



PROTOTYPE V1.0.1

Power

POWER

File: Power.kicad_sch

User Interface

UI

File: User_Interface.kicad_sch

SD Card

SD CARD

File: SD_CARD.kicad_sch

Audio Front-End

AUDIO

File: AUDIO_FRONT_END.kicad_sch

STM32H7

STM32H7

File: STM32H7.kicad_sch

STM32F4

STM32F4

File: STM32F4.kicad_sch

LARA-R6

LARA

File: untitled.kicad_sch

USBC

USBC

File: USBC.kicad_sch

GNSS

GNSS

File: GNSS.kicad_sch

Sensors

SENSORS

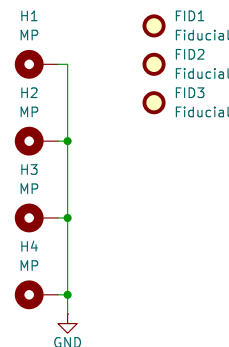
File: Sensors.kicad_sch

LARA Power

LARA PWR

File: LARA_PWR.kicad_sch

MECHANICAL



→ UNDER REVISION ←
→ DO NOT ←
→ MANUFACTURE ←

Sheet: /
File: FI_Cellphone_PCB.kicad_sch

Title: Root

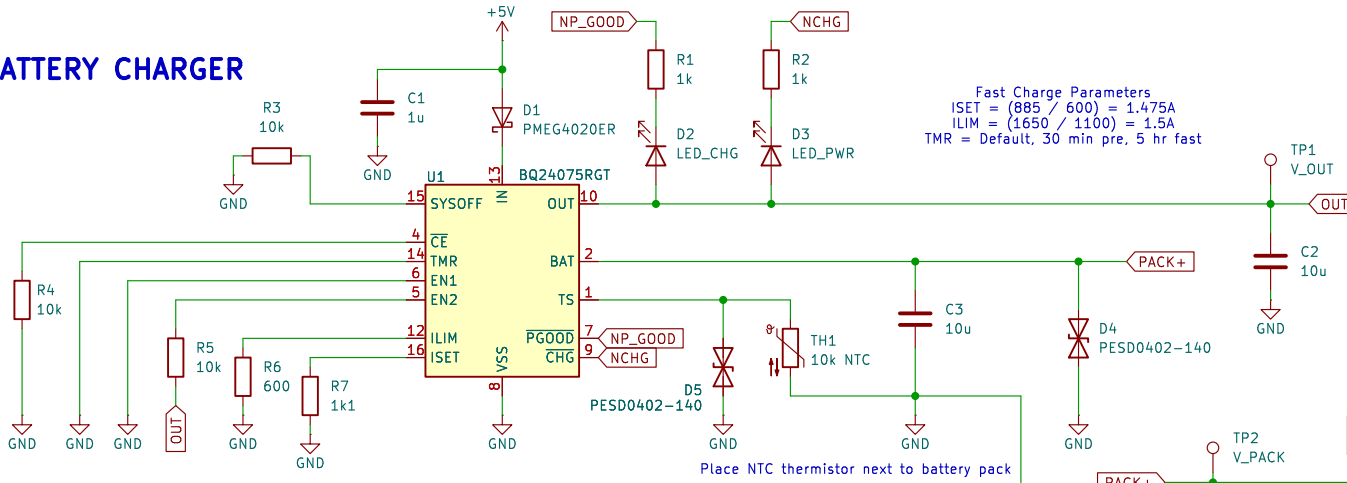
Size: A4 Date: 2024-08-10

KiCad E.D.A. 8.0.3

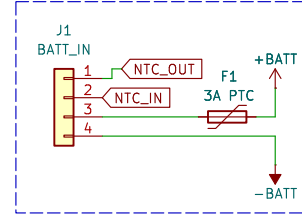
Rev: 1.0.0

Id: 1/12

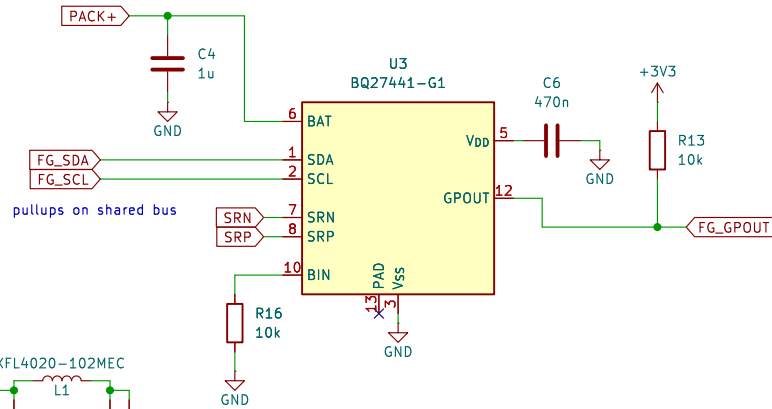
BATTERY CHARGER



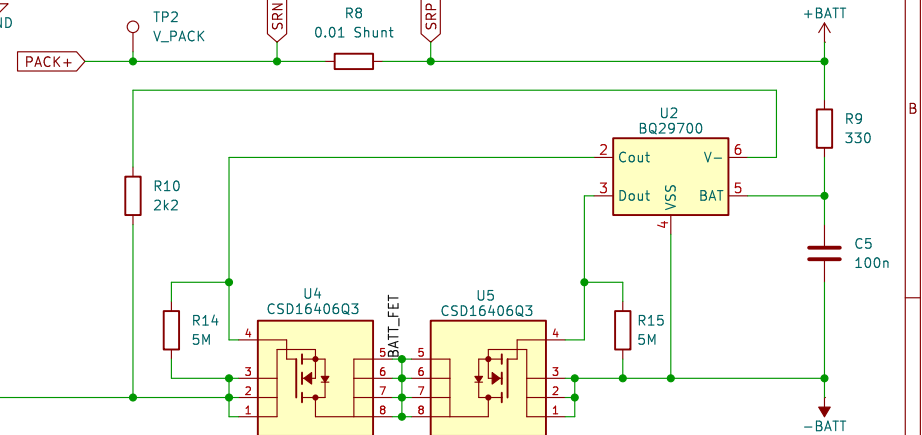
BATTERY CONN



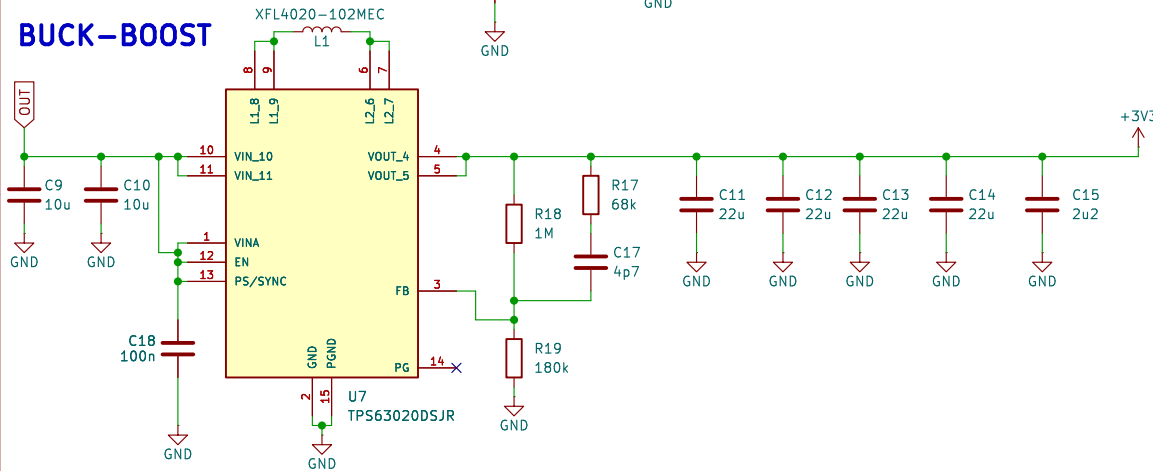
BATTERY FUEL GAUGE



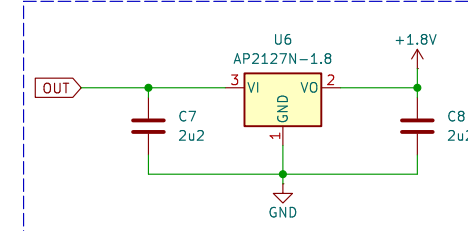
BATTERY PROTECTION



BUCK-BOOST



1V8 LDO



Sheet: /Power/
 File: Power.kicad_sch

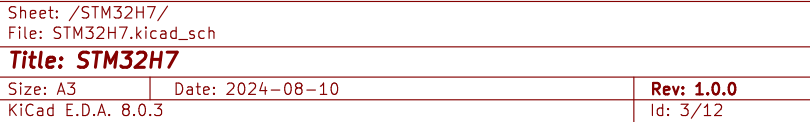
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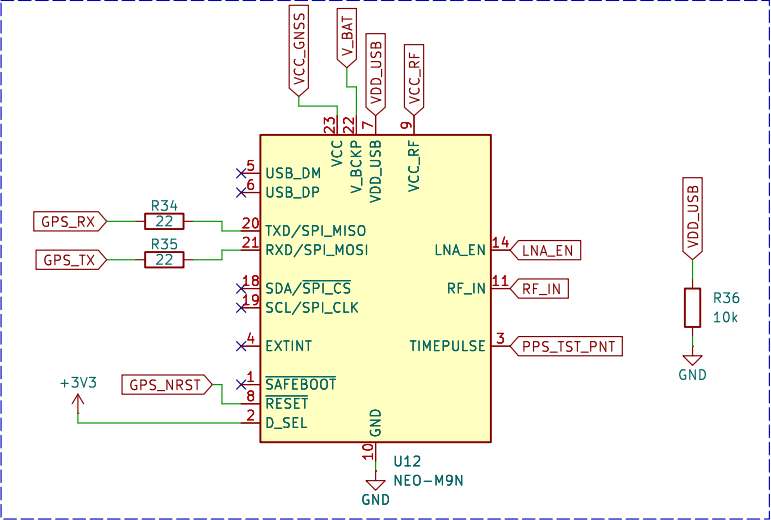
Date: 2024-08-10

Rev: 1.0.0

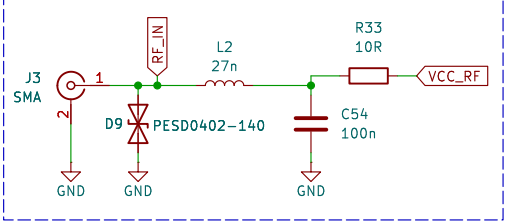
Id: 2/12



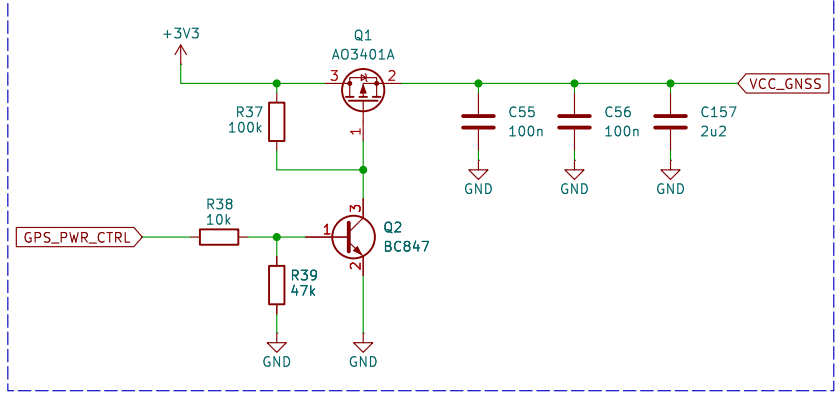
NEO-M9N



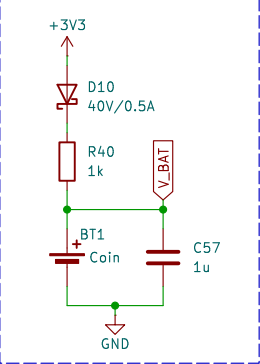
SMA BIAS-T



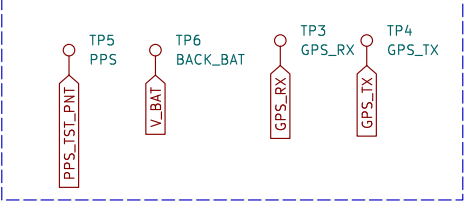
VCC CONTROL



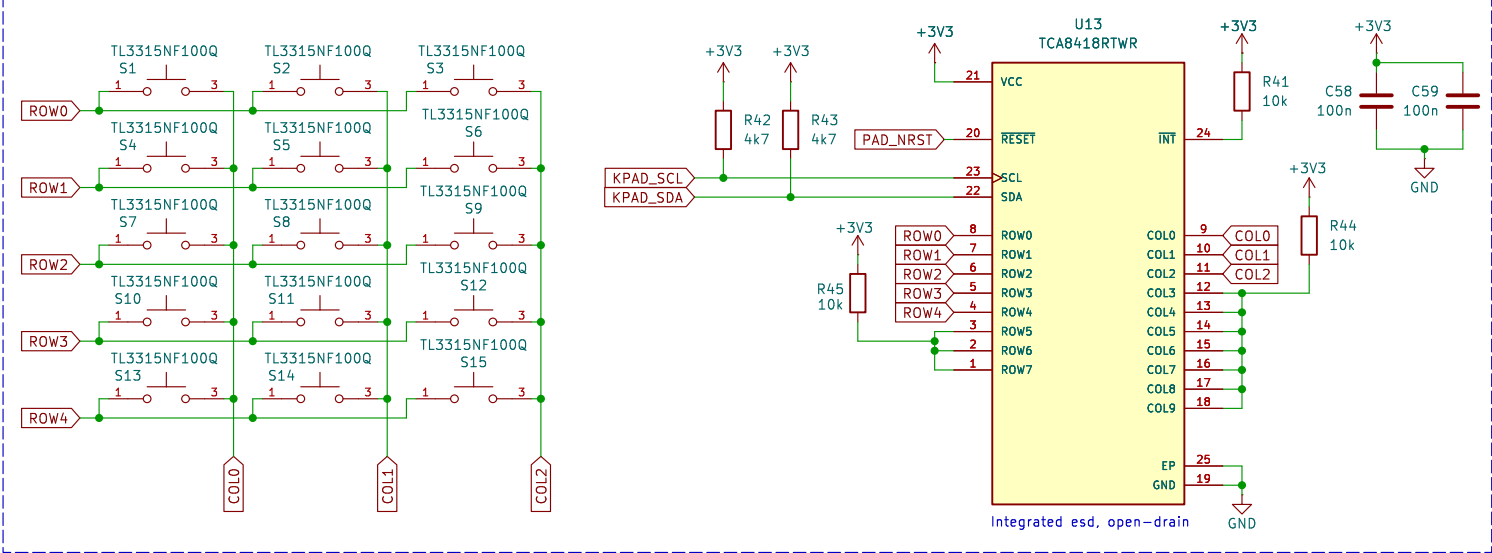
GPS BACKUP



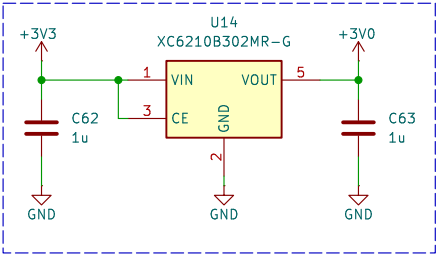
GPS TEST



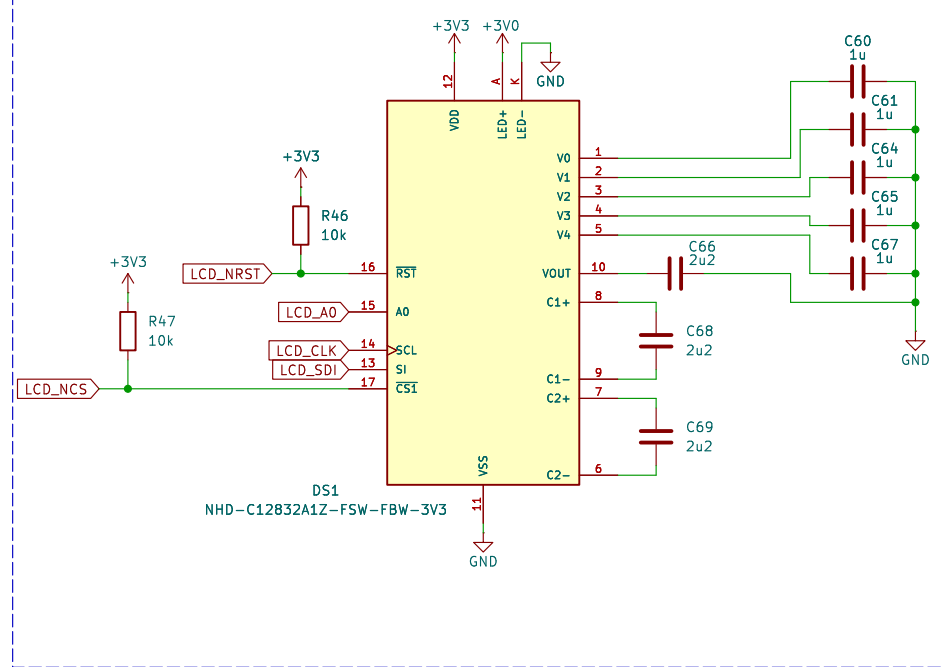
BUTTON MATRIX



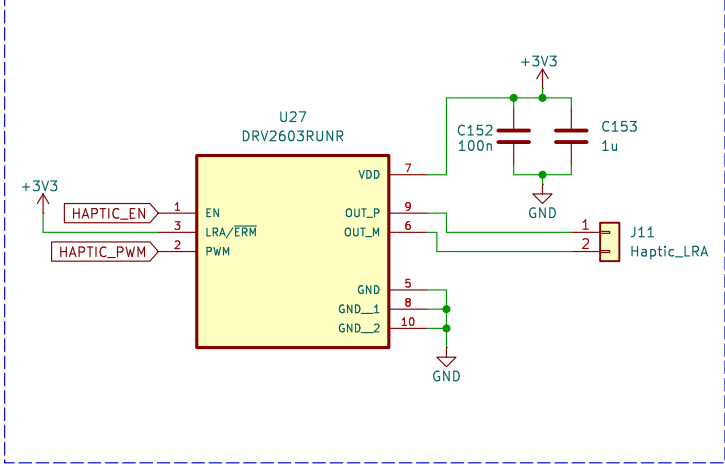
LCD LED SUPPLY



LCD, 128x32



HAPTIC DRIVER



Sheet: /User Interface/
File: User_Interface.kicad_sch

Title: User Interface

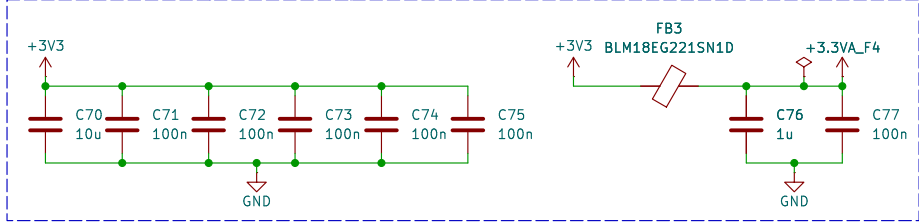
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KiCad E.D.A. 8.0.3

Date: 2024-08-10

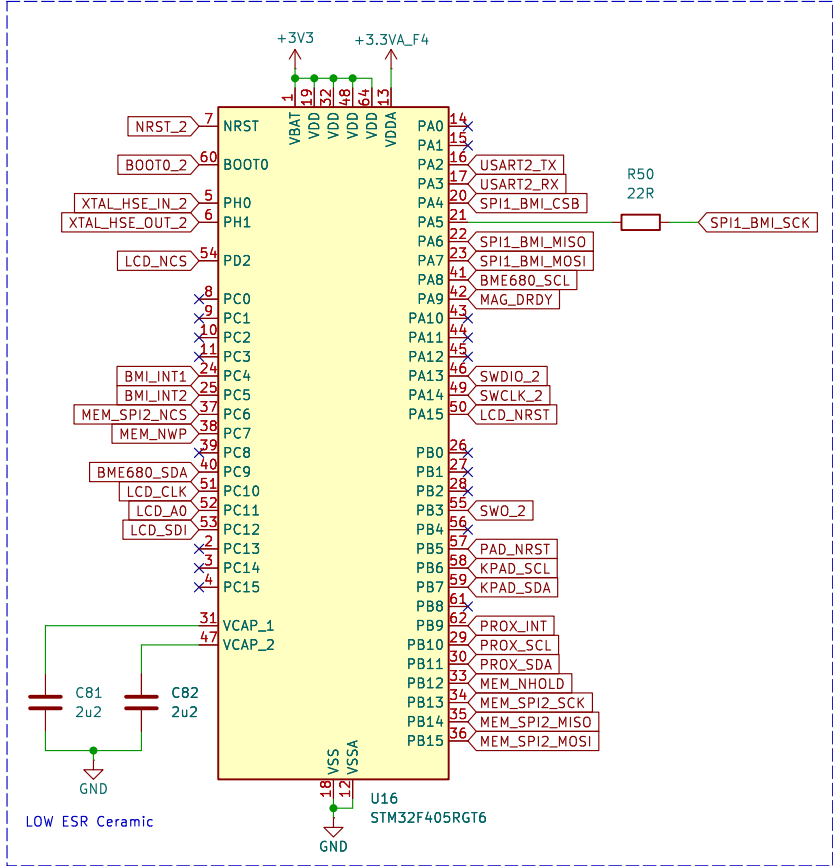
Rev: 1.0.0

Id: 5/12

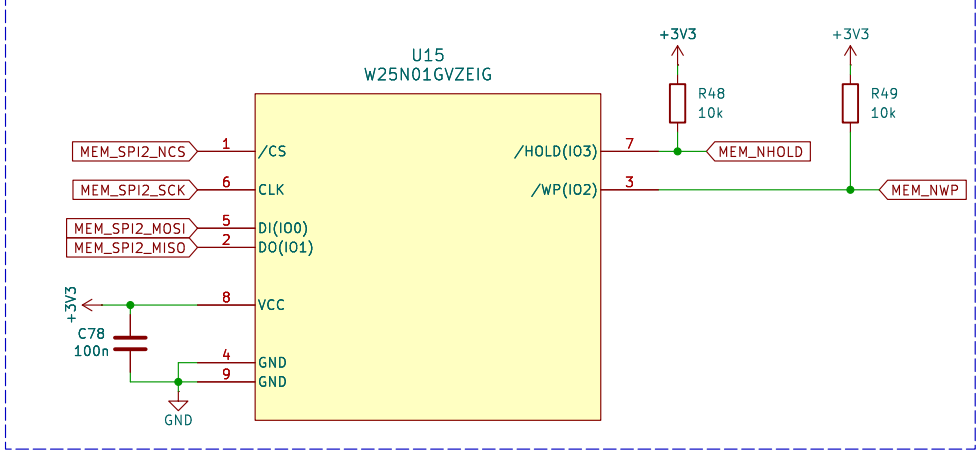
DECOUPLING (VDD,VDDA)



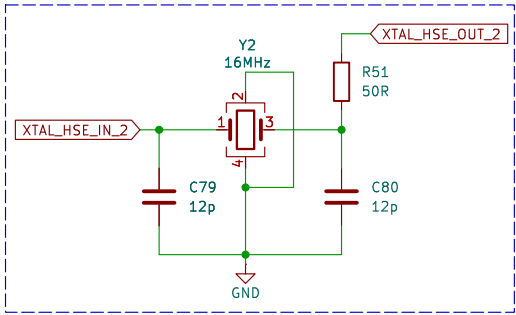
STM32F4 MCU



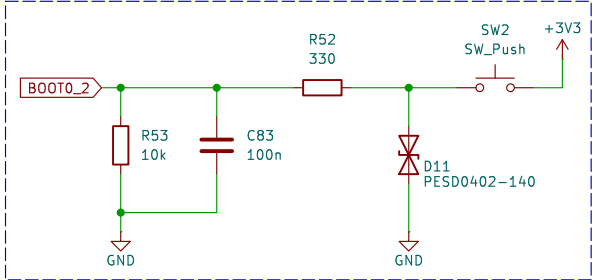
FLASH



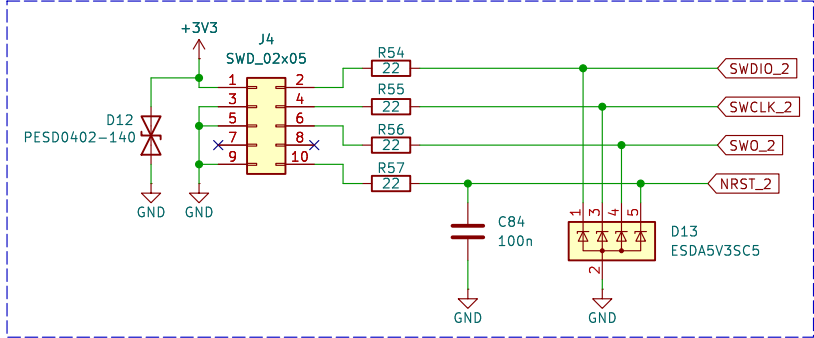
XTAL HSE



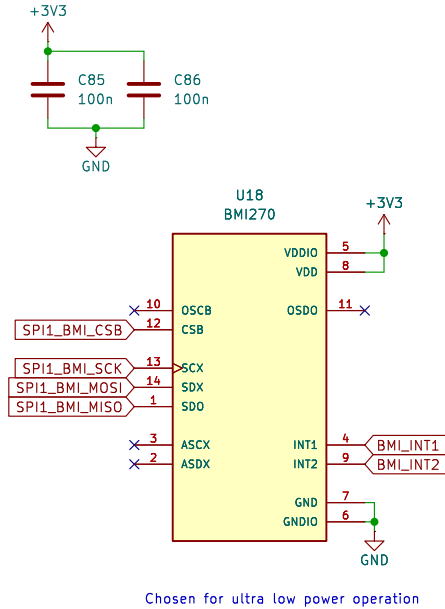
BOOT MODE



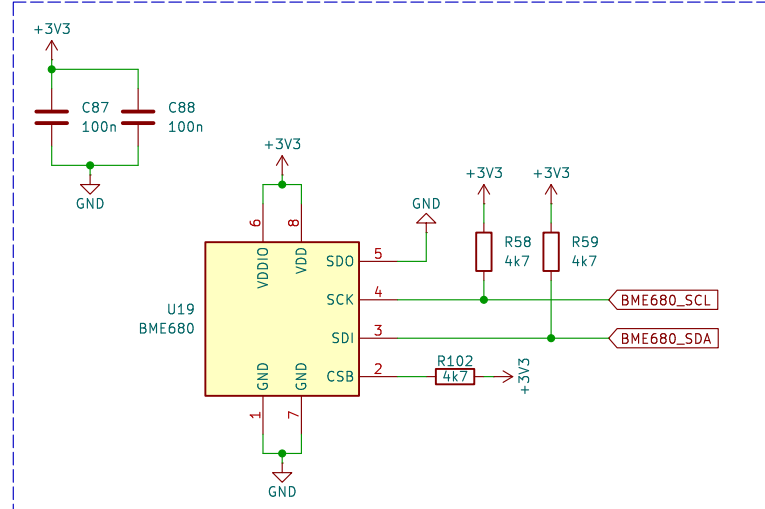
SWD HEADER + ESD



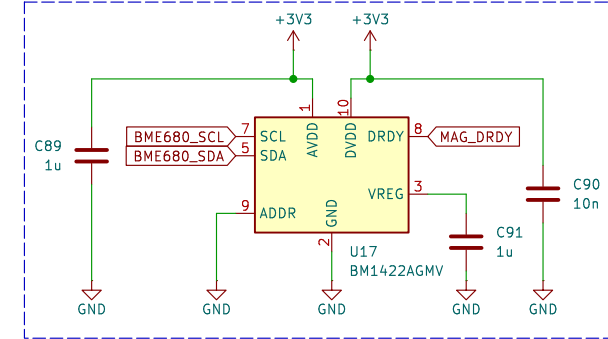
IMU



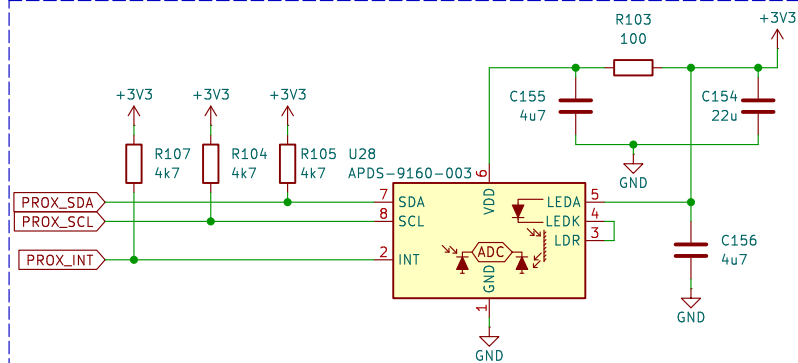
GAS, HUMIDITY, PRESSURE, TEMPERATURE SENSOR



MAGNETOMETER



OPTICAL AMBIENT LIGHT SENSOR



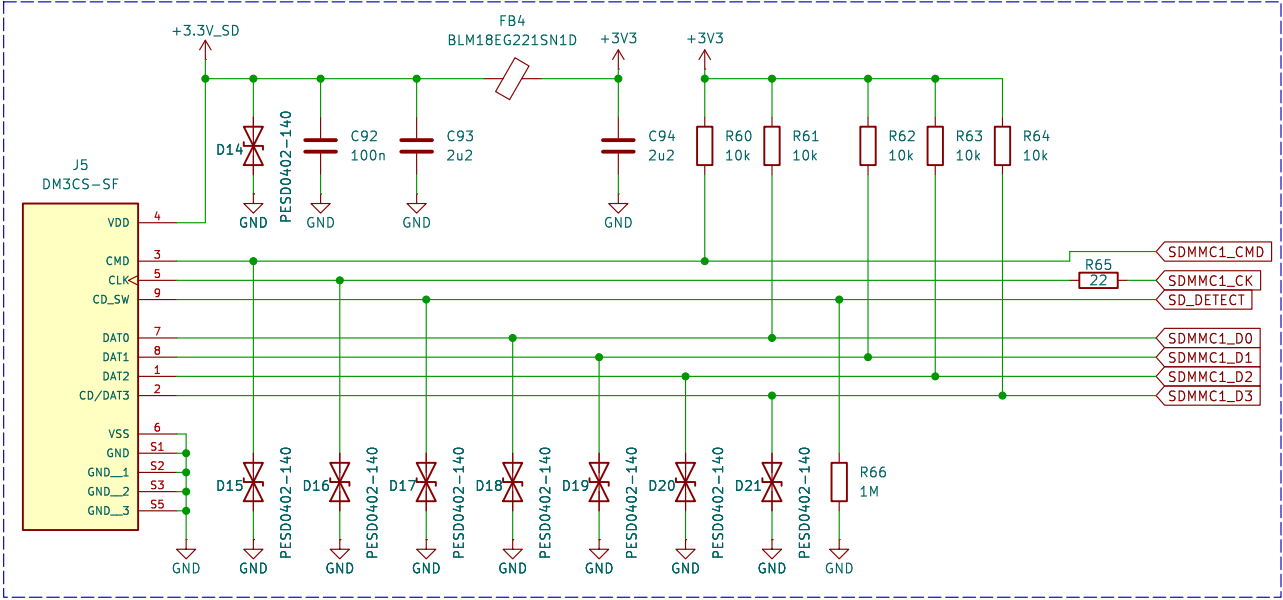
Sheet: /Sensors/
File: Sensors.kicad_sch

Title: Sensors

Size: A4 Date: 2024-08-10
KiCad E.D.A. 8.0.3

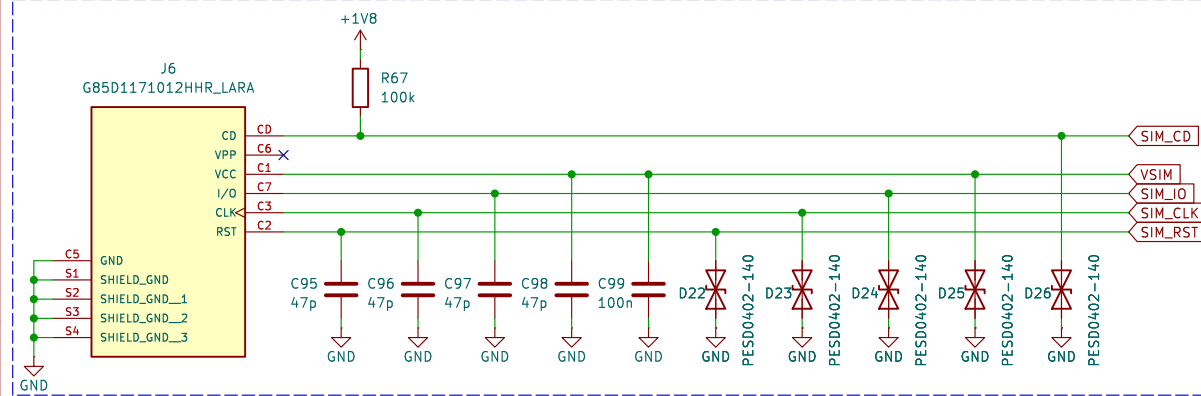
Rev: 1.0.0
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MICRO SD CARD

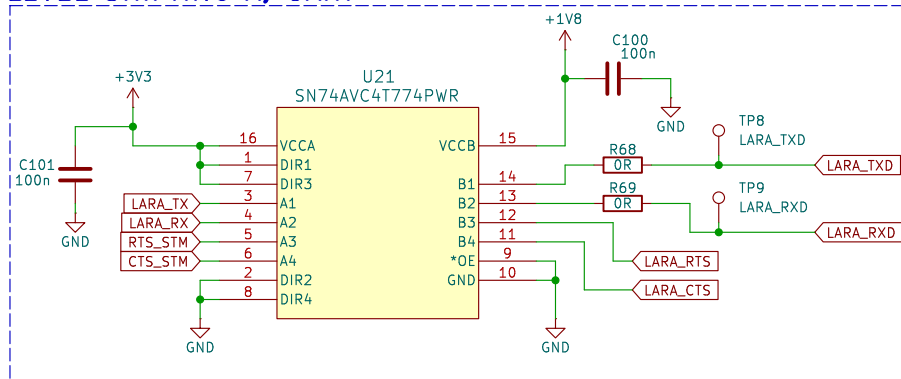


Sheet: /SD Card/	
File: SD_CARD.kicad_sch	
Title: SD Card	
Size: A4	Date: 2024-08-10
KiCad E.D.A. 8.0.3	Rev: 1.0.0
Id: 8/12	

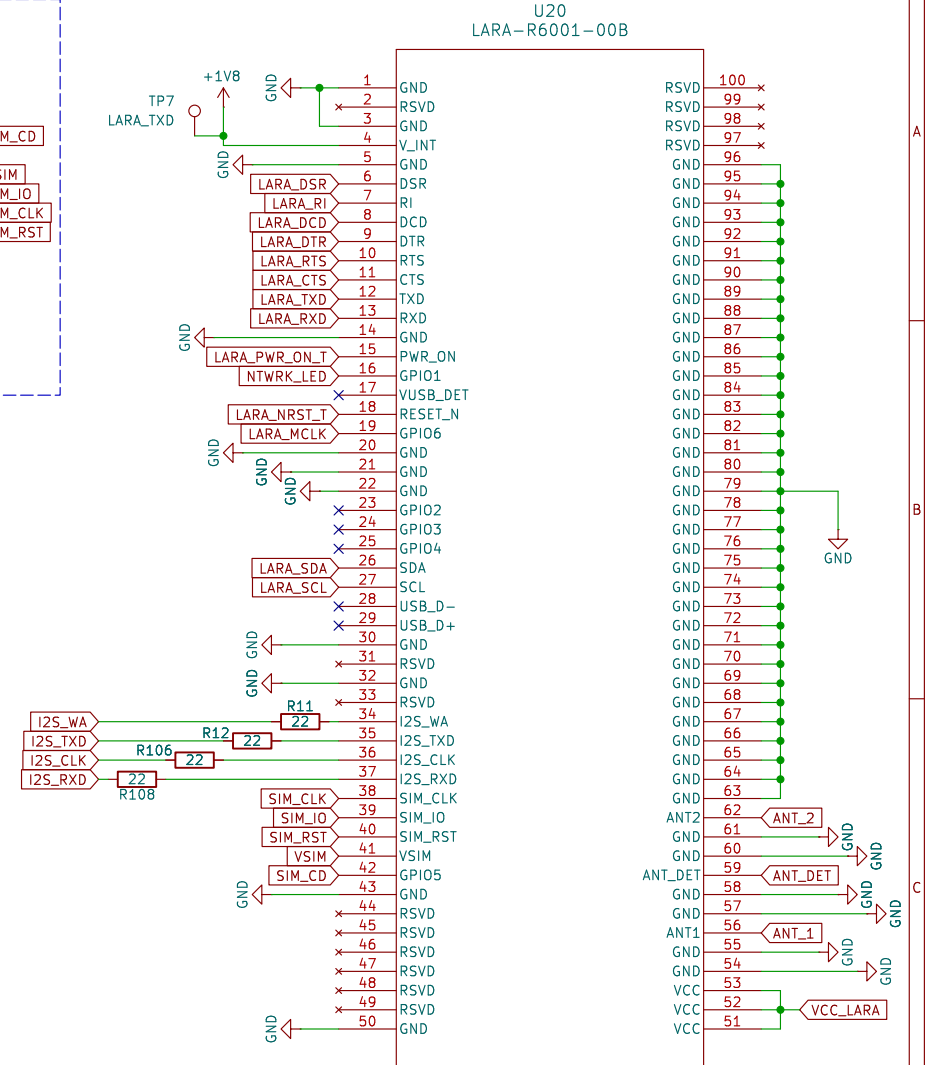
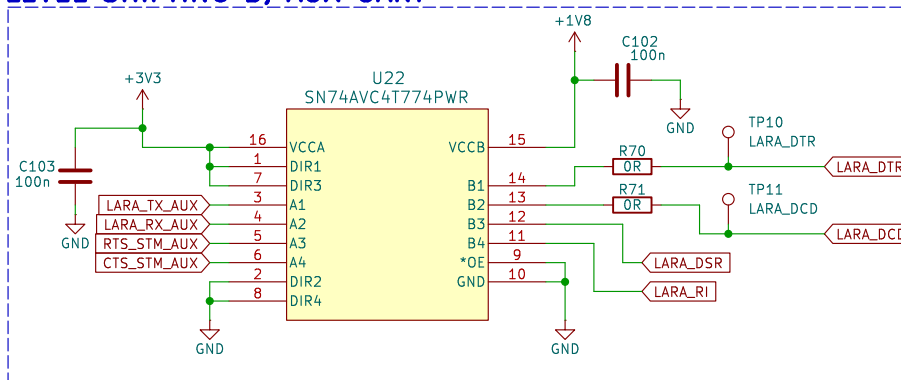
NANO SIM + ESD



LEVEL SHIFTING A, UART



LEVEL SHIFTING B, AUX UART



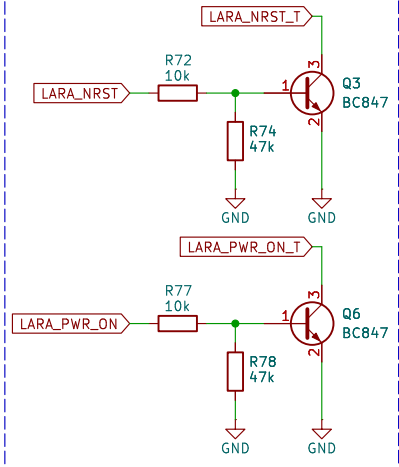
Sheet: /LARA-R6/
File: untitled.kicad_sch

Title: LARA-R6

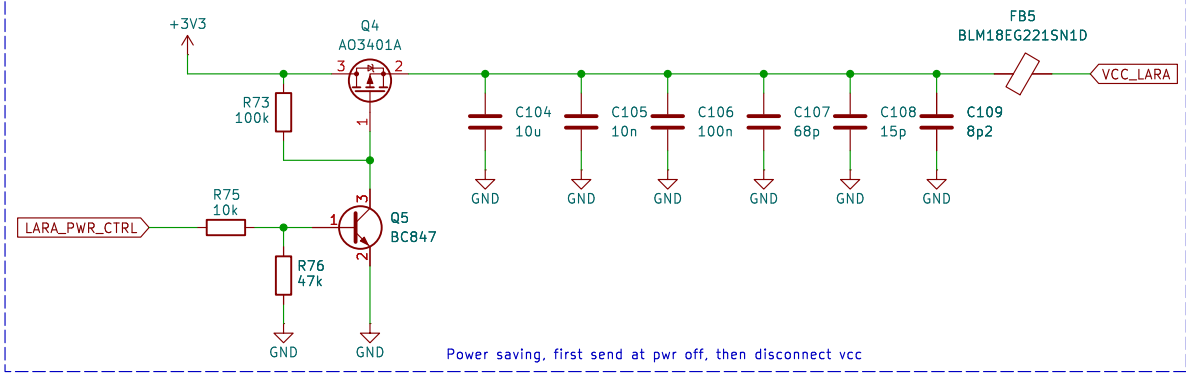
Size: A4 Date: 2024-08-10
KiCad E.D.A. 8.0.3

Rev: 1.0.0
Id: 9/12

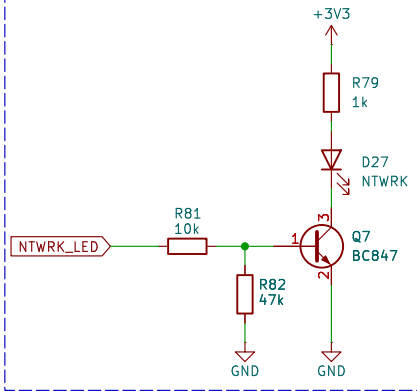
IO CONTROL



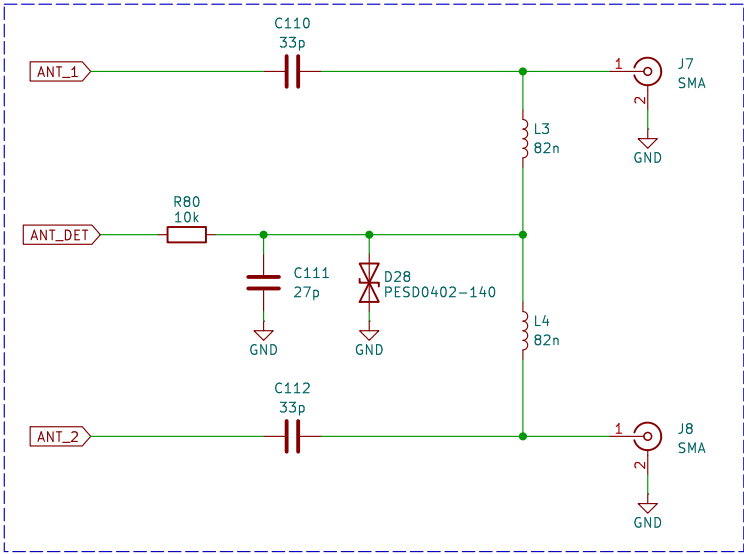
VCC CONTROL



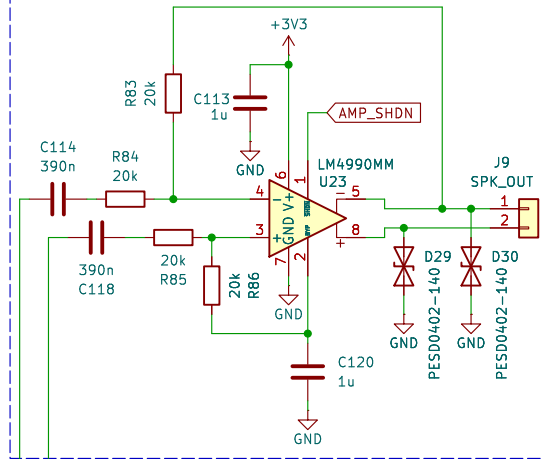
NETWORK INDICATOR



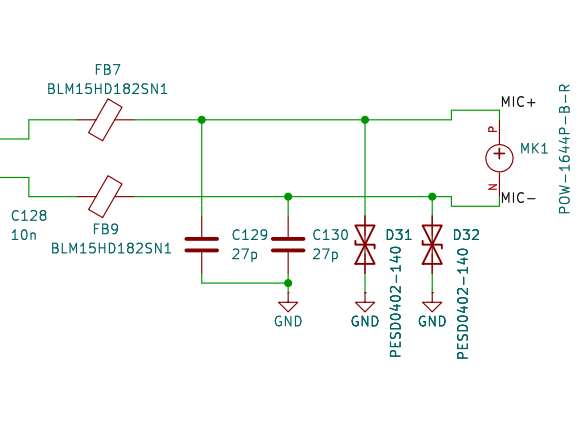
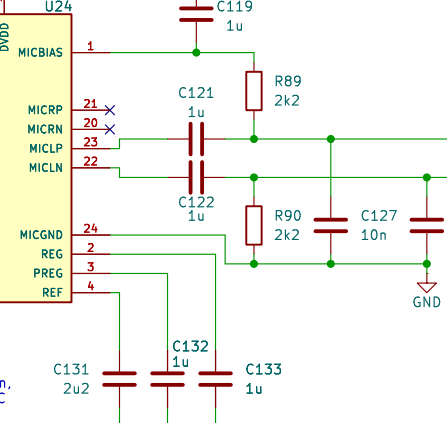
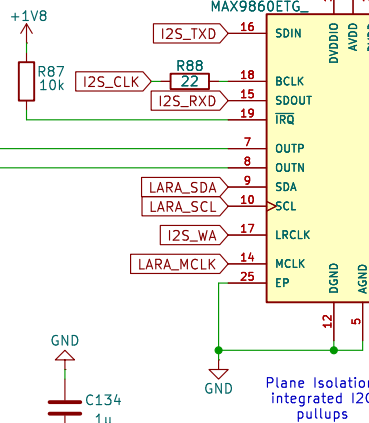
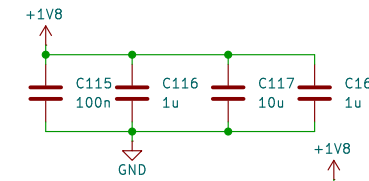
LARA ANTENNAS + MATCHING



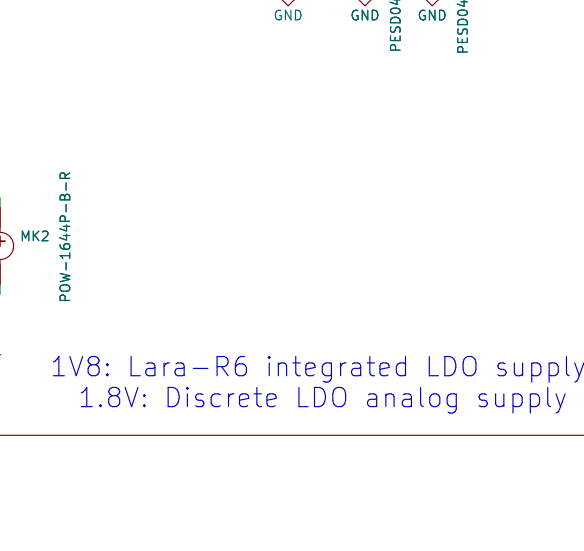
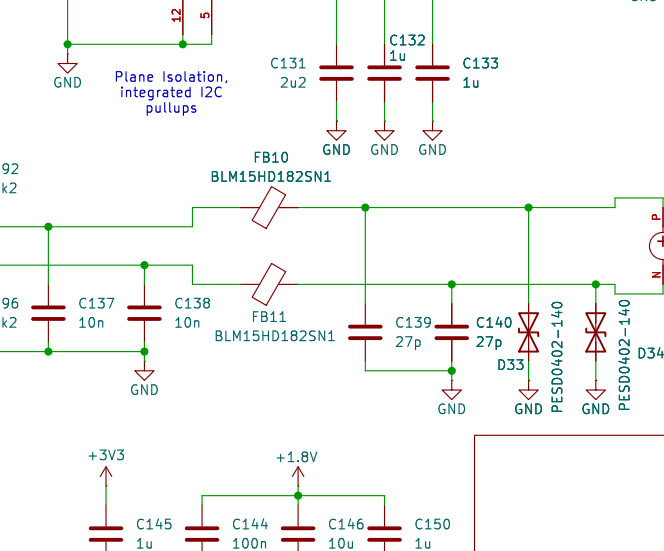
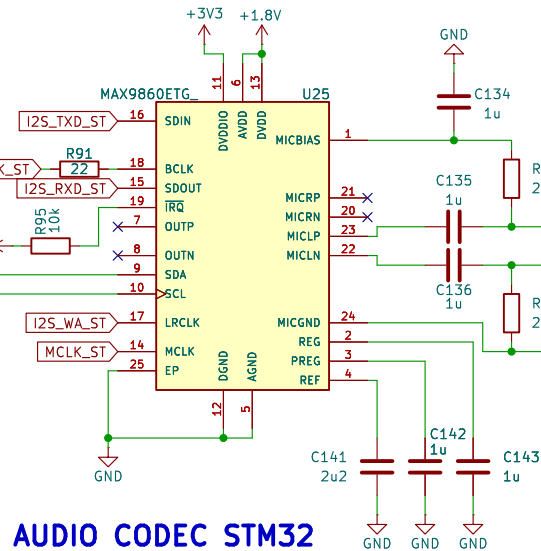
AUDIO AMPLIFIER, test



AUDIO CODEC



AUDIO CODEC STM32



1V8: Lara-R6 integrated LDO supply,
1.8V: Discrete LDO analog supply

Sheet: /Audio Front-End/
File: AUDIO_FRONT_END.kicad_sch

Title: Audio

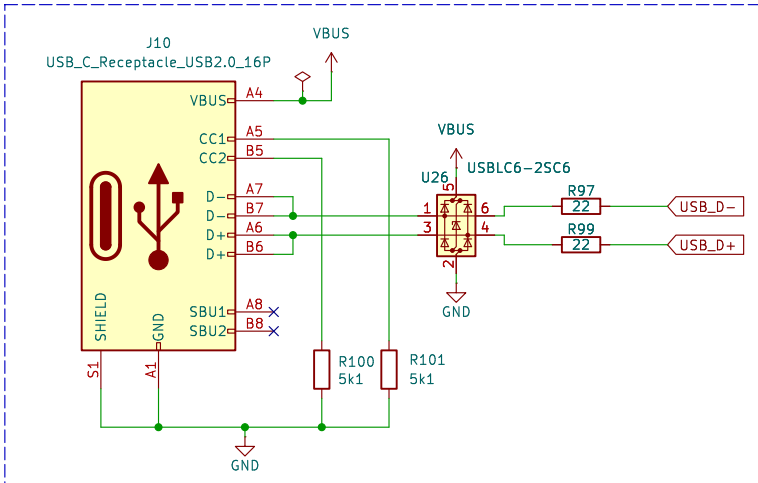
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KiCad E.D.A. 8.0.3

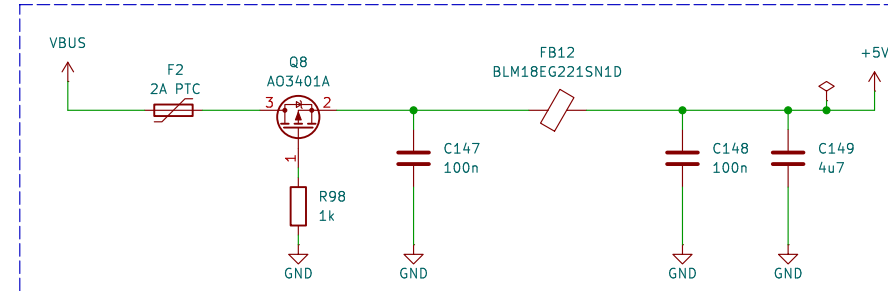
Rev: 1.0.0

Id: 11/12

USB-C INPUT + ESD



VBUS INPUT FILTERING



Sheet: /USBC/
File: USBC.kicad_sch

Title: USBC

Size: A4

Date: 2024-08-10

Rev: 1.0.0

Size: A4	
KiCad E.D.A. 8.0.3	

Id: 12/12