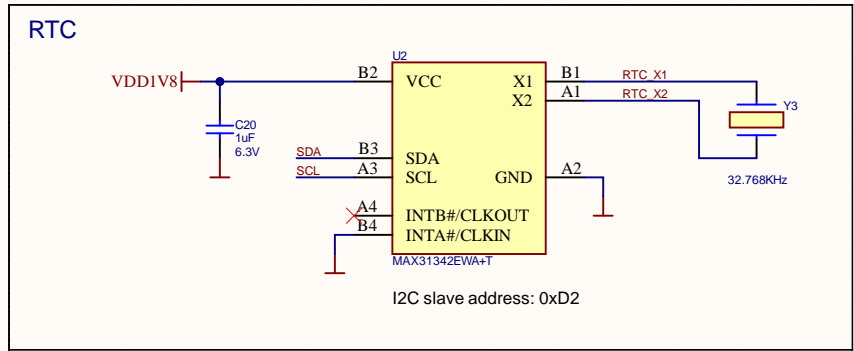
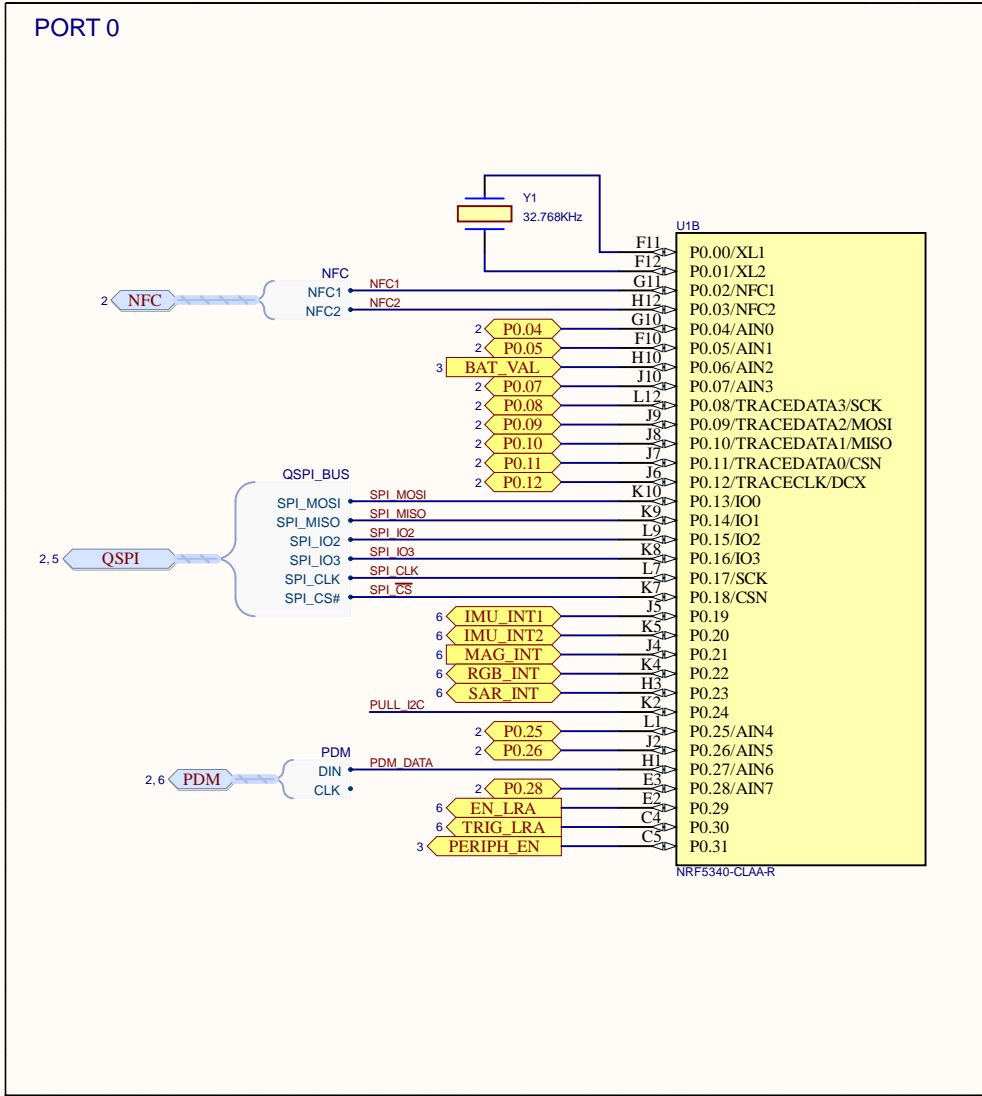
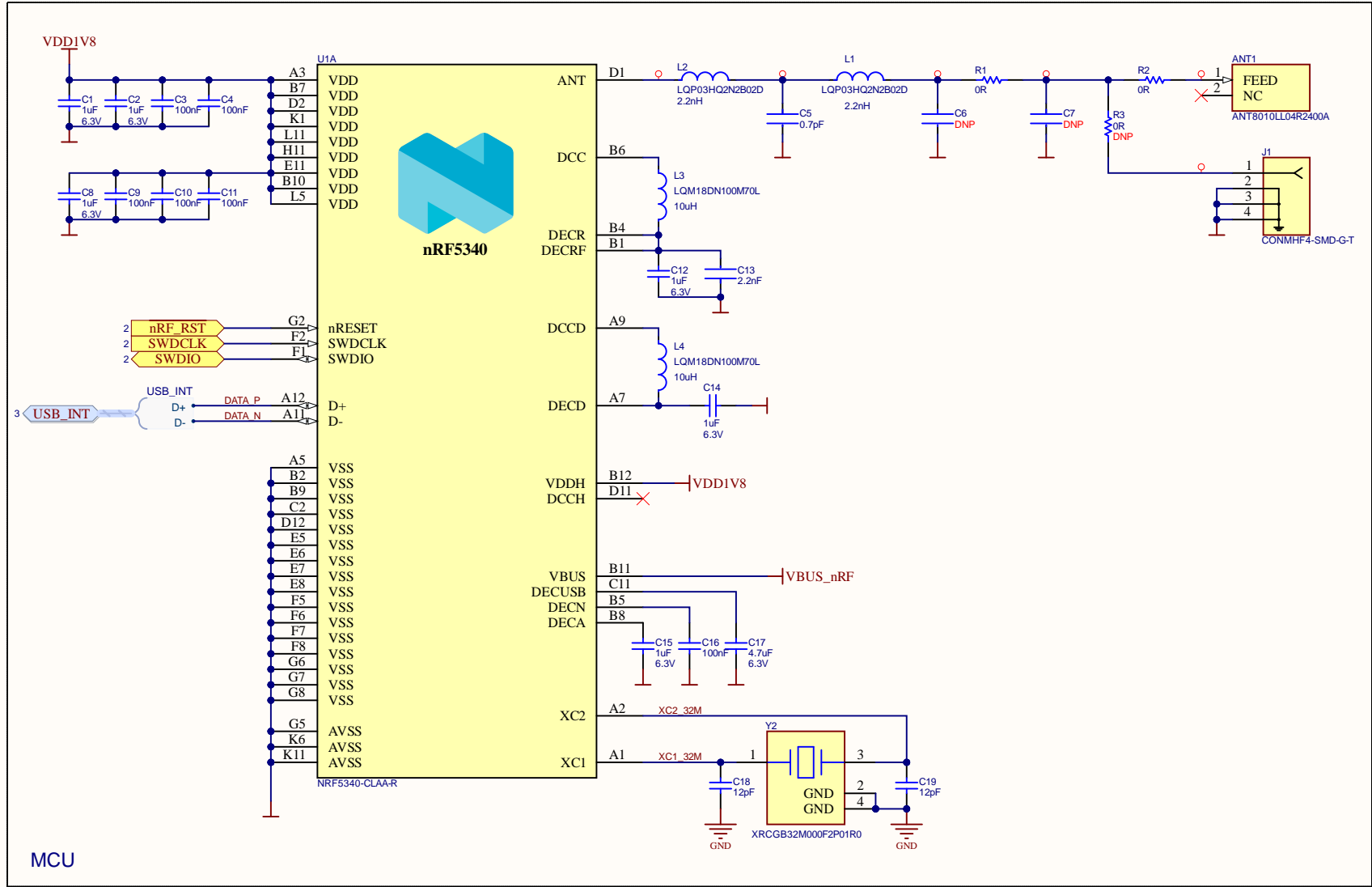
DCDC FPGA

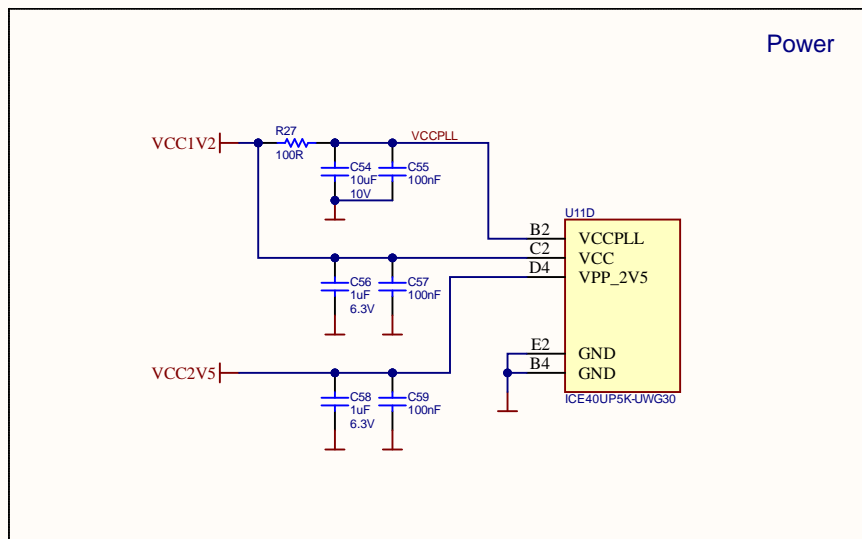
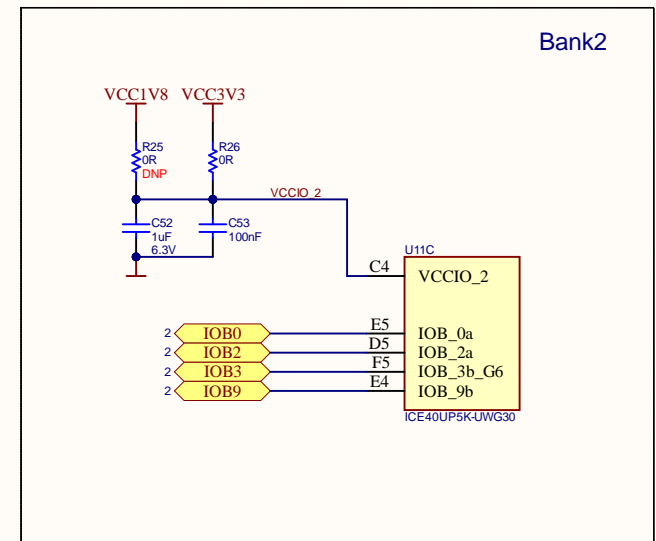
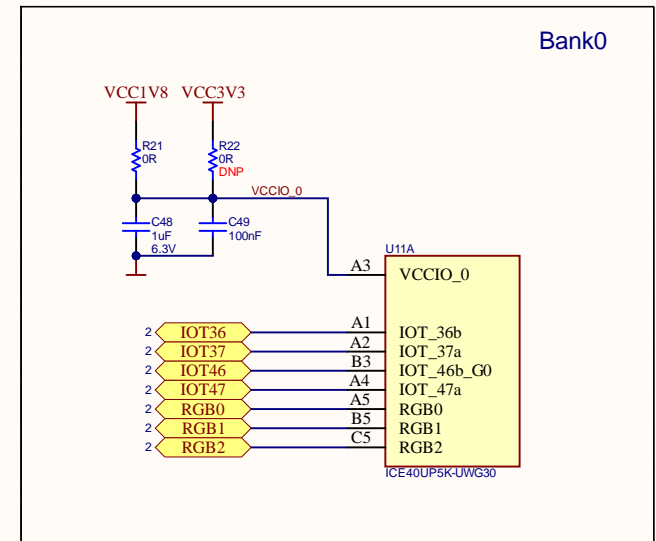
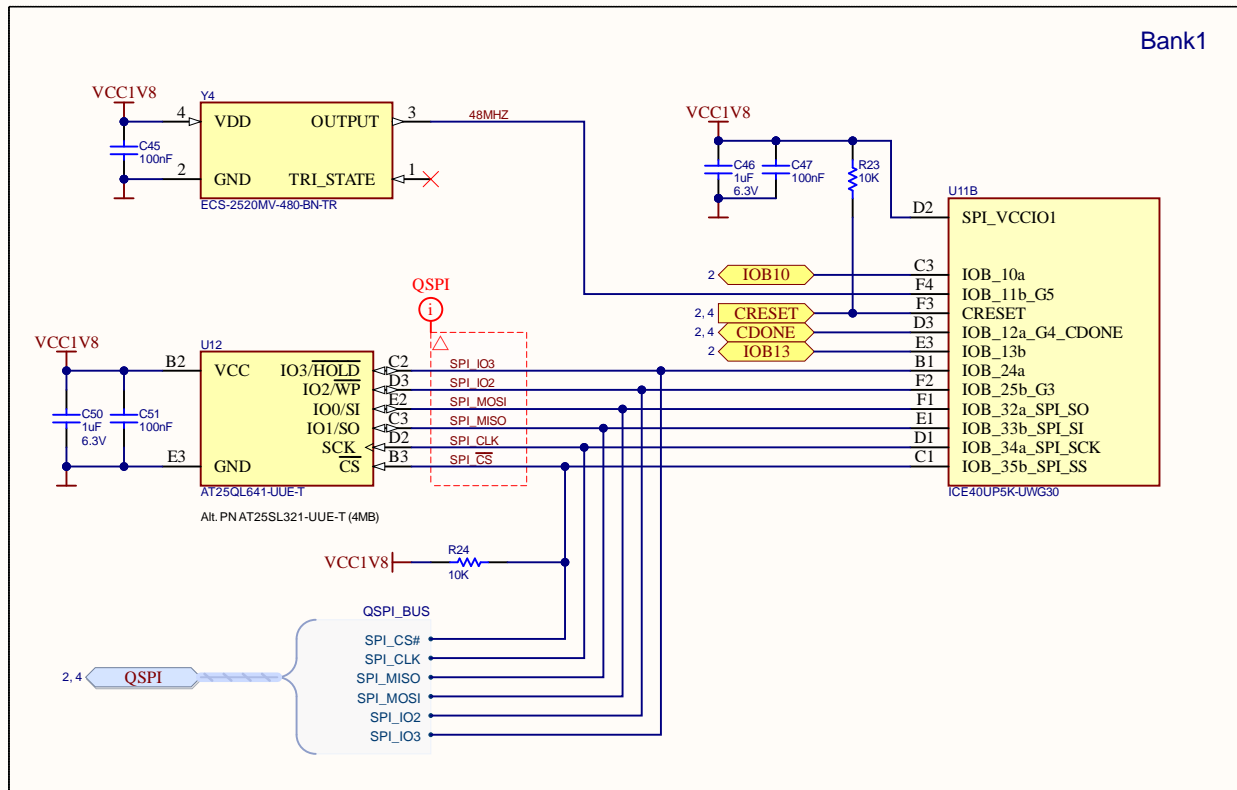


Power sequence:
1) 1.2V (VCC/VCCPLL)
2) 1.8V (SPL_VCCIO1)
3) 3.3V (VCCIO)
3) 2.5V (VPP_2V5)

MCU VBUS Filter







Title **NiCE5340 - iCE40**

Size: **A4**

Number:

Revision: **1.0**

Date: **19/03/2024**

Time: **16:53:50**

Sheet **5** of **7**

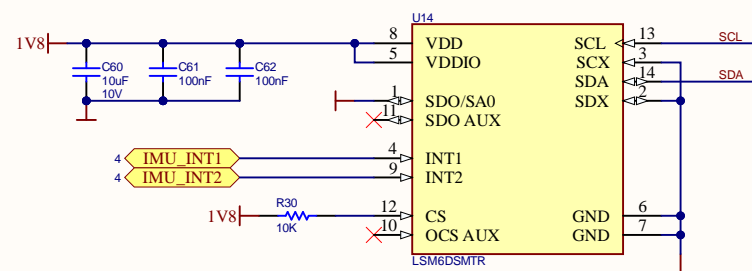
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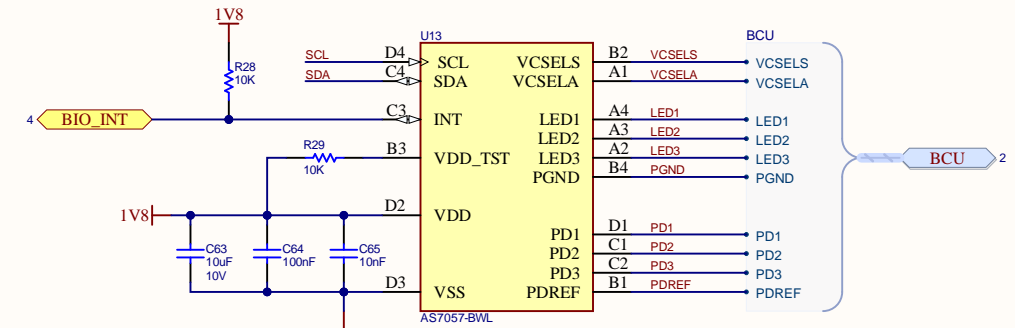
Drawn By: **Viola S.**

6DOF IMU



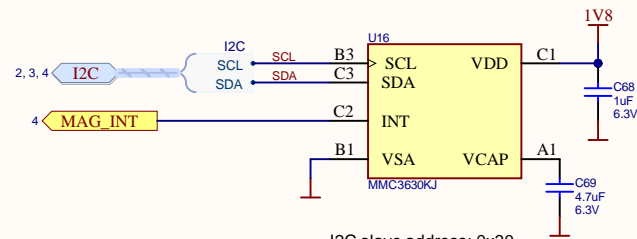
I2C slave address: 0x6A

Biosignal Converting Unit



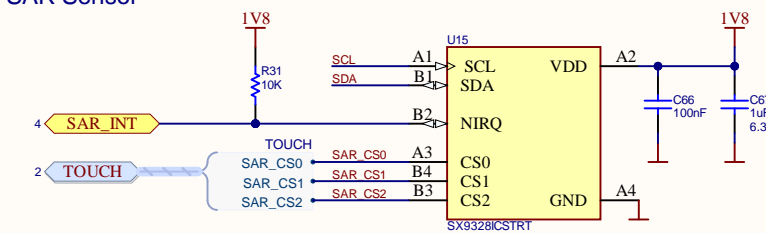
I2C slave address: 0x55

Magnetometer



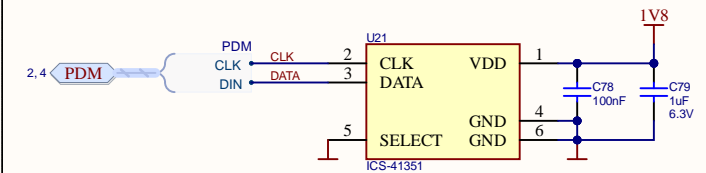
I2C slave address: 0x30

SAR Sensor

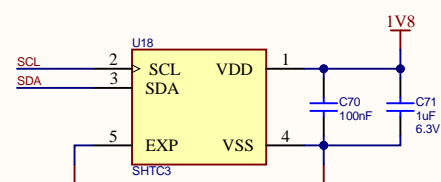


I2C slave address: 0x28

PDM MEMS MIC

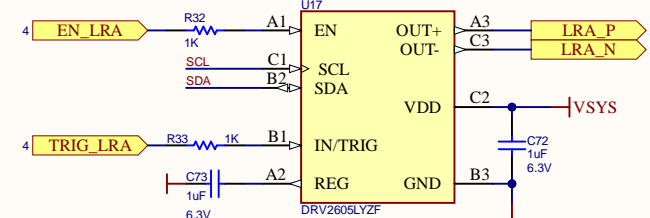


Humidity and Temperature



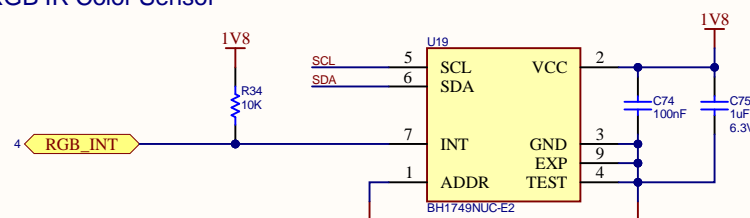
I2C slave address: 0x70

Haptic Driver



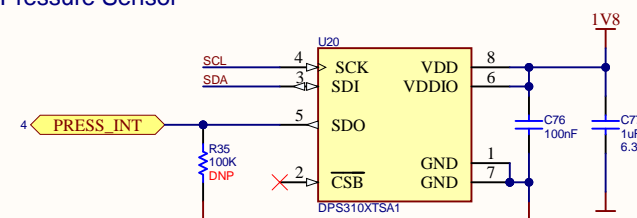
I2C slave address: 0x5A

RGB IR Color Sensor



I2C slave address: 0x38

Barometric Pressure Sensor



I2C slave address: 0x77

Title **NiCE5340 - Peripheral**

Size: A3

Number:

Revision: 1.0

Date: 19/03/2024

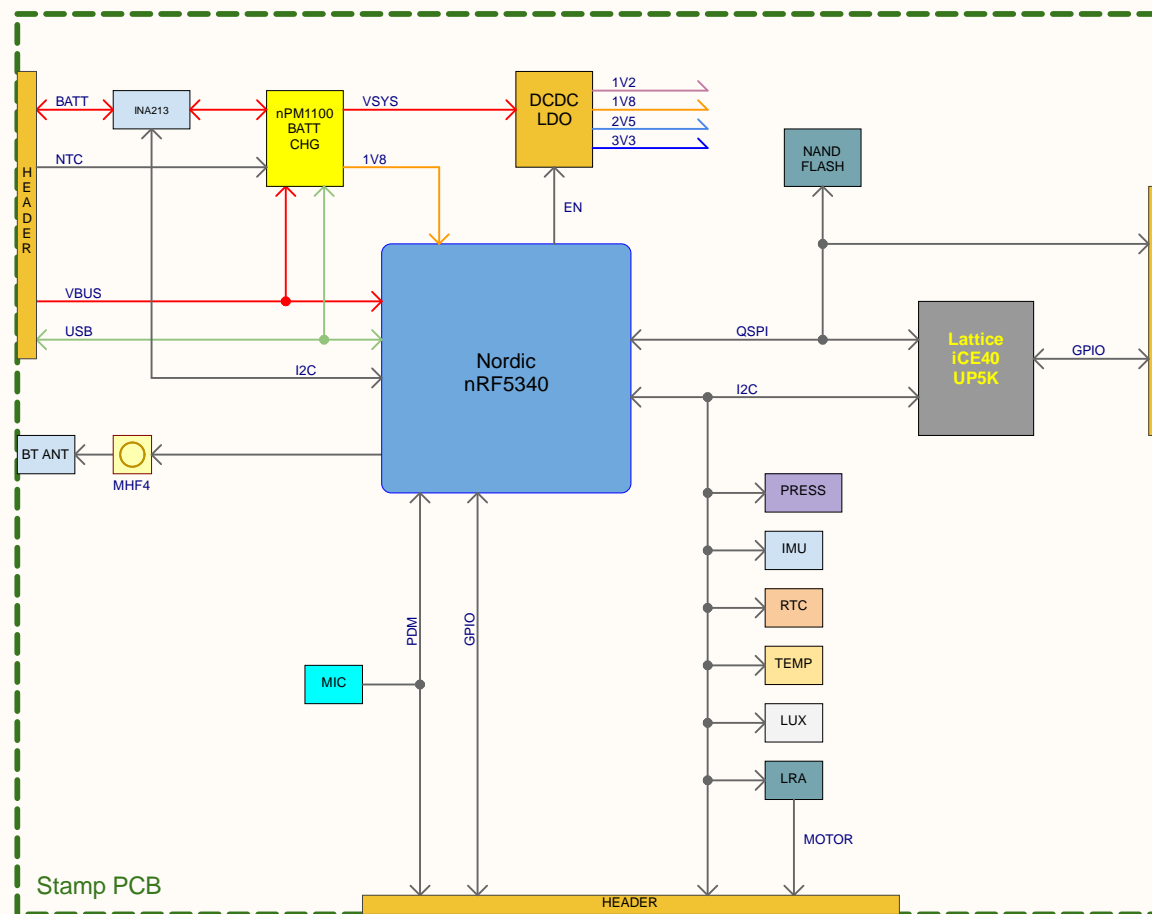
Time: 16:53:50

Sheet 6 of 7

File: PERIPHERAL_SchDoc

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Drawn By: Viola S.



Main components part list

- PMIC : nPM1100 / NCP114AMX330TBG
- Curr. Meas : INA213
- MCU : nRF5340
- FPGA : iCE40UP5K-UWG30
- FLASH : AT25QL641-UUE-T
- MIC : ICS-41351
- IMU : LSM6DSMTR
- MAG : MMC3630KJ
- RTC : MAX31342EWA+T
- TEMP/HUM : SHTC3
- PRESS : DPS310XTSA1
- LUX : BH1749NUC
- LRA : DRV2605LYZF
- SAR : SX9328ICSTRT
- BIO : AS7057-BWL
- BT ANT : ANT8010LL04R2400A

Title **NiCE5340 - Block Diagram**

Size: **A4**

Number:

Revision: **1.0**

Date: **19/03/2024**

Time: **16:53:50**

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File: **Block Diagram.SchDoc**