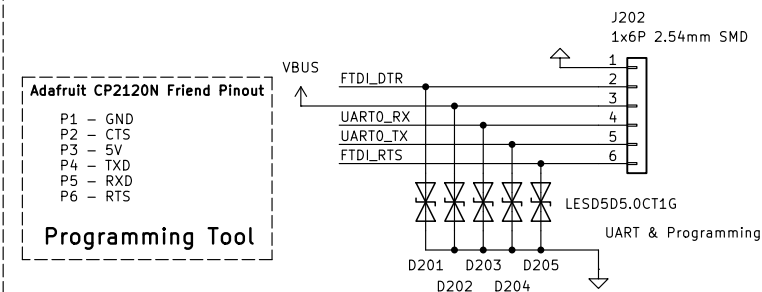
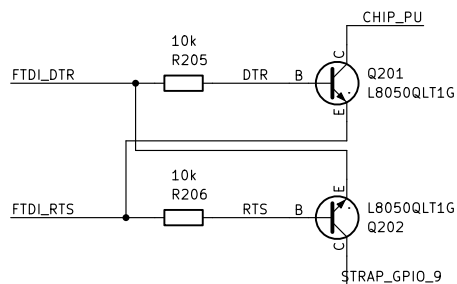


## Programming & Debug Headers

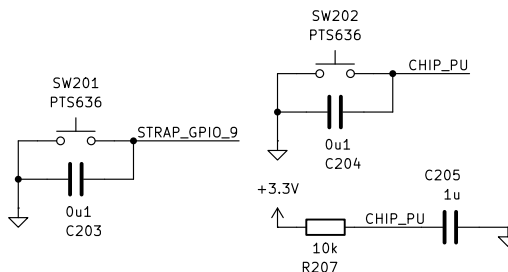


## Auto-Programming



implemented as per  
1. ESP32-C3-DevKitM-1 Schematic Diagram Rev1.0

## Strapping & Programming



implemented as per  
1. ESP32-C6-DevKitM-1 Schematic Diagram Rev1.0

Rearranged Breakout Connectors (I2C &amp; PWR)

Swapped I2C SDA & SCL

**BUCHAREST APPLIED STEAM MUSEUM**

Sheet: /MCU/

File: MCU.kicad\_sch

**Title:** BASM SOUNCARD DEV V0

Size: A4

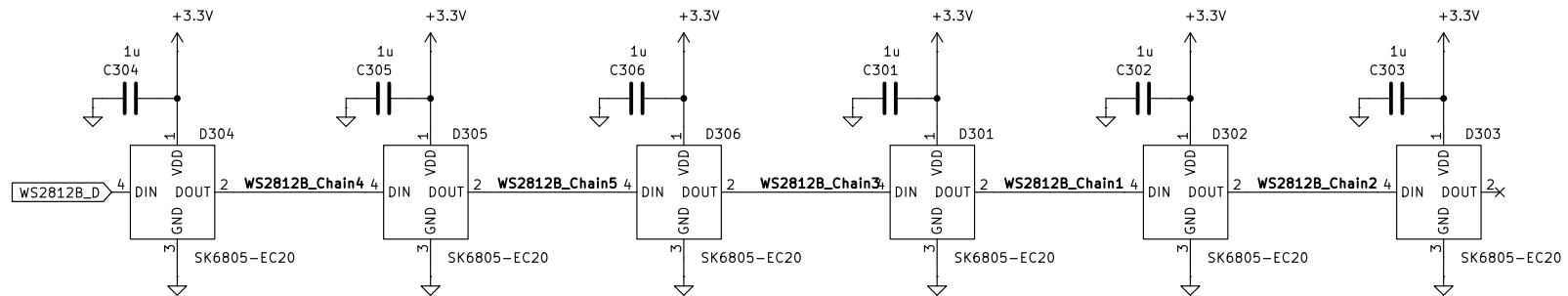
Date: 2025-05-06

Size: A4	
KiCad E.D.A. 8.0.8	

Rev: 2

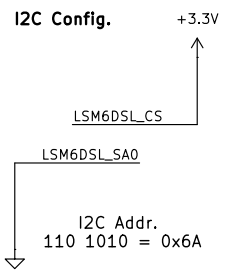
Id: 2/5

## RGB LEDs

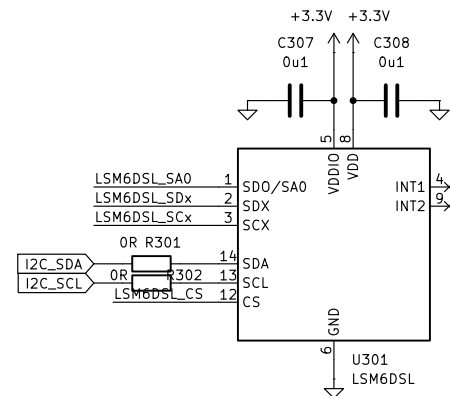
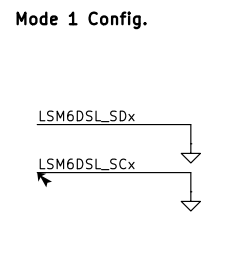


## 6-DoF IMU

### I2C Config.



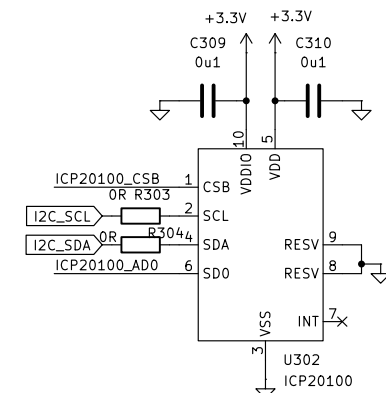
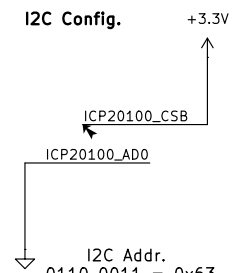
### Mode 1 Config.



I2C Pull-ups on MCU Sheet  
CS tied HI for I2C (App. Note 6.1)  
LSM6DSL Connections as per. Application Hints Mode 1 (App. Note 7.1)

## Barometric Sensor

### I2C Config.



I2C Pull-ups on MCU Sheet  
CSB tied HI for I2C (App. Note 4)  
ICP20100 Connections as per. Application Notes

Added 00hm Res. to I2C lines to ease PCB Routing  
Changed order of RGBs for PCB Layout  
Changed RGB LED to SK6805-EC20

**BUCHAREST APPLIED STEAM MUSEUM**

Sheet: /sense\_feedback/  
File: sense\_feedback.kicad\_sch

**Title: BASM SOUNDCARD DEV V0**

Size: A4 Date: 2025-05-06

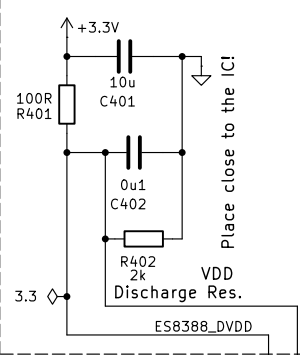
KiCad E.D.A. 8.0.8

**Rev: 2**

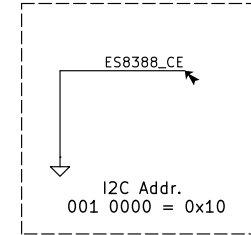
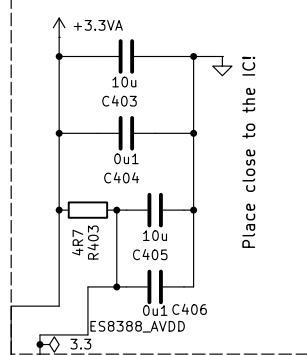
Id: 3/5

## ES8388 Audio CODEC

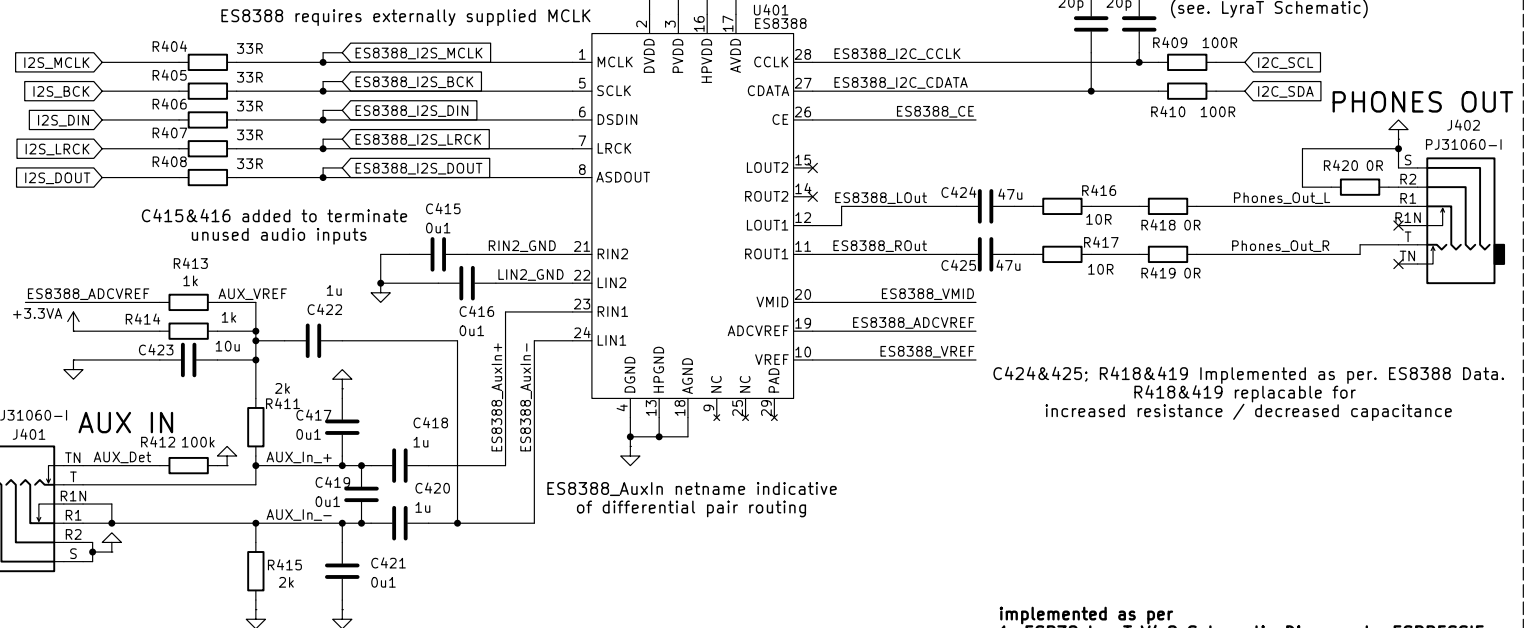
### [DIGITAL] Power Rail Decoupling



### [ANALOG] Power Rail Decoupling



1. I2C Pull-ups at MCU
2. RC circ. to avoid R/W errors (see. LyraT Schematic)



- implemented as per
1. ESP32 LyraT V4.2 Schematic Diagram by ESPRESSIF
  2. ES8388 Datasheet by Everest Semis

Switched Aux Detect Signal + Aux VREF to R Ch.

Flipped R/L Audio on Phones & AuxIn

**BUCHAREST APPLIED STEAM MUSEUM**

Sheet: /Audio CODEC/

File: codec.kicad\_sch

**Title: BASM SOUND CARD DEV V0**

Size: A4 Date: 2025-05-06

KiCad E.D.A. 8.0.8

Rev: 2

Id: 4/5