

Douglas P. Fields, Jr.

Sheet: /User Interface/
File: user_interface.kicad_sch

Title: User Interface

Size: USLetter Date: 2024-12-21
KiCad E.D.A. 8.0.5

Rev: 2
Id: 3/6

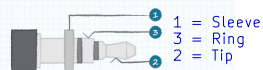
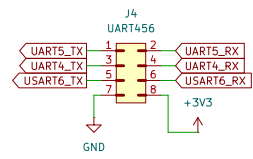


Image credit:
<https://www.sameskydevices.com/blog/understanding-audio-jack-switches-and-schematics>

TODO: Make this a sub-schematic and instantiate it 5x

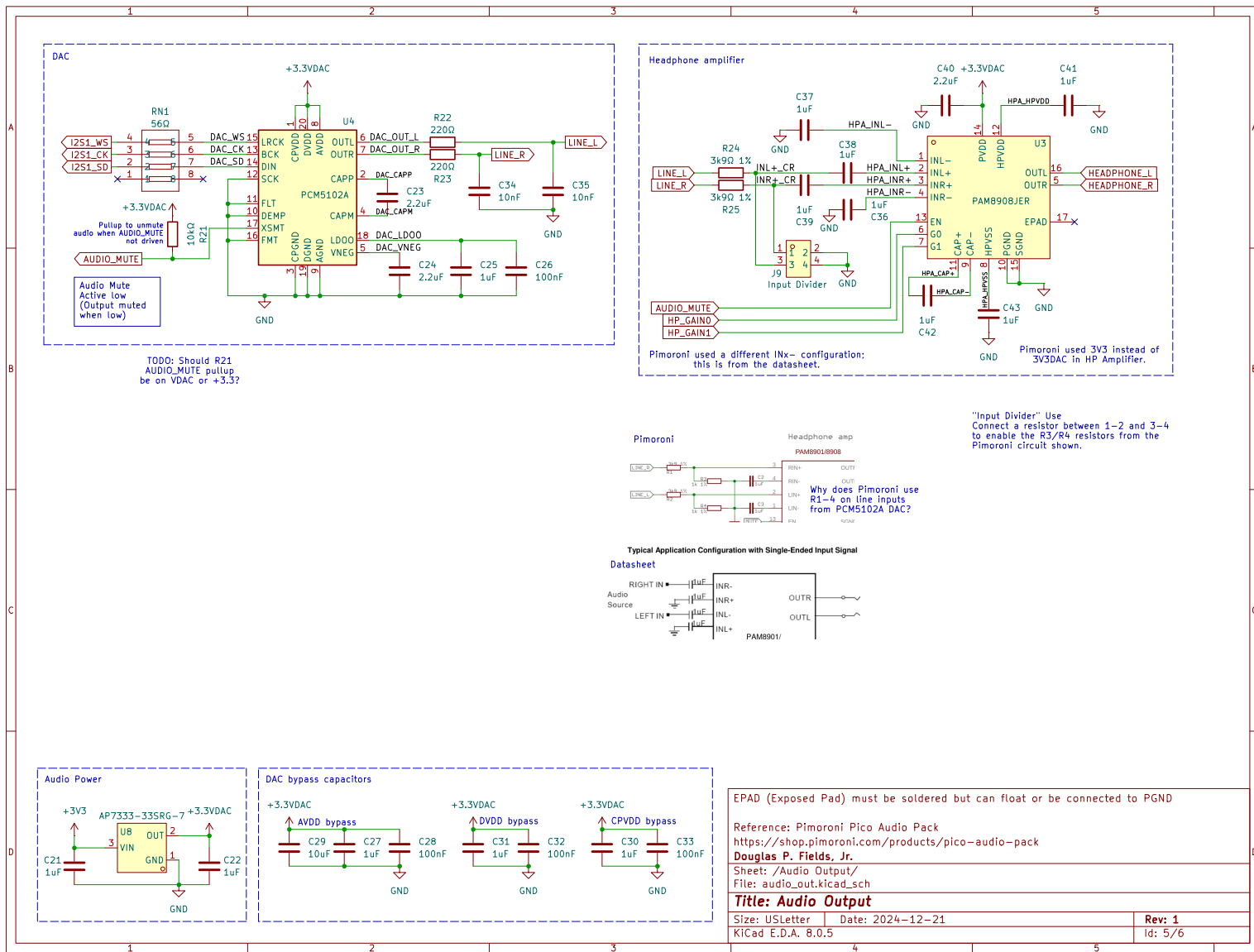
MIDI TRS Type A
Tip: Sink (5-pin: 5)
Ring: Source (5-pin: 4)
Sleeve: n/c (5-pin: 2)
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Sheet: /MIDI/
File: midi.kicad_sch

Title: MIDI

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Rev: 2
Id: 4/6



1

2

3

4

5

A

B

C

D

Revision 1: EVT #1

Initial version

Revision 2: EVT #2

Fix connections for 3.5mm jacks (tip & sleeve were reversed)

Revise MIDI in circuits with smaller opto-isolator

Add USB 5V pin header

Move Gain0/1 from switches to GPIO pins

Revise SPI header with pins for ILI9341 SPI screen

Consolidate SWD and Console USART2 to a single header

Consolidate all unused MIDI into a single header

Add Jumper to HP Amp inputs to experiment with resistor values per Pimoroni circuit

Miscellaneous cleanups

TODO

Consider replacing J7 with same type as J9 for BOM reduction

Add MIDI in/out LEDs

Add test pins for:

Audio, MIDI

USB Gnd/5v/D+/D-

MIDI raw UART RX/TX

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Sheet: /Revision History/
File: revisions.kicad_sch

Title: Revision History

Size: USLetter

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Rev: 2

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