

MCU

Page 2

File: MCU.kicad\_sch

User Interface

Page 3

File: user\_interface.kicad\_sch

MIDI

Page 4

File: midi.kicad\_sch

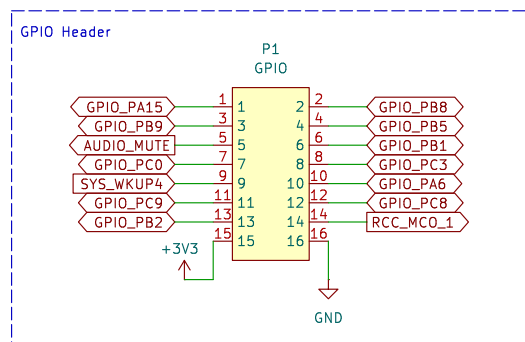
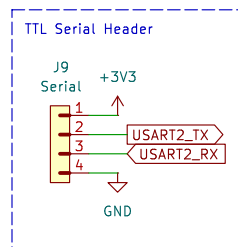
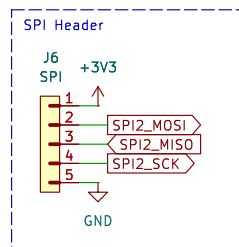
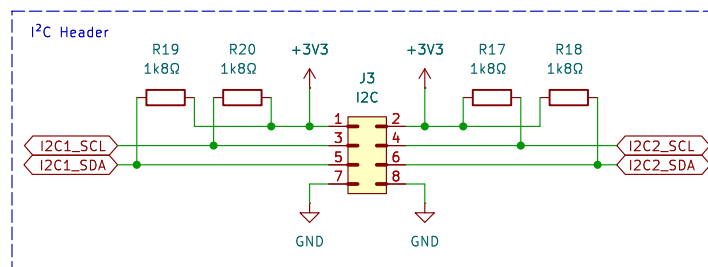
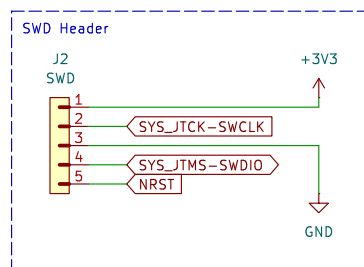
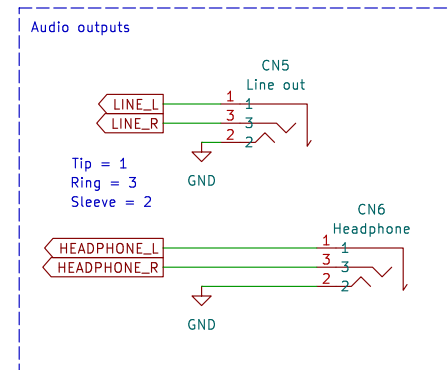
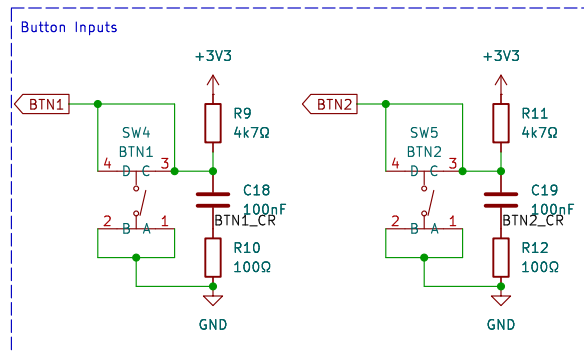
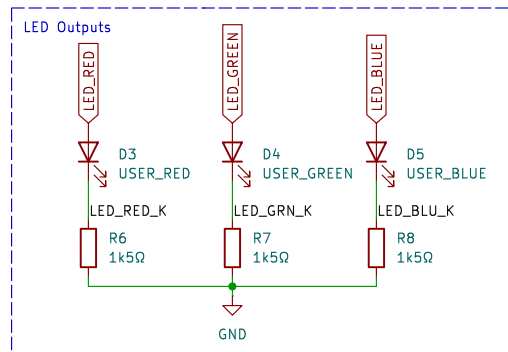
Audio Output

Page 5

File: audio\_out.kicad\_sch

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Sheet: / File: stm-midi-poc1.kicad_sch		
<b>Title: Block Diagram</b>		
Size: USLetter	Date: 2024-10-26	Rev: 1
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**Fiducial Markers**

- FID3 Fiducial
- FID2 Fiducial
- FID1 Fiducial

**Mounting Holes**

- H1 MountingHole
- H2 MountingHole
- H3 MountingHole
- H4 MountingHole

R30 0Ω-2010 R31 0Ω-1206 R35 0Ω-0805

Route 2 or 4 signals underneath  
0805 = ? (R35)  
1206 = 3 (R31)  
2010 = 4+ (R30)

TODO: Find a 0-ohm resistor network

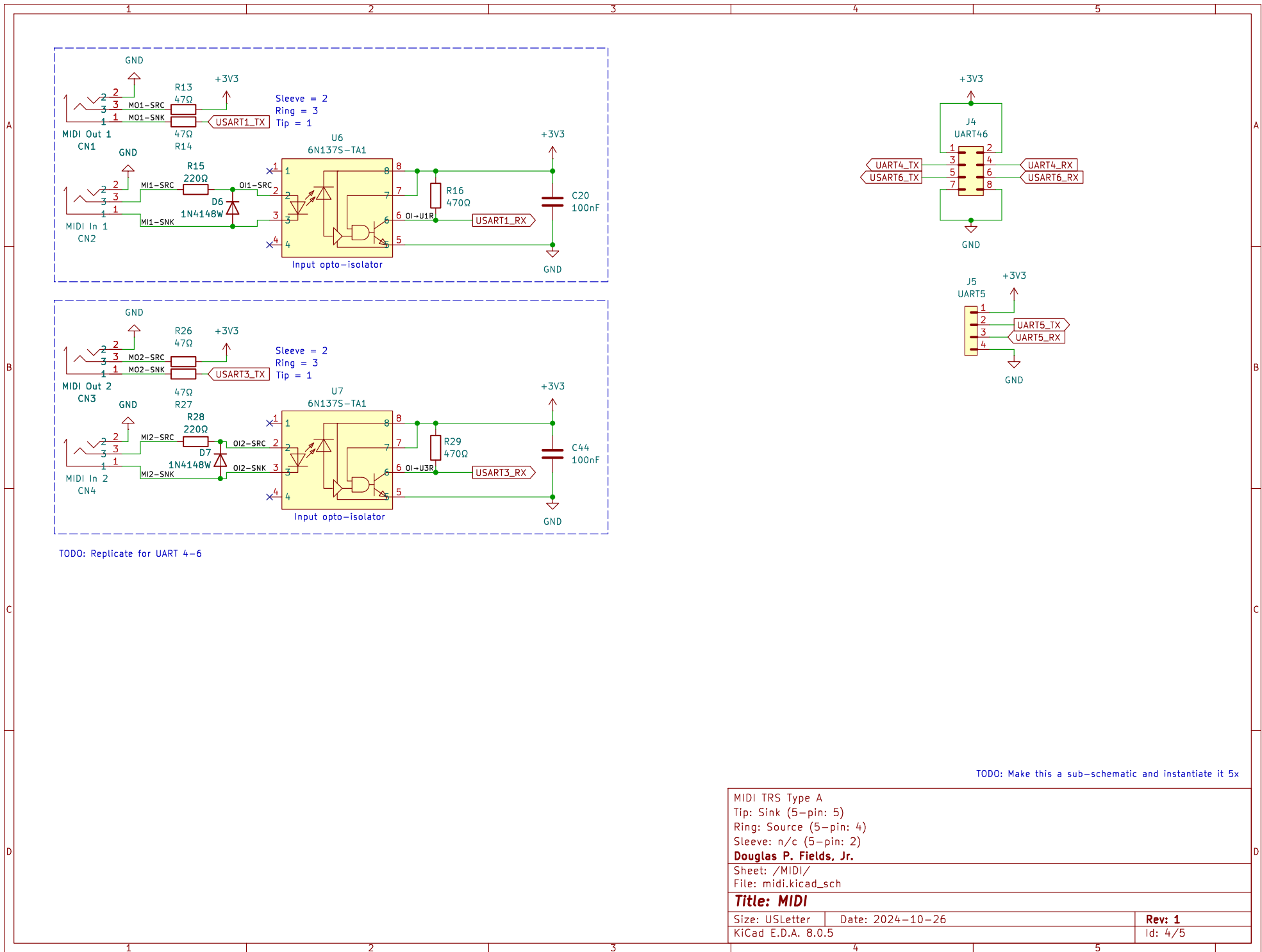
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Sheet: /User Interface/  
File: user\_interface.kicad\_sch

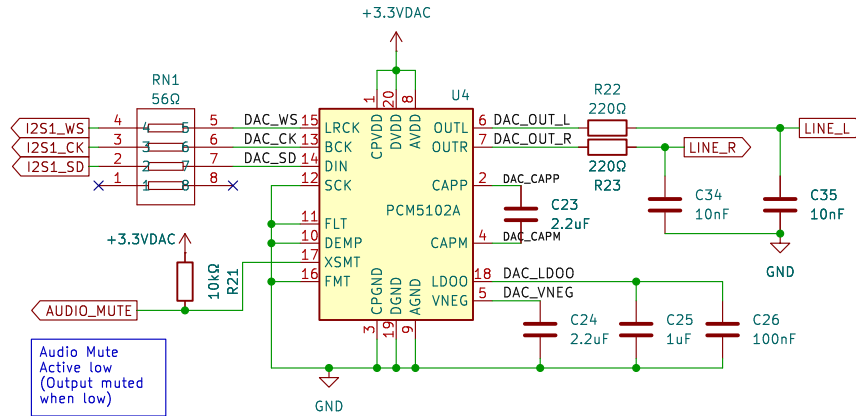
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Size: USLetter Date: 2024-10-26  
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Id: 3/5

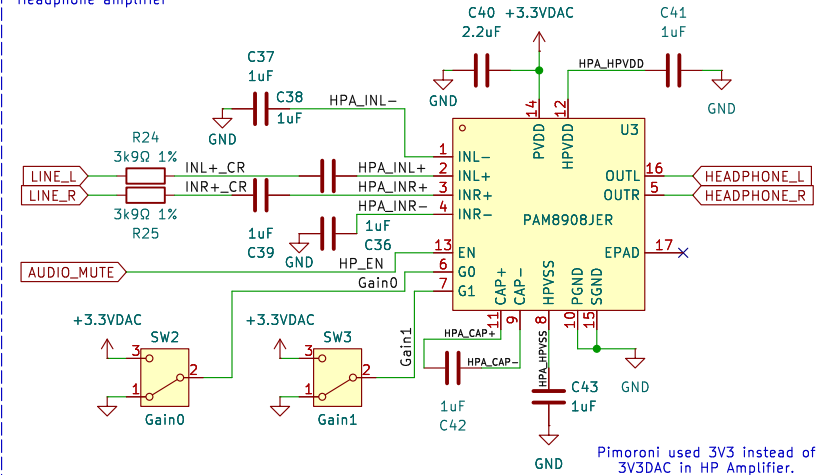


# DAC



TODO: Should R21  
AUDIO\_MUTE pullup  
be on VDAC or +3.3?

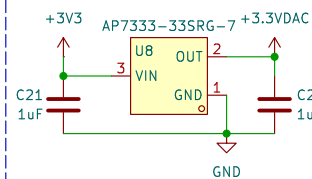
# Headphone amplifier



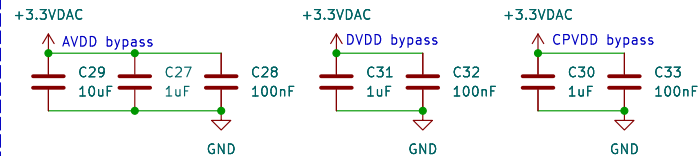
Pimoroni used 3V3 instead of  
3V3DAC in HP Amplifier.

I2S1\_MCK

# Audio Power



# DAC bypass capacitors



EPAD (Exposed Pad) must be soldered but can float or be connected to PGND

Reference: Pimoroni Pico Audio Pack  
<https://shop.pimoroni.com/products/pico-audio-pack>

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

**Title: Audio Output**

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