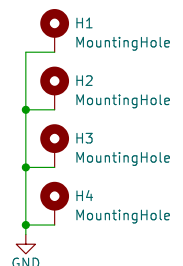
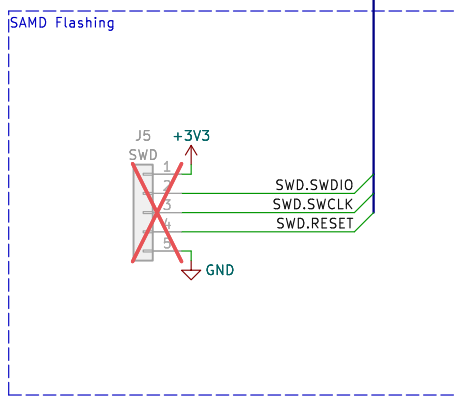
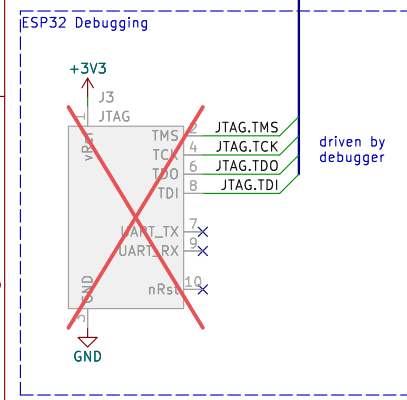
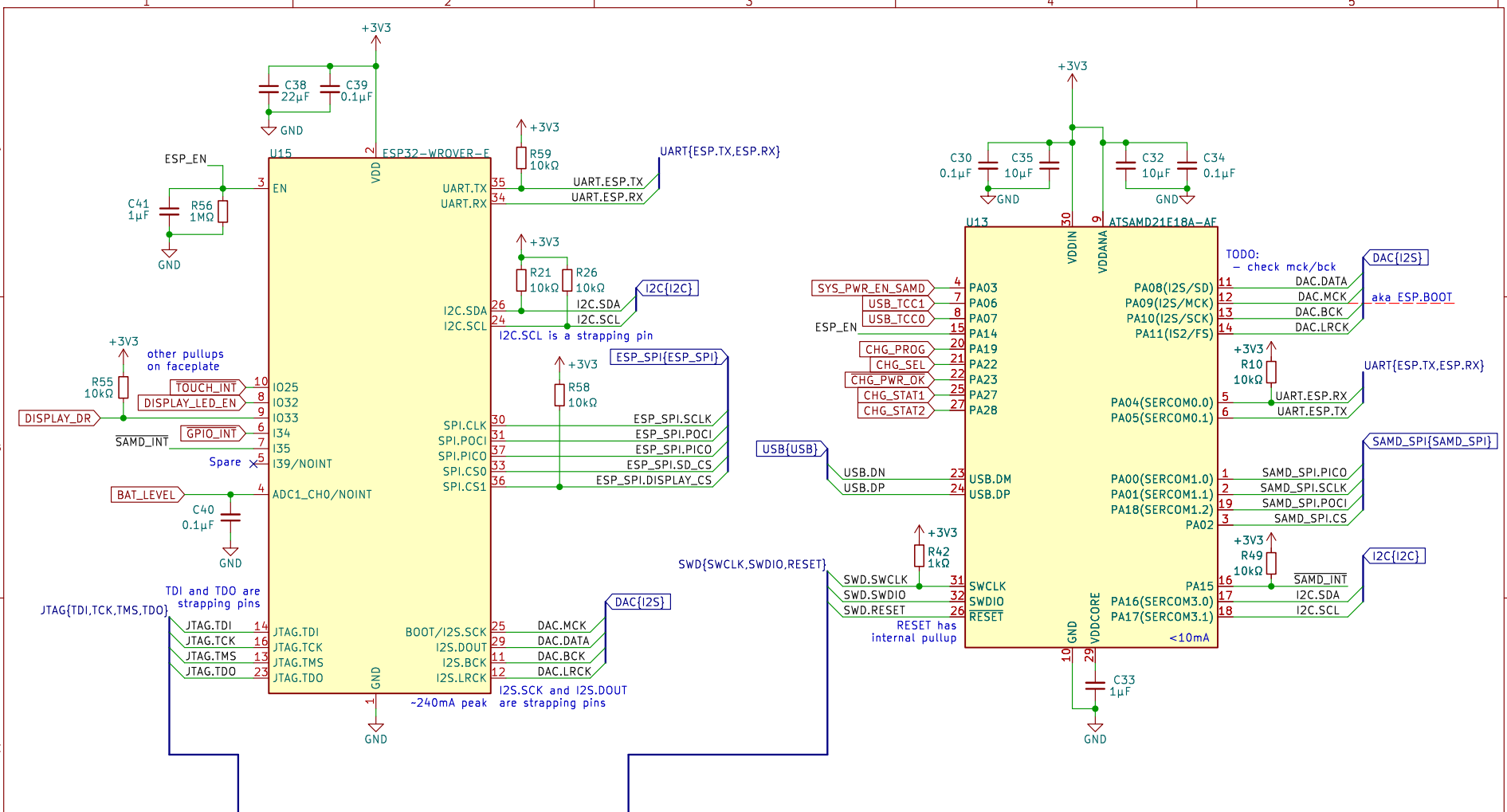


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made by jacqueline		
Sheet: /		
File: tangara-faceplate.kicad_sch		
<b>Title: TANGARA</b>		
Size: User	Date: 2024-06-21	Rev:
KiCad E.D.A. 8.0.2-1		Id: 1/1

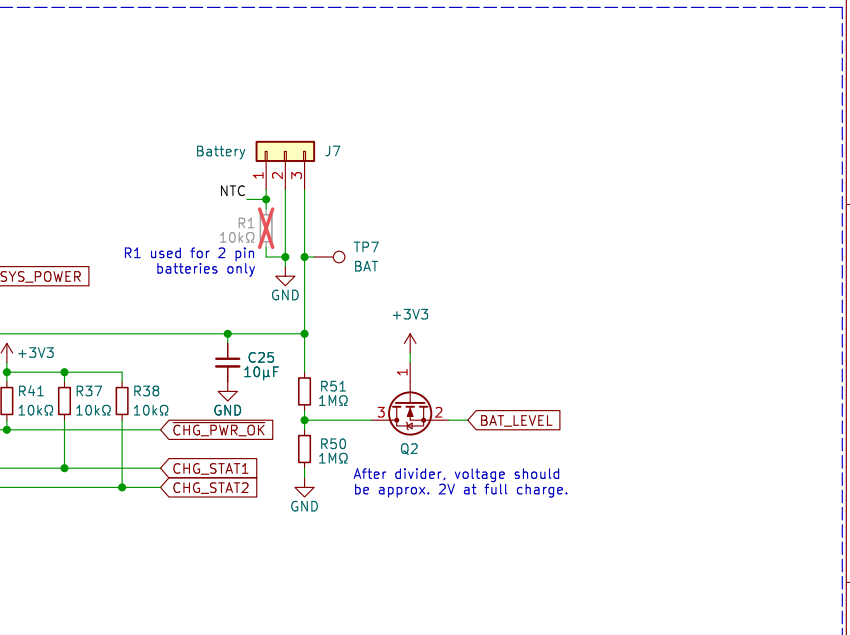
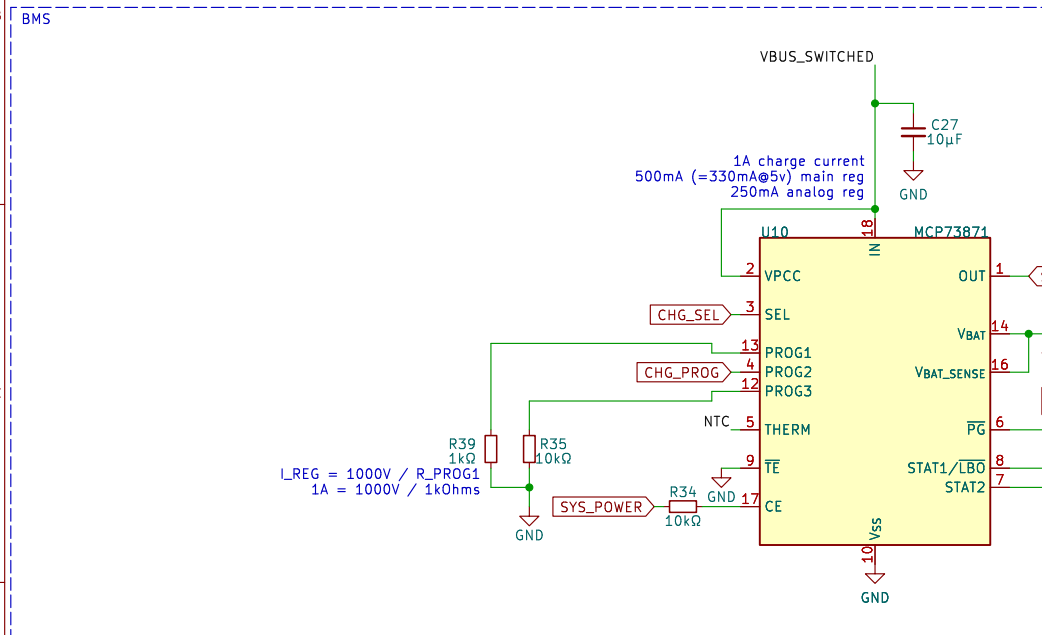
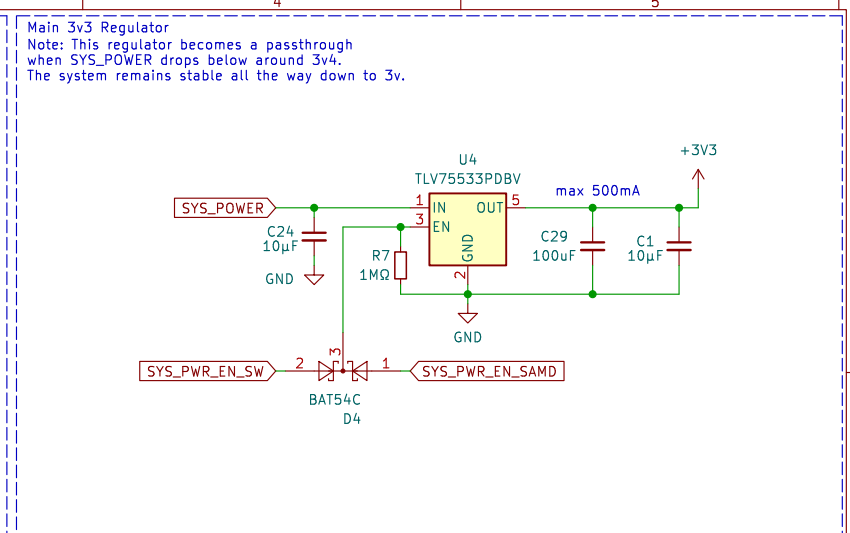
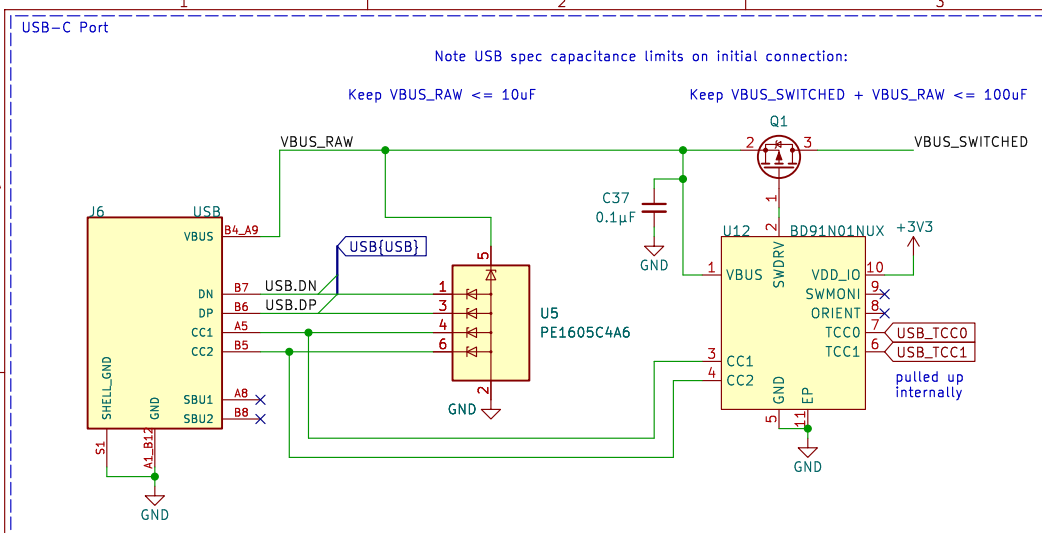


Audio  File: audio.kicad\_sch  
 Power  File: power.kicad\_sch  
 Peripherals  File: peripherals.kicad\_sch

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**made by jacqueline**  
 Sheet: /  
 File: tangara-mainboard.kicad\_sch

**Title: TANGARA**

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 Sheet: /Power/  
 File: power.kicad\_sch

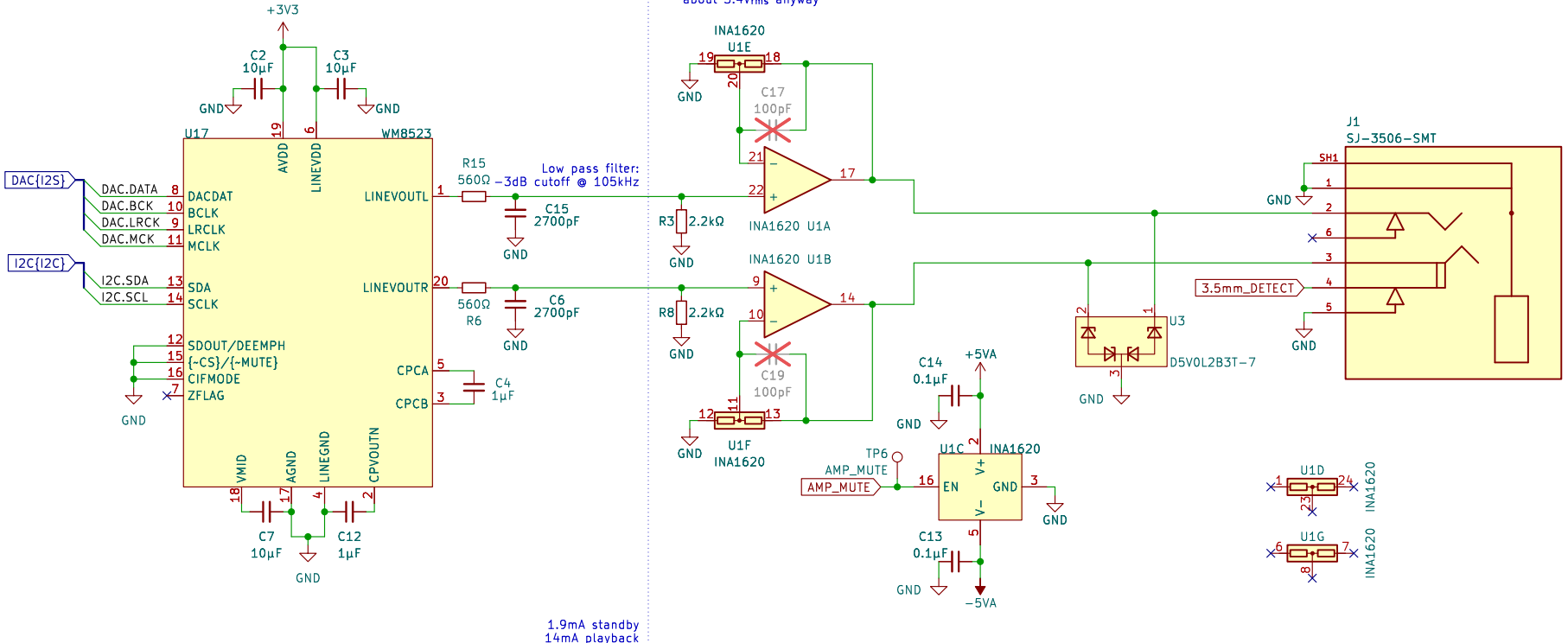
**Title: TANGARA**

Size: User	Date: 2024-06-21	<b>Rev: 4</b>
KiCad E.D.A. 8.0.2-1		

Audio Chain

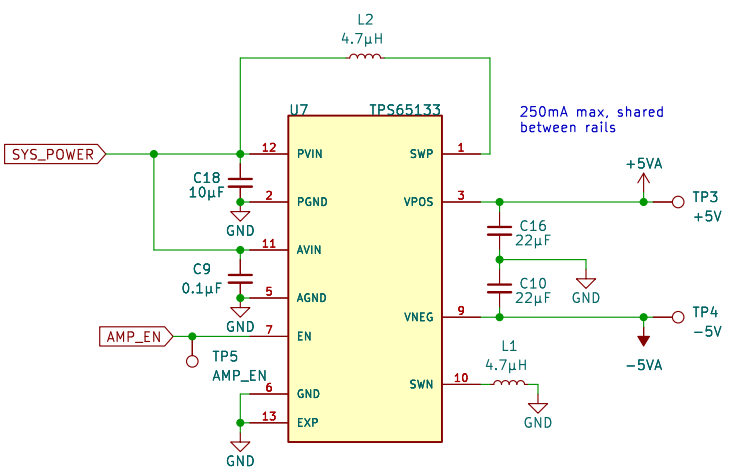
- Stage 1:
- outputs max 2 V<sub>rms</sub>, ground-centred
  - max 24bit/192KHz over I2S
  - digital volume control over I2C

- Stage 2:
- amplify: 2G = 4V<sub>rms</sub> max
  - ±5V power supply, 0.2V rail-to-rail swing means we can't reach more than about 3.4V<sub>rms</sub> anyway



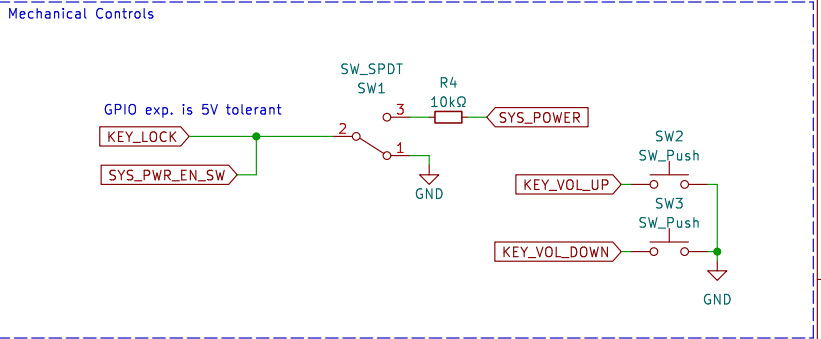
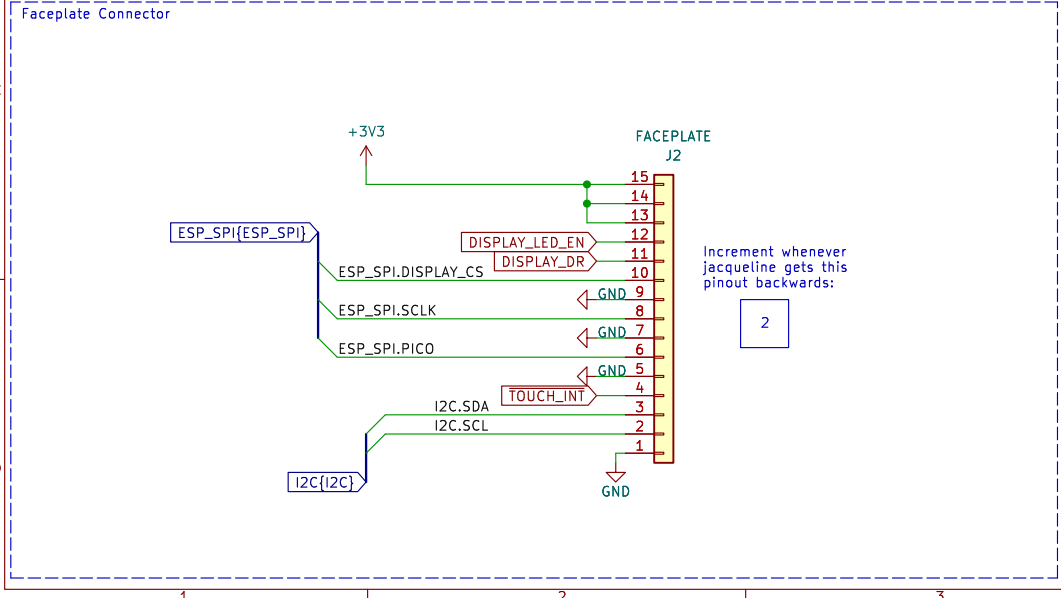
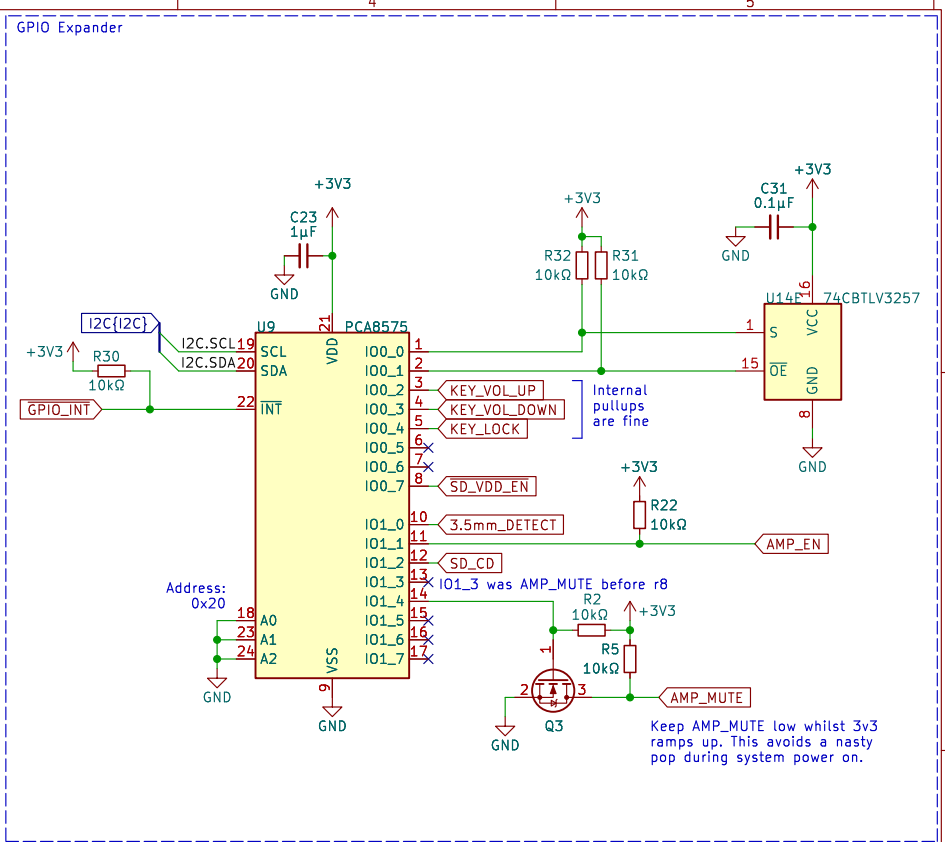
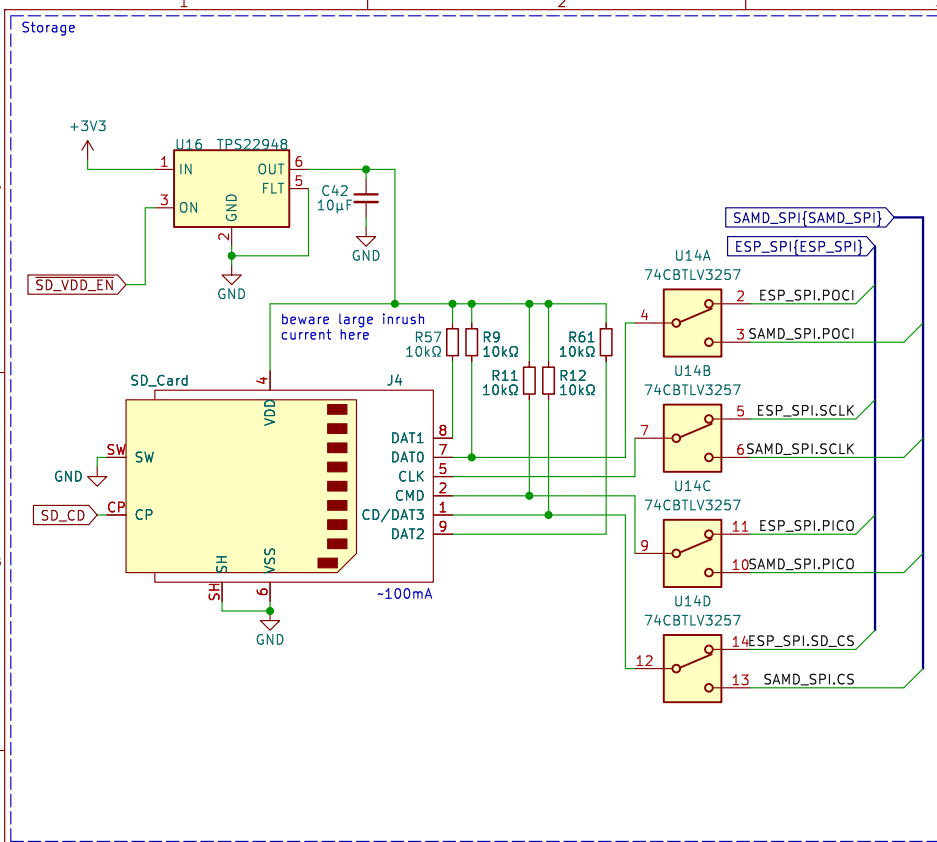
1.9mA standby  
14mA playback

Split Rail Regulator -- +5V/-5V, 250mA



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 Sheet: /Audio/  
 File: audio.kicad\_sch

<b>Title: TANGARA</b>	
Size: User	Date: 2024-06-21
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Id: 3/4	



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**made by jacqueline**  
 Sheet: /Peripherals/  
 File: peripherals.kicad\_sch

**Title: TANGARA**

Size: User	Date: 2024-06-21	Rev: 4
KiCad E.D.A. 8.0.2-1		Id: 4/4