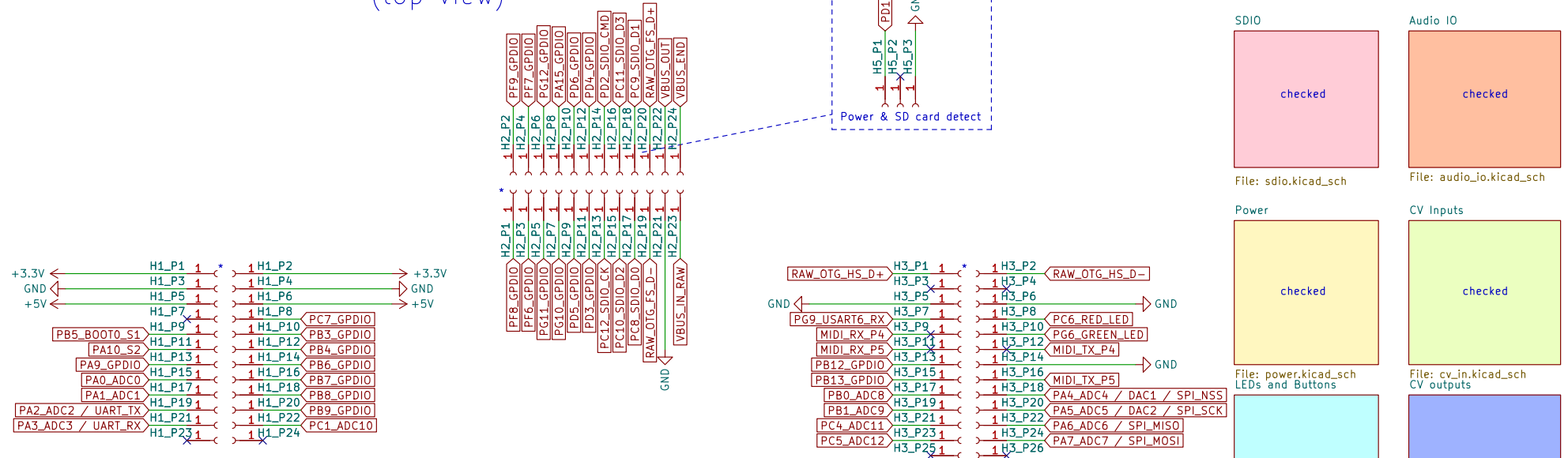
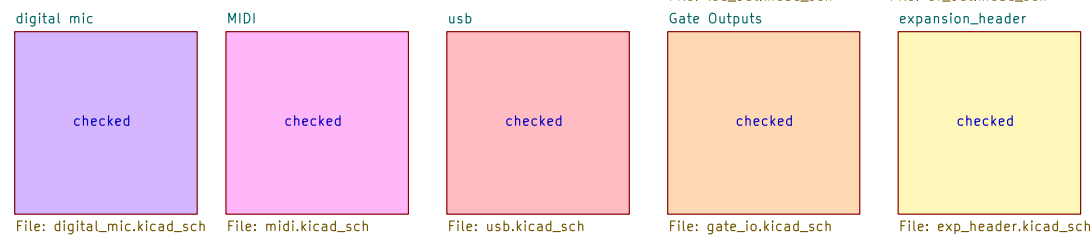
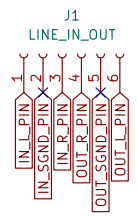


Ksoloti Core v0.4+ headers (top view)



- 2 audio inputs, 2 audio outputs, Eurorack level
- 8 pots
- 4 CV inputs (P1-P4) are summed with pots 1-4
- 4 independent CV inputs (A-D), non-trimmable (+/-5V)
- 2 independent CV inputs (X, Y), trimmable offset and V/oct (+/-5V or 0..10V via jumper)
- 2 encoders with switch (E1, E2)
- 2 buttons (S3, S4)
- 2 fade-able Axo status LEDs, 2 fade-able duo-color LEDs
- 2 gate outputs, ca. 10.3V, optional gate indicator LEDs
- 2 CV outputs, trimmable offset and V/oct (+/-5V or 0..10V via jumper)
- 1 OLED display, 128x64px



changelog

CHANGELOG

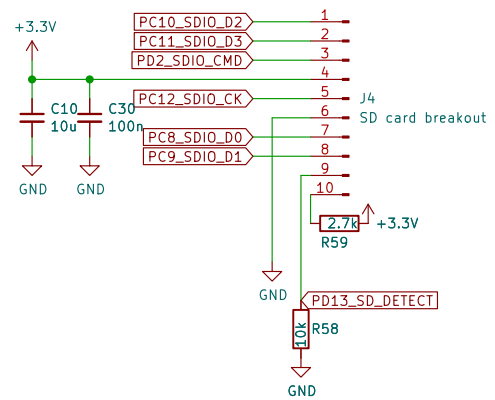
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Sheet: /
File: ksoloti_big_genes.kicad_sch

Title:

Size: A4	Date: 2024-04-13	Rev: v0.6
KiCad E.D.A. kicad (6.0.11)		Id: 1/13





Sheet: /SDIO/
 File: sdio.kicad_sch

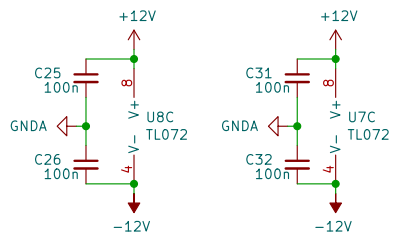
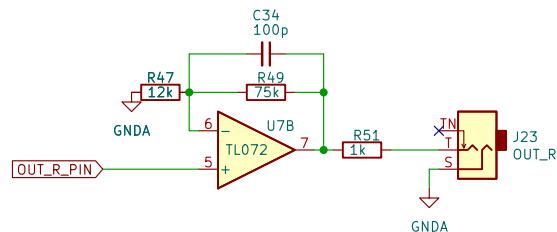
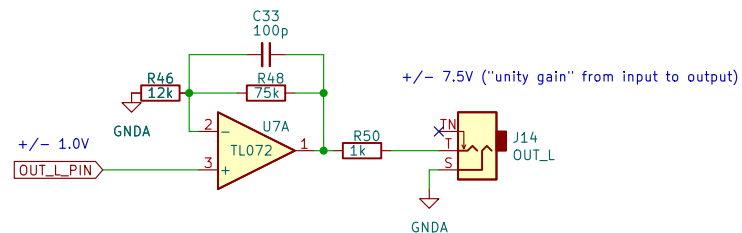
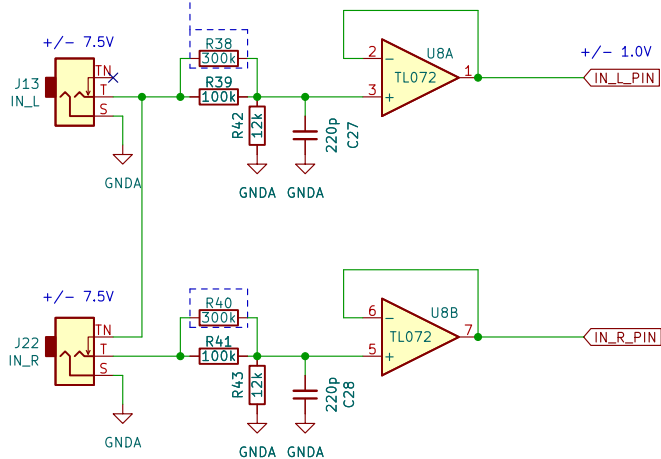
Title:

Size: A4 | Date: 2024-04-13
 KiCad E.D.A. kicad (6.0.11)

Rev: v0.6
 Id: 2/13

+/-7.5V input level (+/-5V seemed to distort easily)

if you have particularly hot input levels,
remove R38, R40 to allow for ca. +/-10V input level



Sheet: /Audio IO/
File: audio_io.kicad_sch

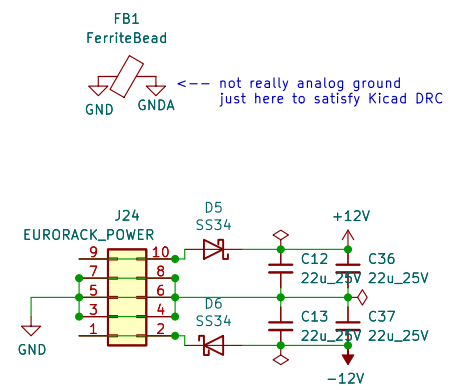
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Size: A4 Date: 2024-04-13

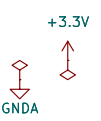
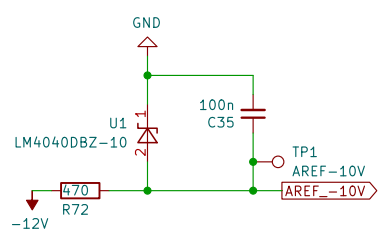
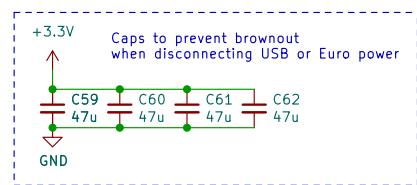
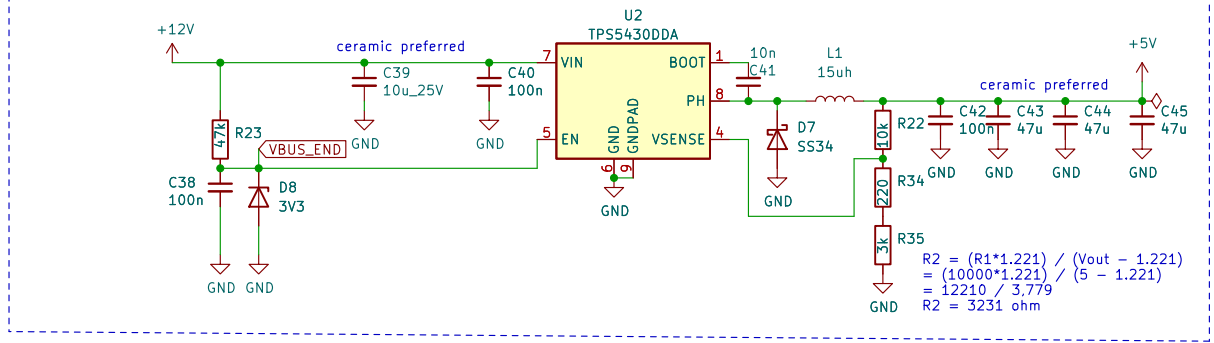
KiCad E.D.A. kicad (6.0.11)

Rev: v0.6

Id: 3/13



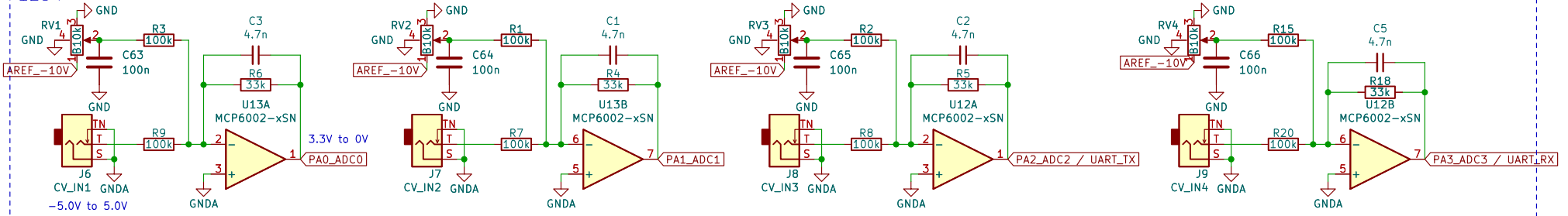
DC to 5V



Sheet: /Power/		
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Title:		
Size: A4	Date: 2024-04-13	Rev: v0.6
KiCad E.D.A. kicad (6.0.11)		Id: 4/13

Pots / CV inputs

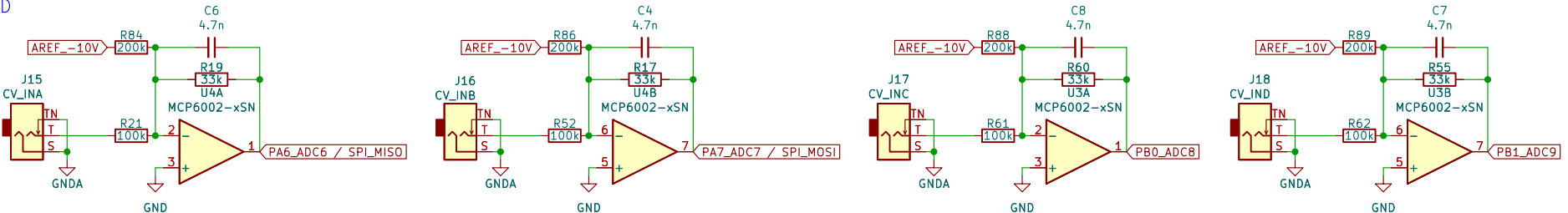
1234



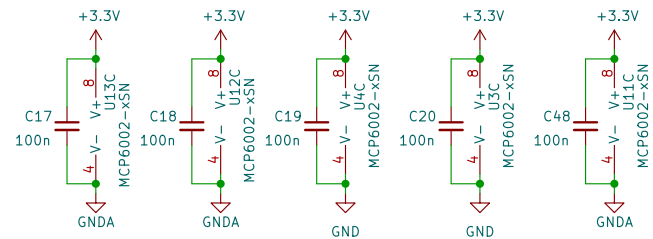
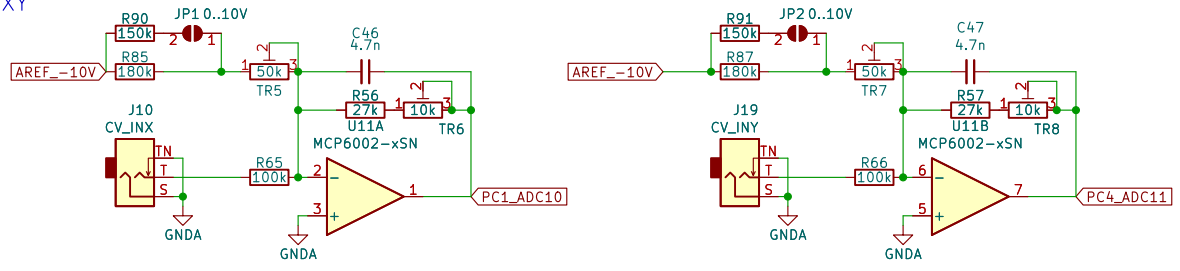
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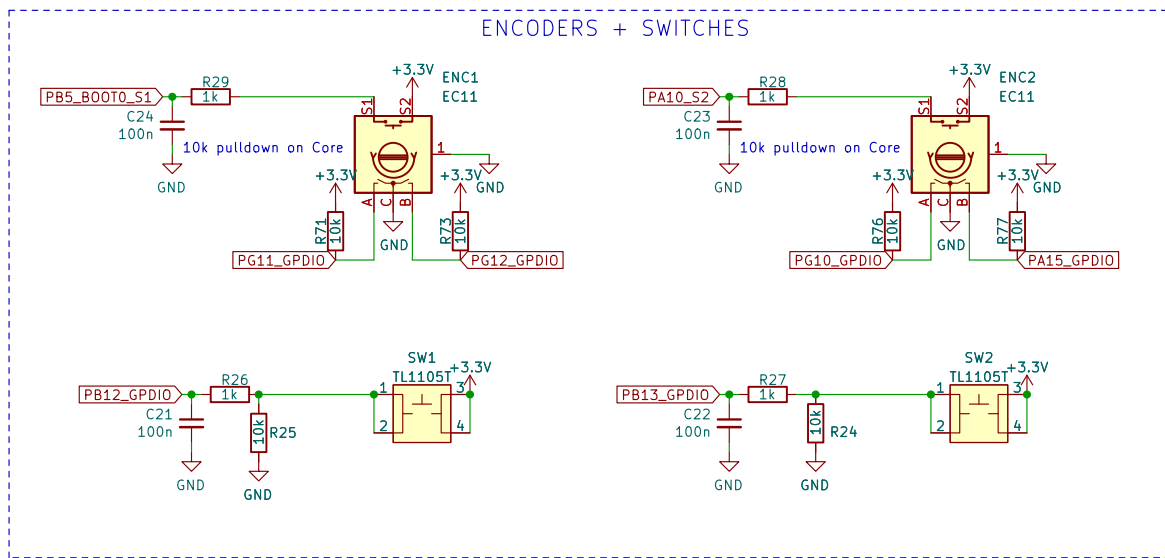
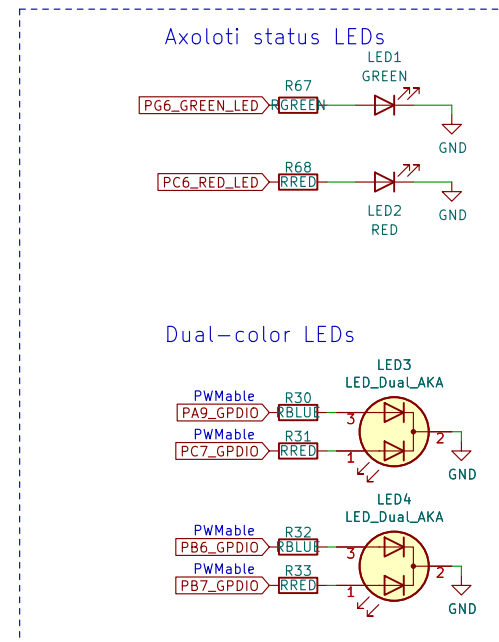
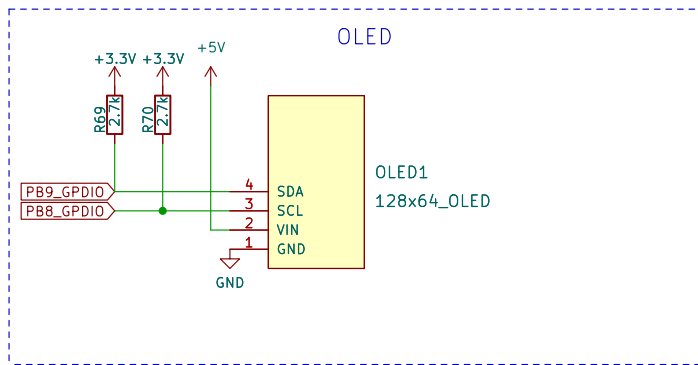


ABCD



XY





Sheet: /LEDs and Buttons/
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Size: A4
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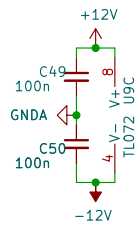
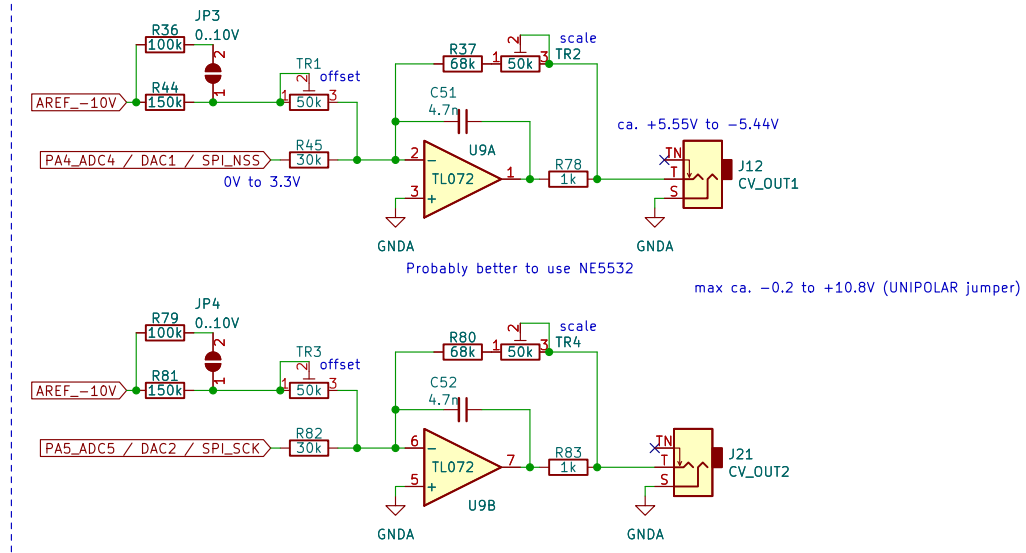
Date: 2024-04-13

Rev: v0.6

Id: 6/13

CV outputs

SIGNAL SCALE/OFFSET

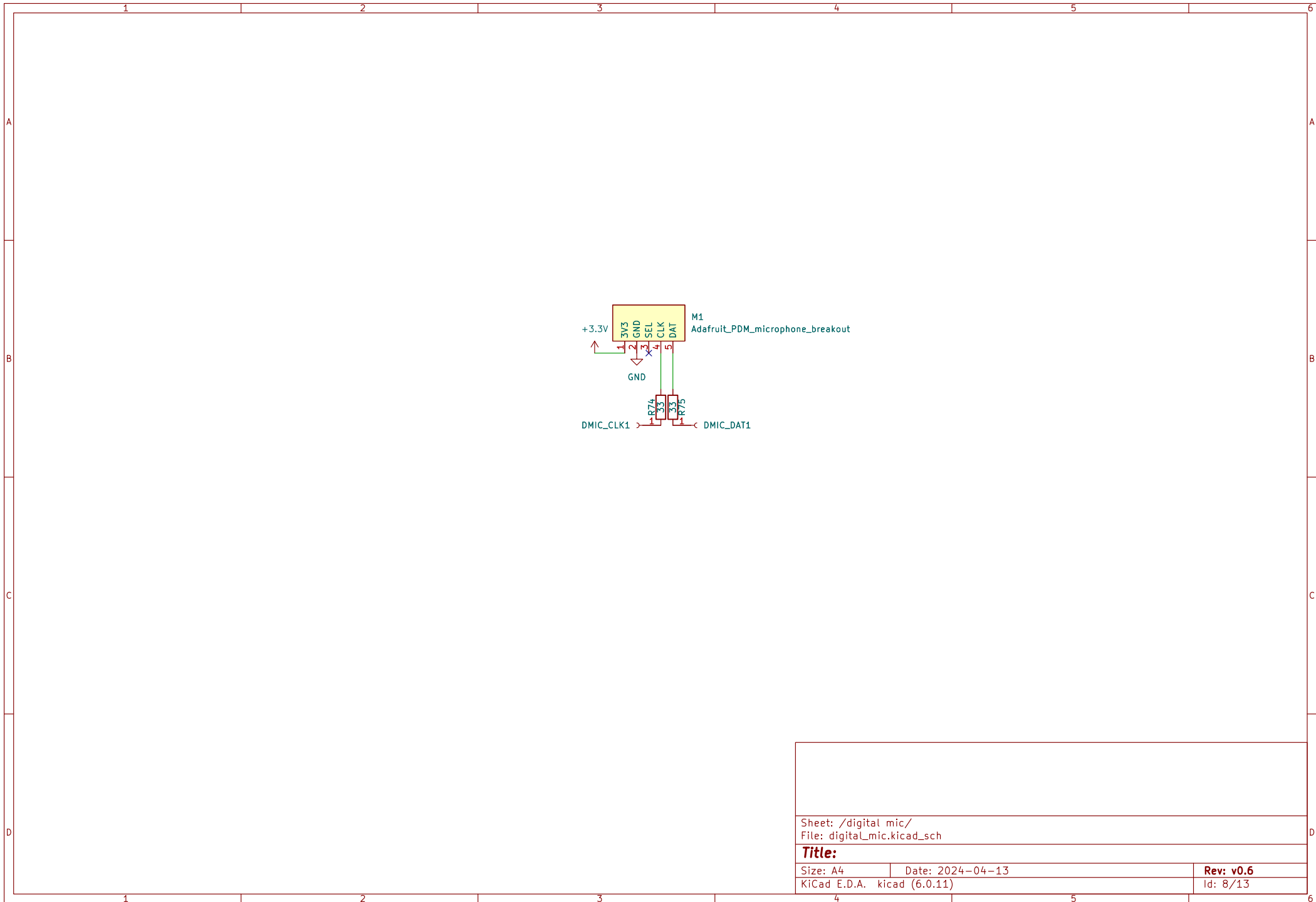


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File: cv_out.kicad_sch

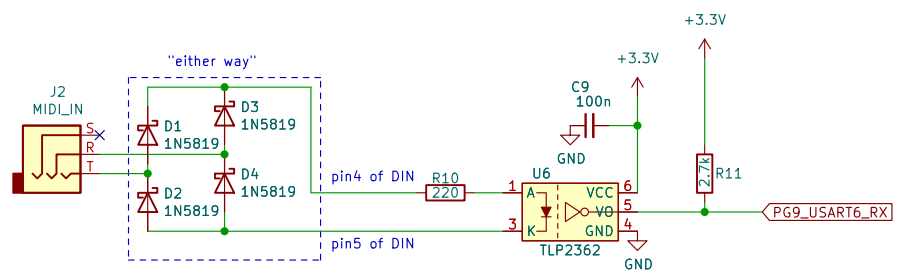
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Size: A4 Date: 2024-04-13
KiCad E.D.A. kicad (6.0.11)

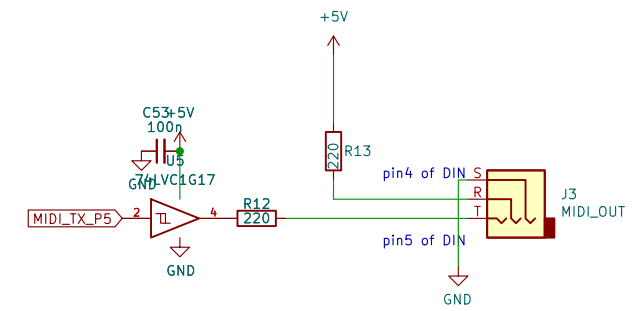
Rev: v0.6
Id: 7/13



Sheet: /digital mic/ File: digital_mic.kicad_sch		
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Size: A4	Date: 2024-04-13	Rev: v0.6
KiCad E.D.A. kicad (6.0.11)		Id: 8/13

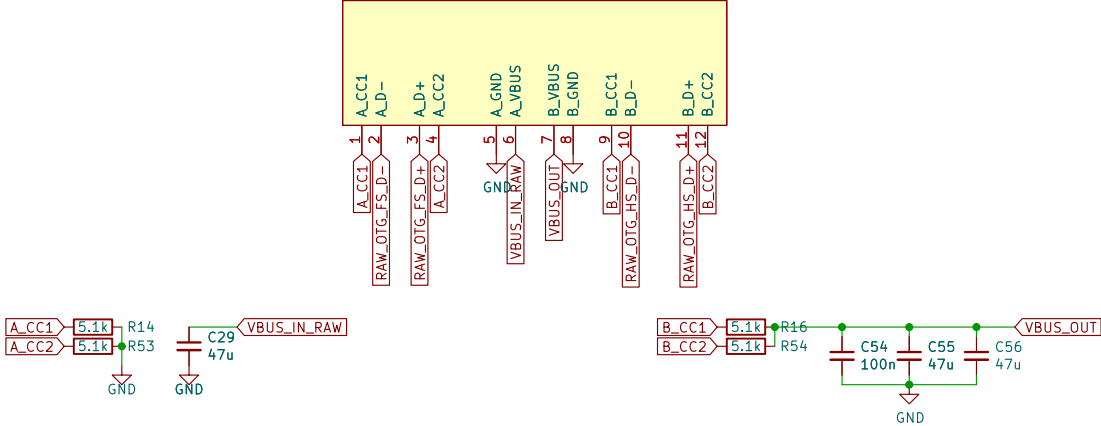


conforming to TRS MIDI specs
<https://www.midi.org/midi-articles/trs-specification-adopted-and-released>



Sheet: /MIDI/		Date: 2024-04-13	
File: midi.kicad_sch		Rev: v0.6	
Size: A4	KiCad E.D.A. kicad (6.0.11)		Id: 9/13

USB PROGRAMMER J5
USB_breakout USB HOST

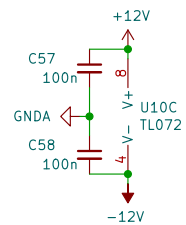
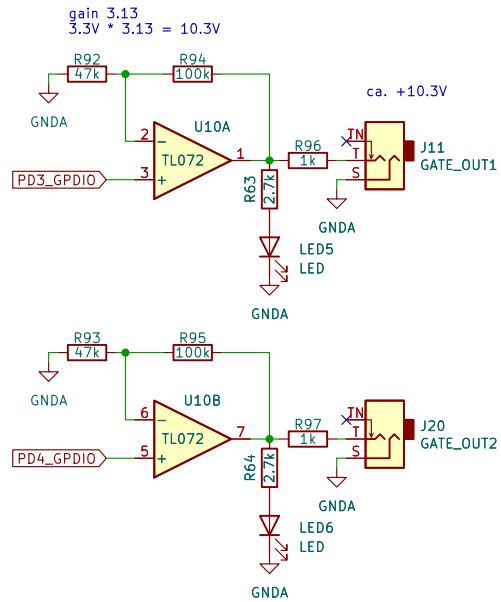


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Size: A4 Date: 2024-04-13
KiCad E.D.A. kicad (6.0.11)

Rev: v0.6
Id: 10/13

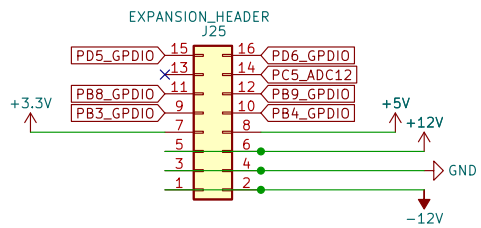


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Size: A4 Date: 2024-04-13
 KiCad E.D.A. kicad (6.0.11)

Rev: v0.6
 Id: 11/13



Sheet: /expansion_header/
File: exp_header.kicad_sch

Title:

Size: A4 Date: 2024-04-13
KiCad E.D.A. kicad (6.0.11)

Rev: v0.6
Id: 12/13

Changelog

v0.3 done – prototype ordered 2024–02–07

v0.4 done – prototype ordered 2024–03–06

- swap pins PD5 and PD6 on expansion header (consistency)
- rework USB connector and SD card connector footprints, panel holes
- Use pseudo-SMD pin socket for J1 line in/out to Core
- Use LM4040–10 instead of CJ431 for stabler VREF
- Add extra caps on 3.3V rail
- Use "thin" OLED footprint (slightly different dimensions)
- Adjust Thonkiconn stereo jacks footprint size, position
- Fix encoder pins not connecting to any MCU pin

v0.5 done – production

- Add filter caps to pots 1–4
- Rework USB connectors: design breakout board holding two horizontal connectors and pin headers
- Revert OLED to "non-thin" version (same like Gills), run on 5V instead of 3.3V
- Reduce series resistors for optional Gate LEDs to 2.7k

v0.6 done – production

- Improve SD card and USB breakouts: use 2.0 mm pin headers instead of 1.27 mm ones (a pain to solder)
- Improve Thonkiconn mono and stereo footprints
- Change audio in/out amplification to non-inverted

Sheet: /changelog/
File: changelog.kicad_sch

Title:

Size: A4 Date: 2024–04–13

KiCad E.D.A. kicad (6.0.11)

Rev: v0.6

Id: 13/13