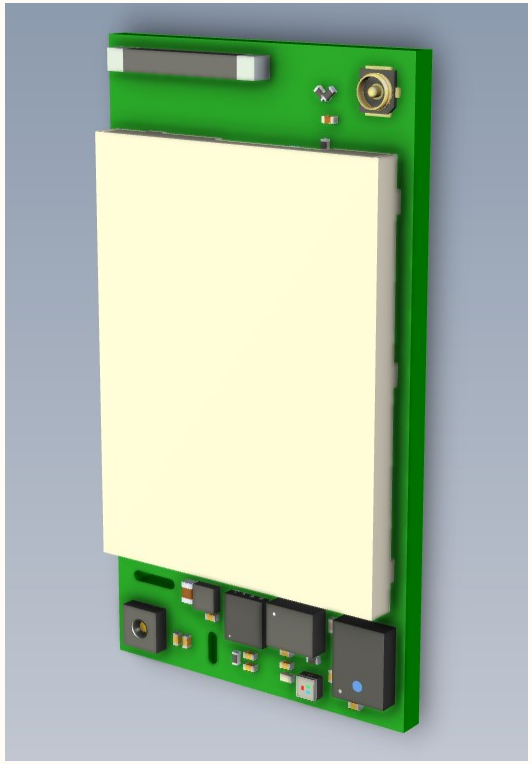
NiCE5340 LGA SoM

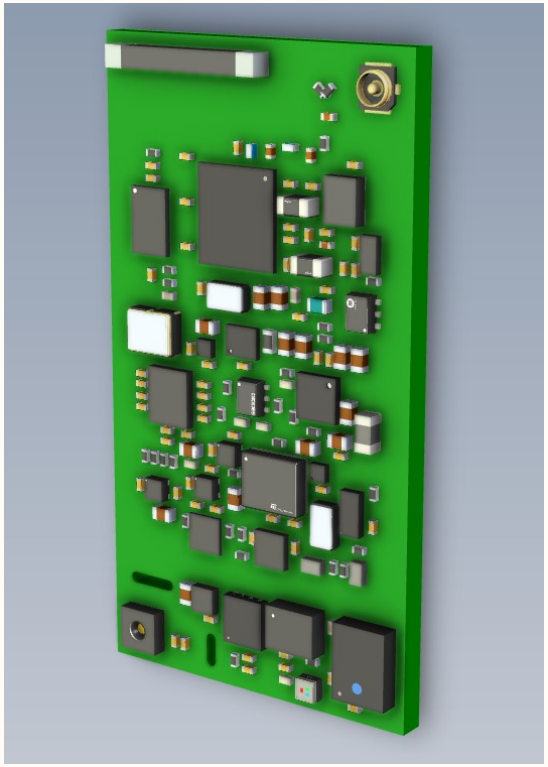
Rev 1.0

Released 19.02.2024

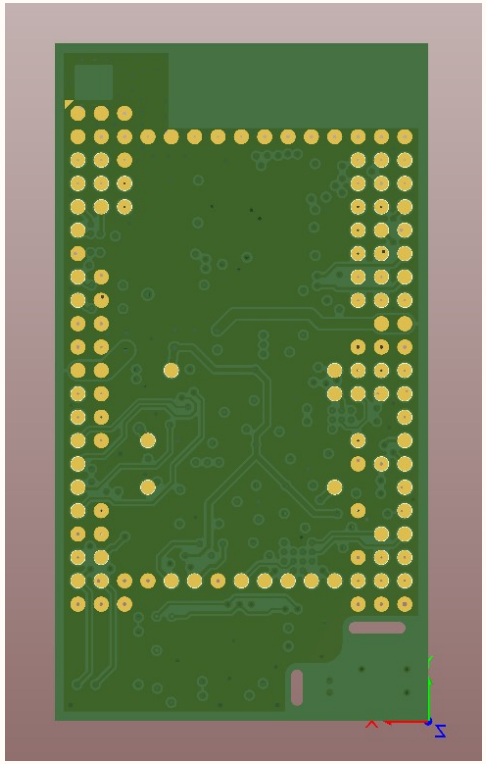
TOP VIEW - SHIELDED



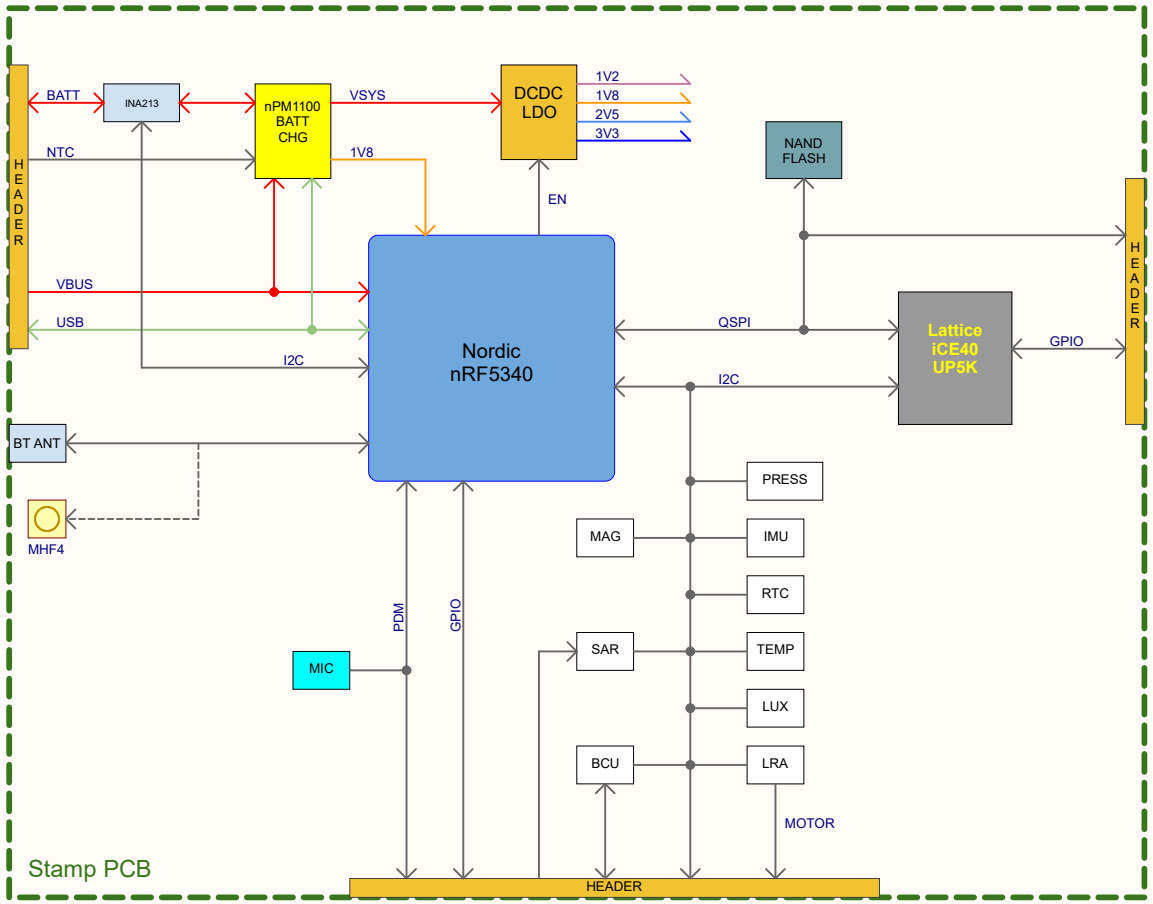
TOP VIEW - NO SHIELD



BOT VIEW - LGA HEADER



Title	*NiCE5340 - Cover Page*		
Size: A4	Number:	Revision: 1.0	PRODES LAB Electronic Design
Date: 04/06/2024	Time: 14:10:38	Sheet 1 of 9	
File: Cover Page.SchDoc			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: 04/06/2024 Time: 14:10:38		Sheet 2 of 9
File: Block Diagram.SchDoc		Drawn By: Viola S.

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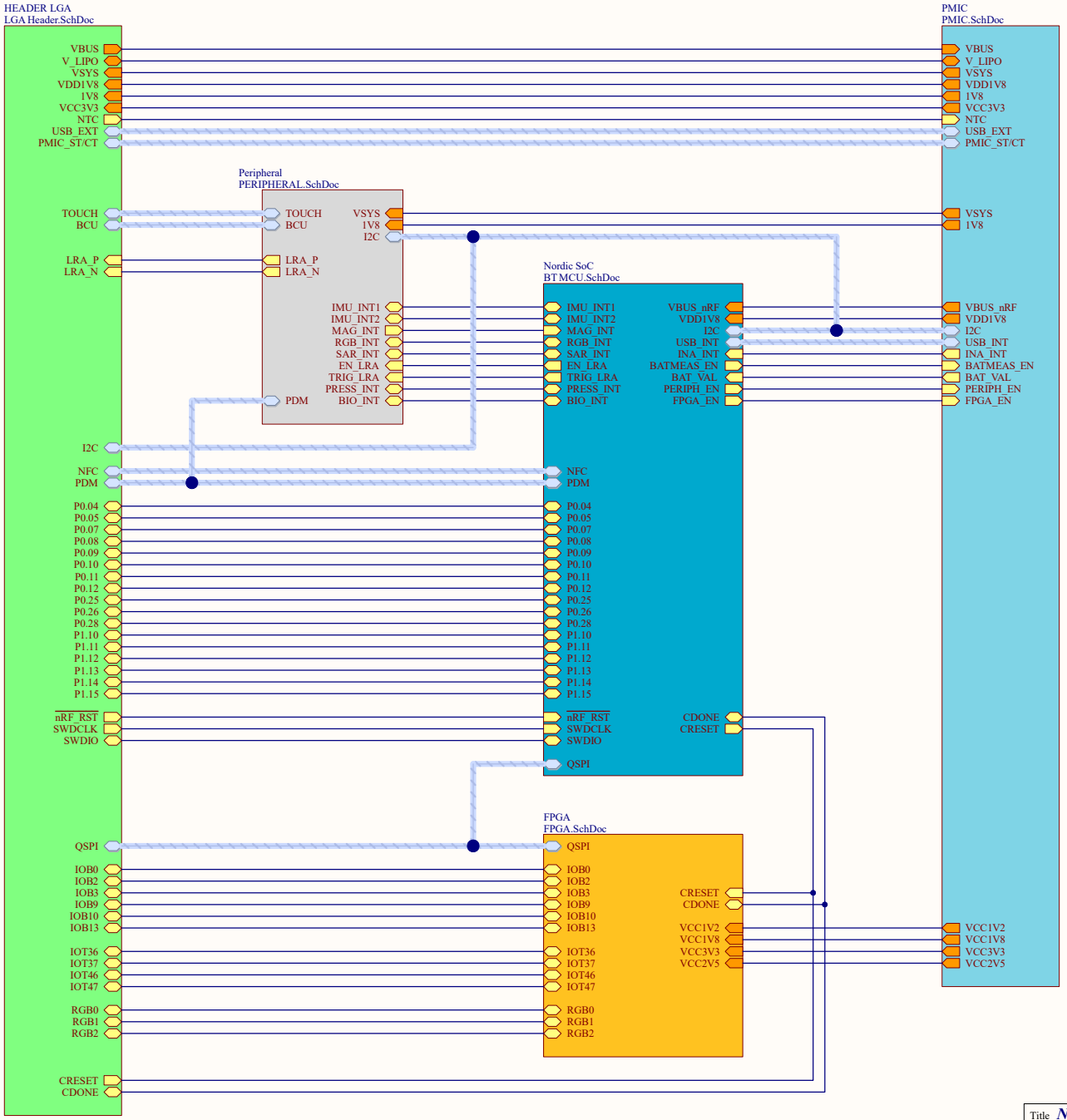

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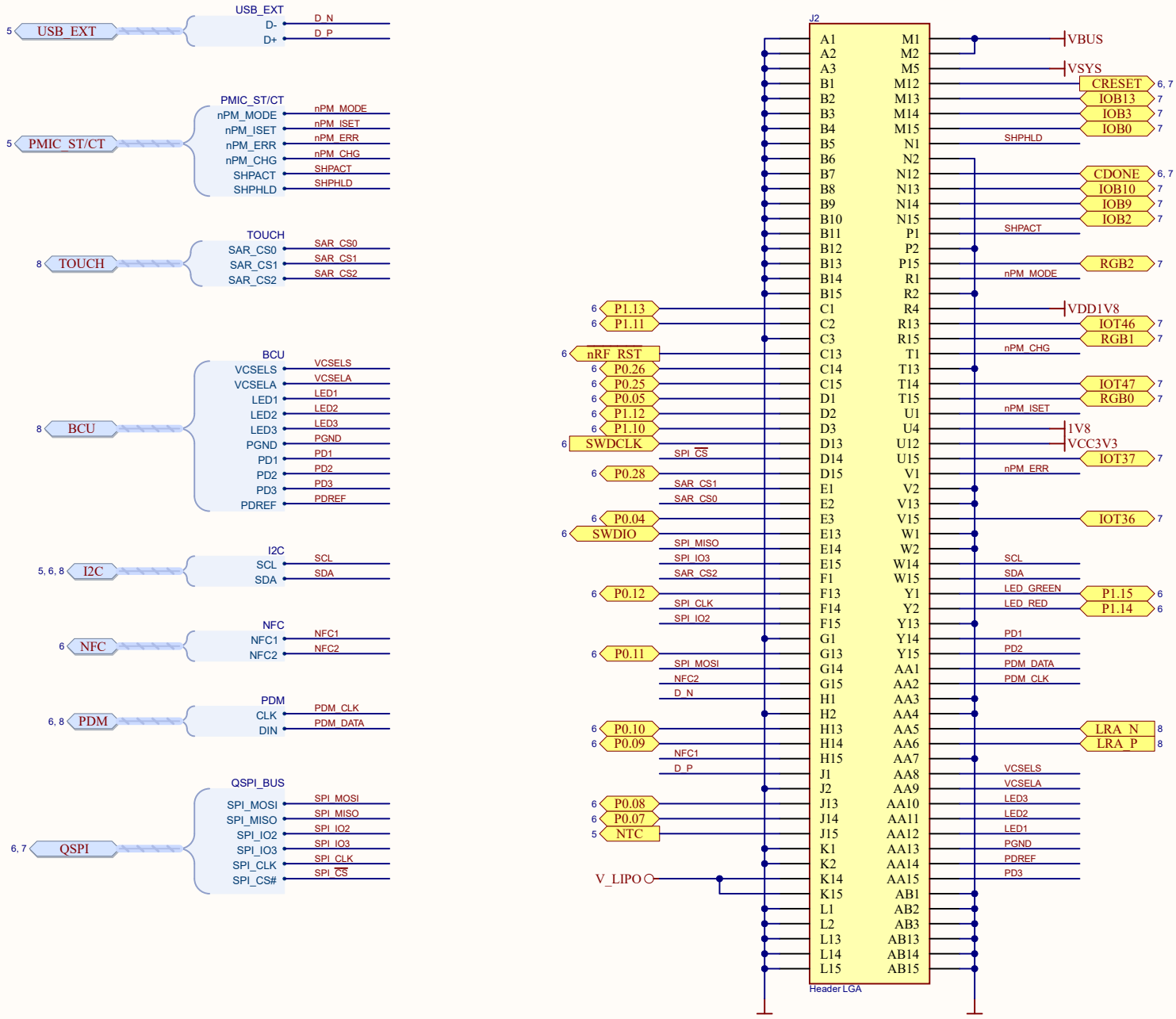

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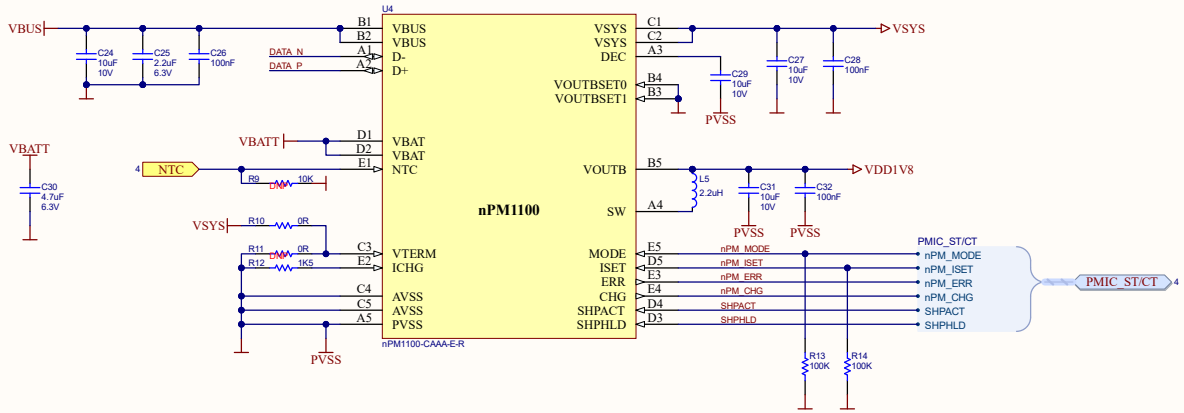
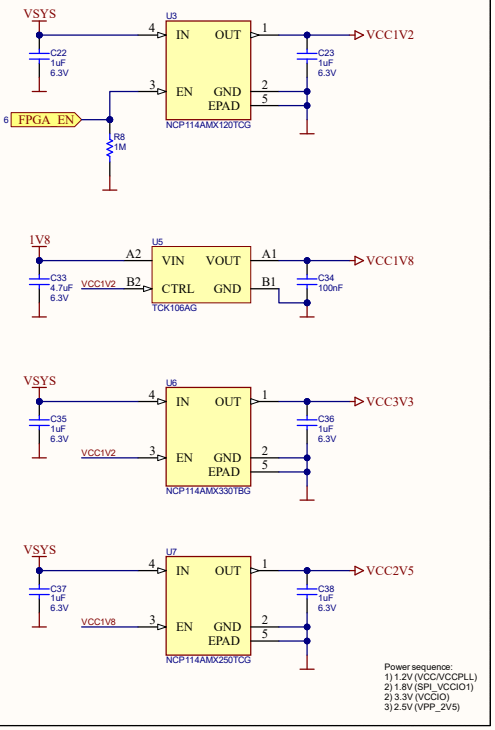
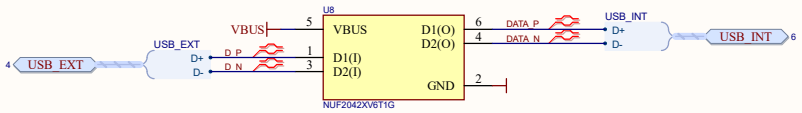
PMIC / CHARGE



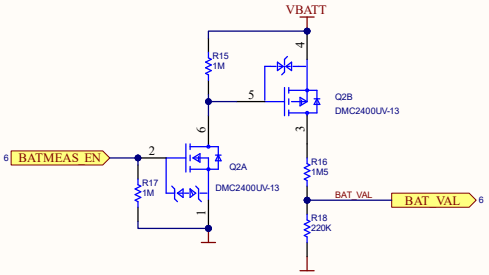
DCDC FPGA



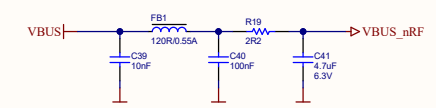
USB Upstream Terminator and ESD



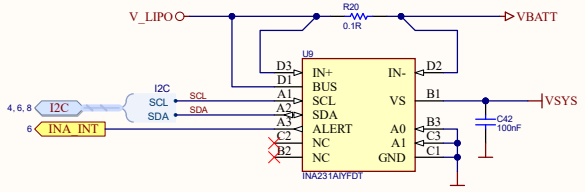
Battery Voltage Monitor



MCU VBUS Filter

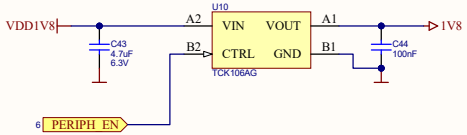


Battery Charge/Discharge Current Measurement



I2C slave address: 0x40

Peripheral Load Switch



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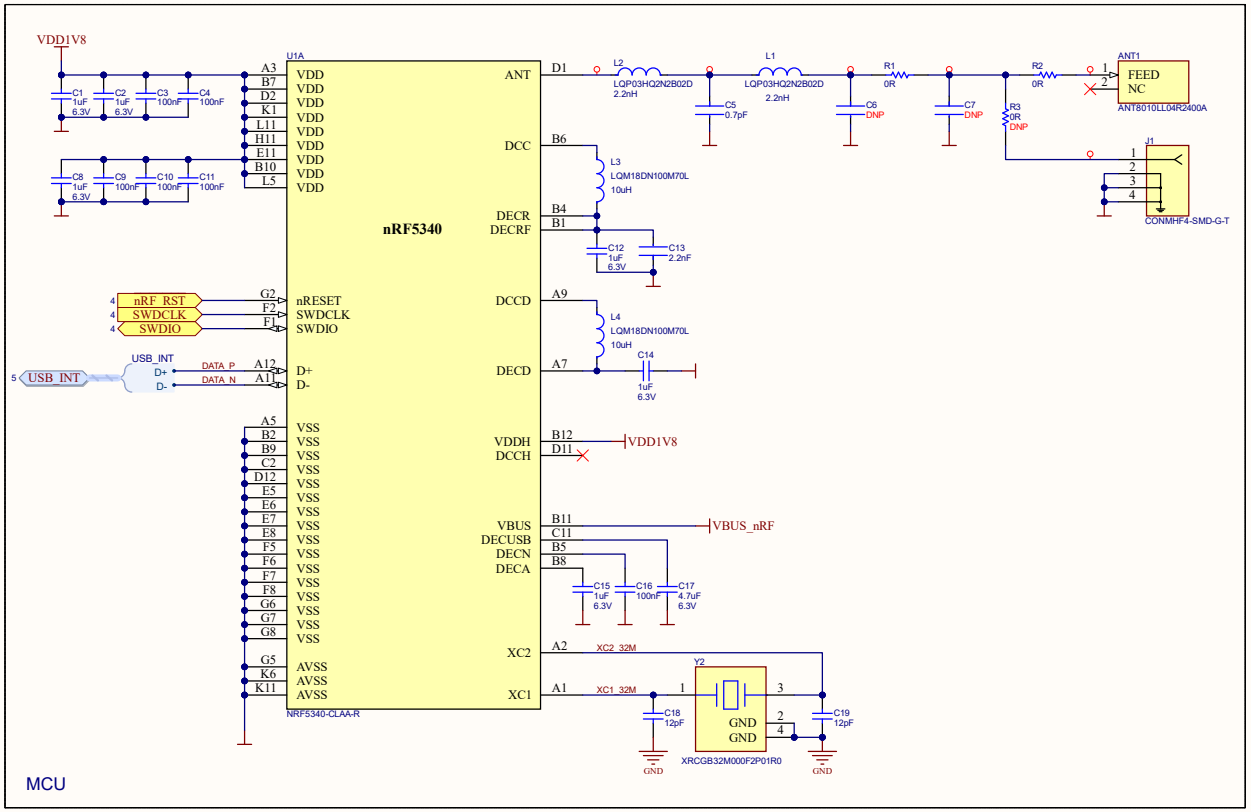

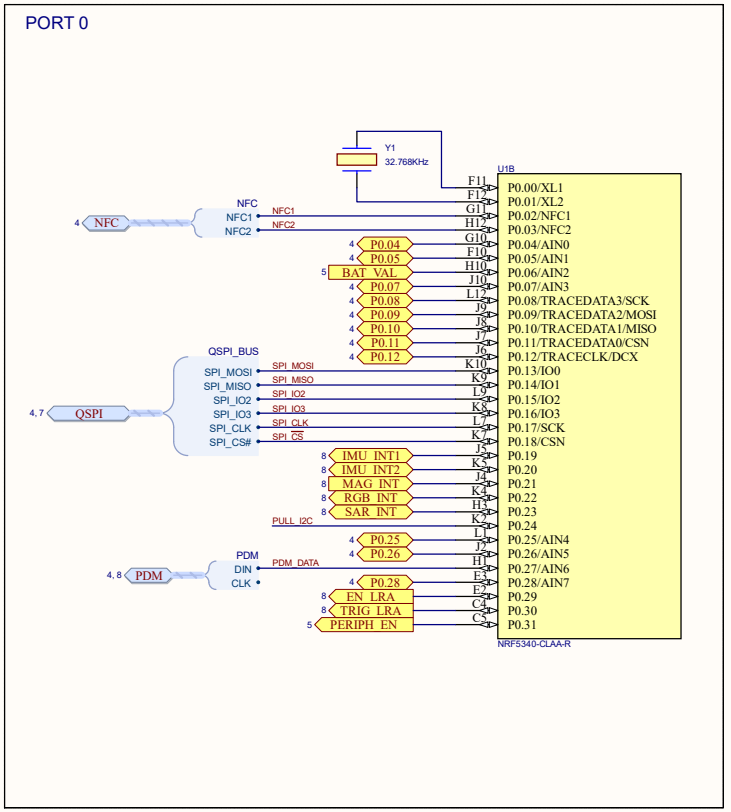

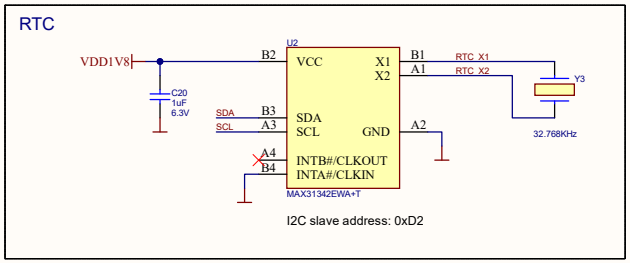

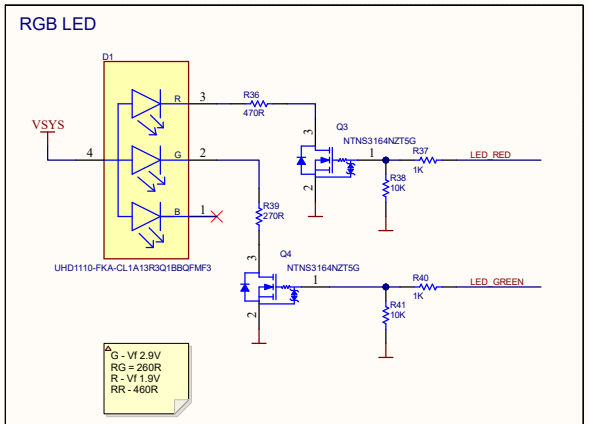

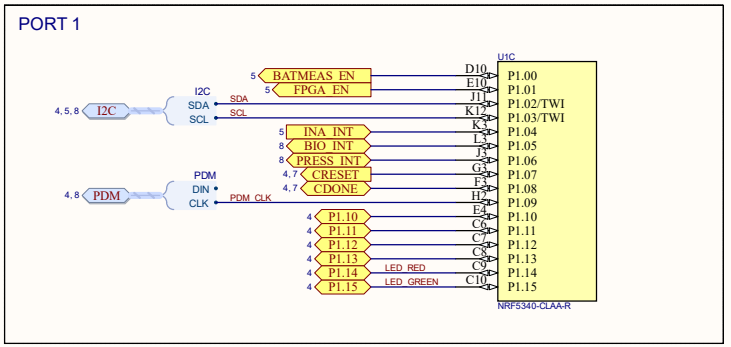

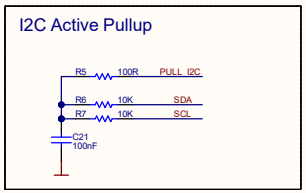

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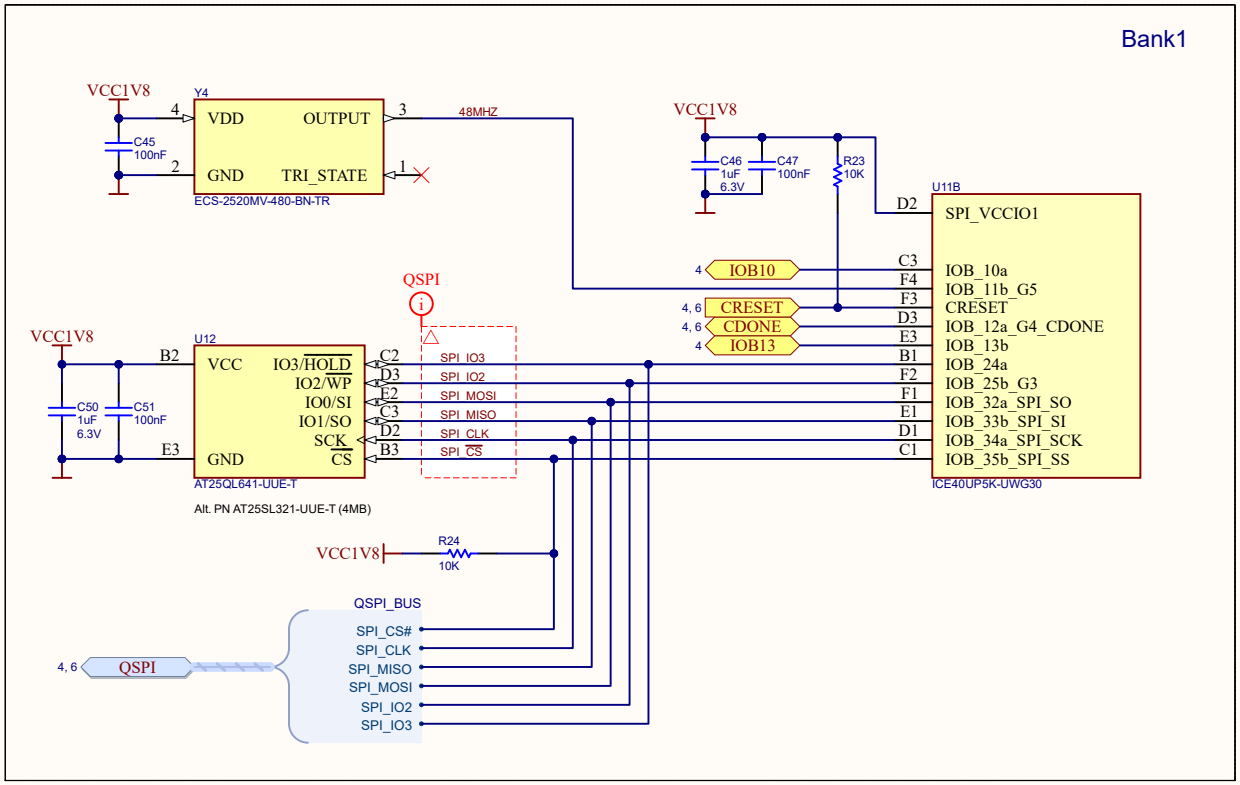

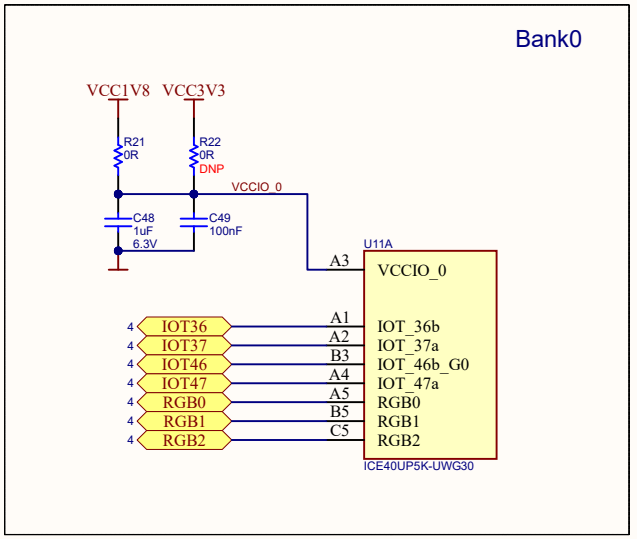

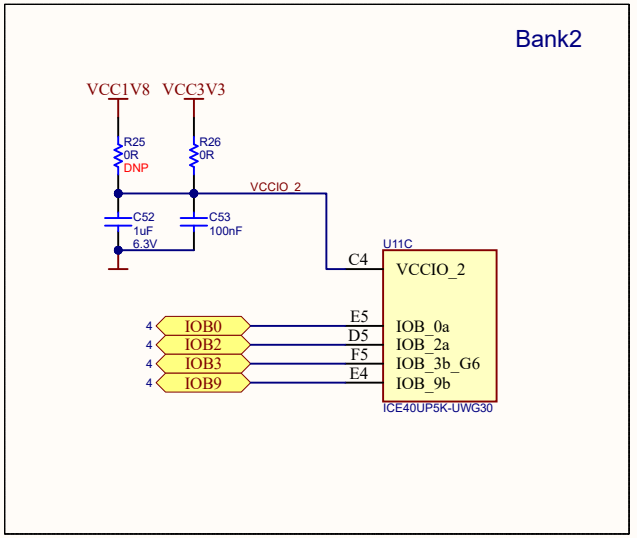

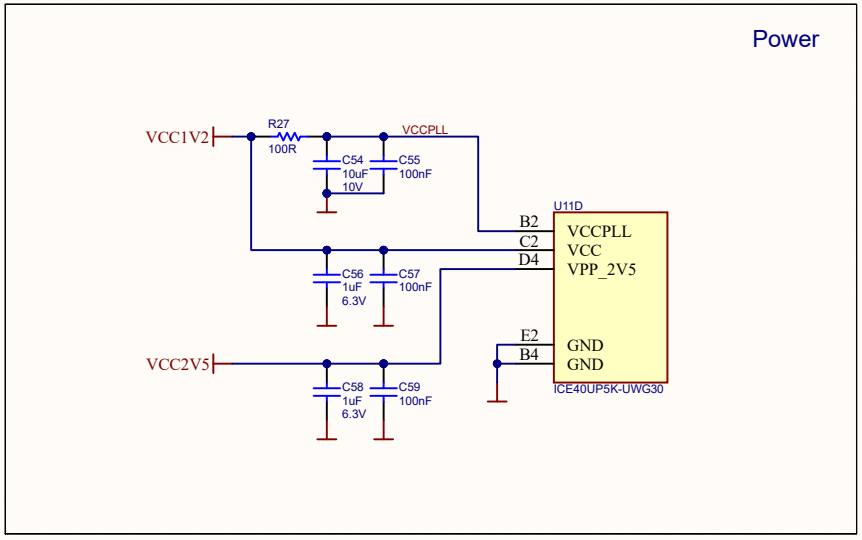

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File: FPGA.SchDoc		Drawn By: Viola S.

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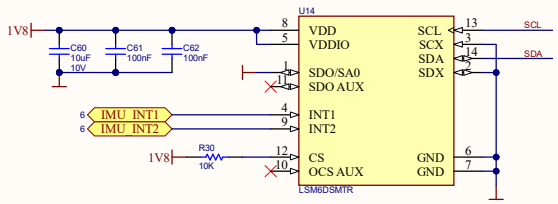
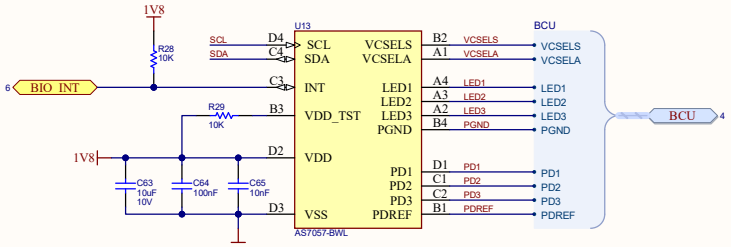
6DOF IMU



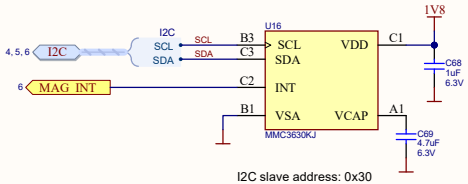
I2C slave address: 0x6A

Biosignal Converting Unit



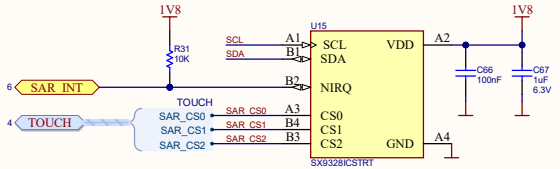
I2C slave address: 0x55

Magnetometer



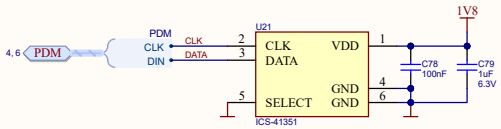
I2C slave address: 0x30

SAR Sensor

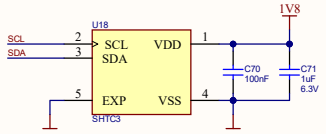


I2C slave address: 0x28

PDM MEMS MIC

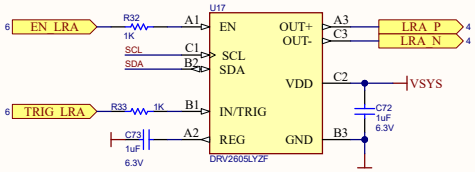


Humidity and Temperature



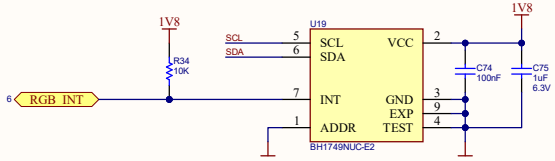
I2C slave address: 0x70

Haptic Driver



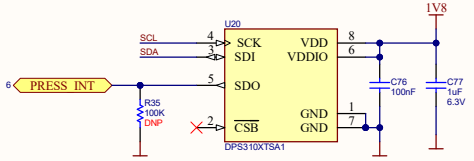
I2C slave address: 0x5A

RGB IR Color Sensor



I2C slave address: 0x38

Barometric Pressure Sensor



I2C slave address: 0x77

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Size: A3	Number:	Revision: 1.0
Date: 04/06/2024 Time: 14:10:39		Sheet 8 of 9
File: PERIPHERAL.SchDoc		Drawn By: Viola S.

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REVISION HISTORY

Schematics Index	Revision	Change Description	Date	Drawn
P01: Cover Page P02: Block Diagram P03: Main P04: LGA Header P05: PMIC P06: BT MCU P07: FPGA P08: Peripheral P09: Revision History	Rev. 1.0	Initial Version	29.12.2023	S. Viola

Title	*NiCE5340 - Revision Hystory*		
Size: A4	Number:	Revision: 1.0	
Date: 04/06/2024	Time: 14:10:40	Sheet 9 of 9	
File: Revision History.SchDoc			Drawn By: Viola S.

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