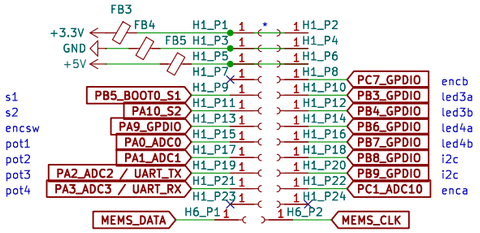
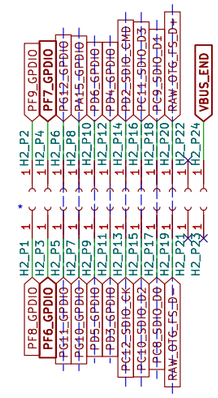
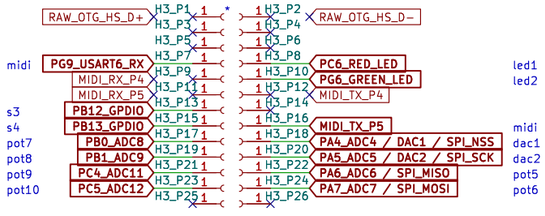
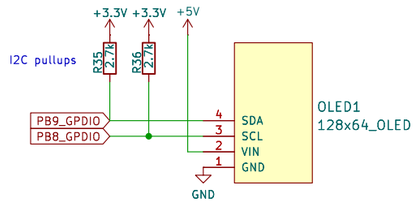
Ksoloti headers

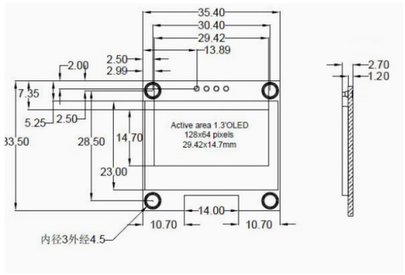


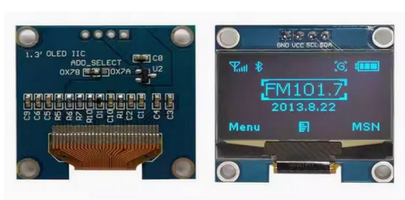


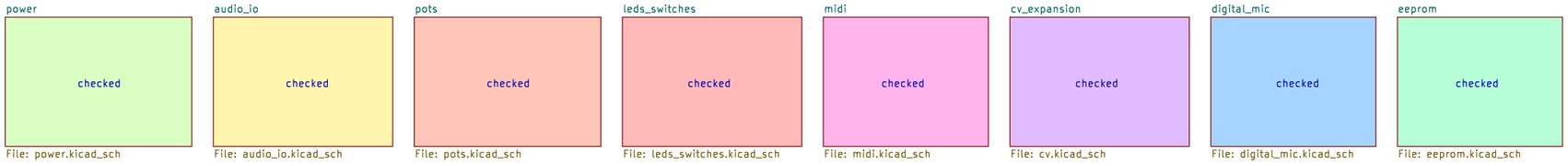


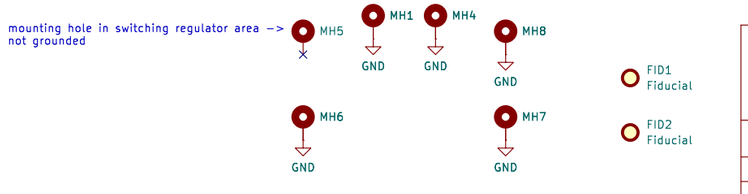
OLED 1.3" 128x64 I2C SH1106











CHANGELOG

changelog

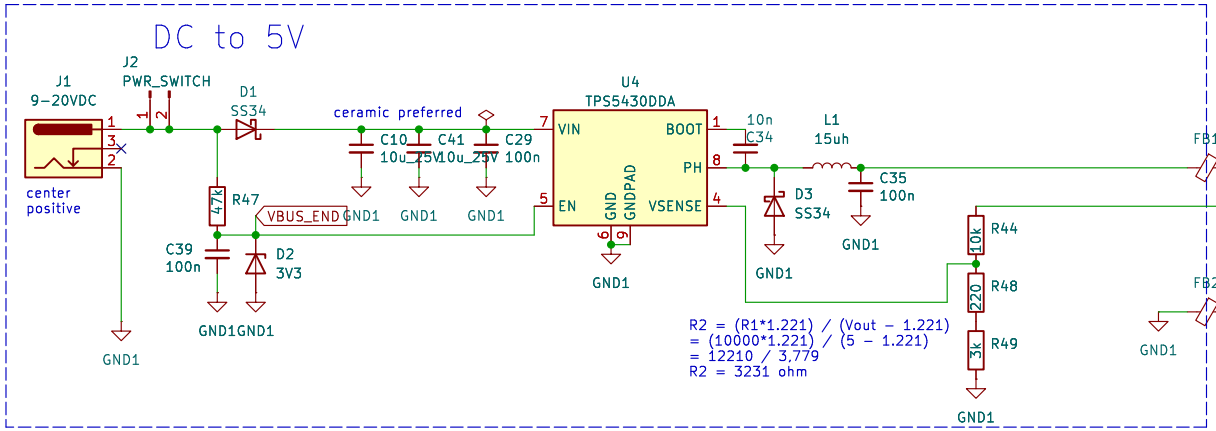
File: changelog.kicad_sch

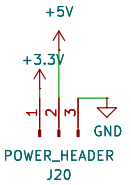
Sheet: /
File: ksoloti-gills.kicad_sch

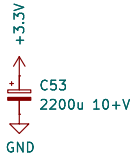
Title: https://github.com/ksoloti/ksoloti-gills

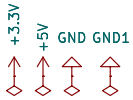
Size: A3	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 1/10

Power



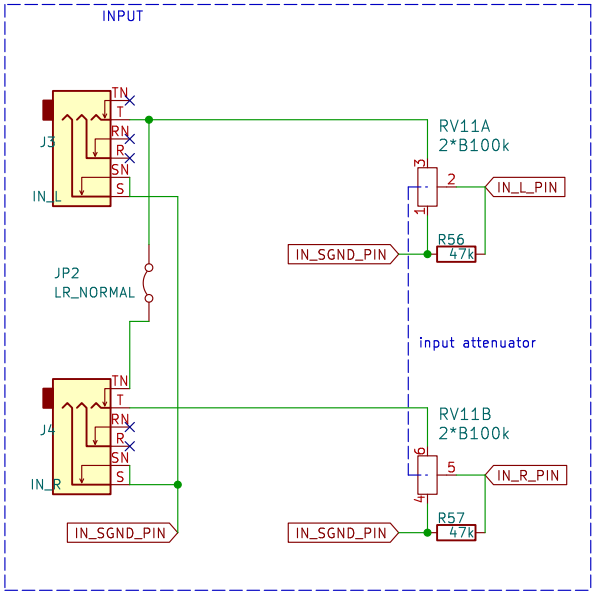


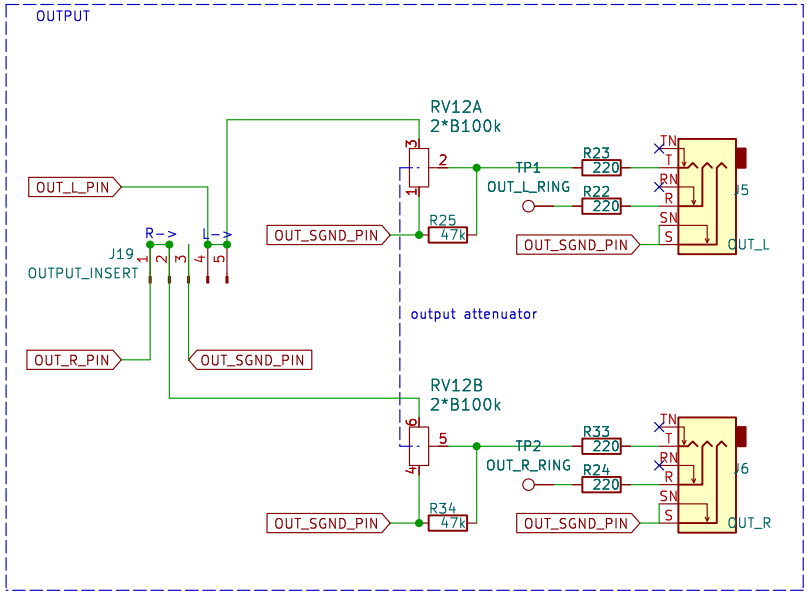




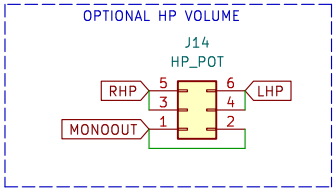
Sheet: /power/	
File: power.kicad_sch	
Title: https://github.com/ksoloti/ksoloti-gills	
Size: A4	Date: 2025-11-19
KiCad E.D.A. 9.0.6	Id: 2/10
	Rev: v0.6

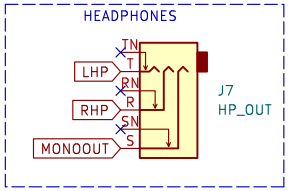
Audio I/O





If installing a headphone volume pot,
cut bridges between pins 3&5 and 4&6!





Pot "chassis"

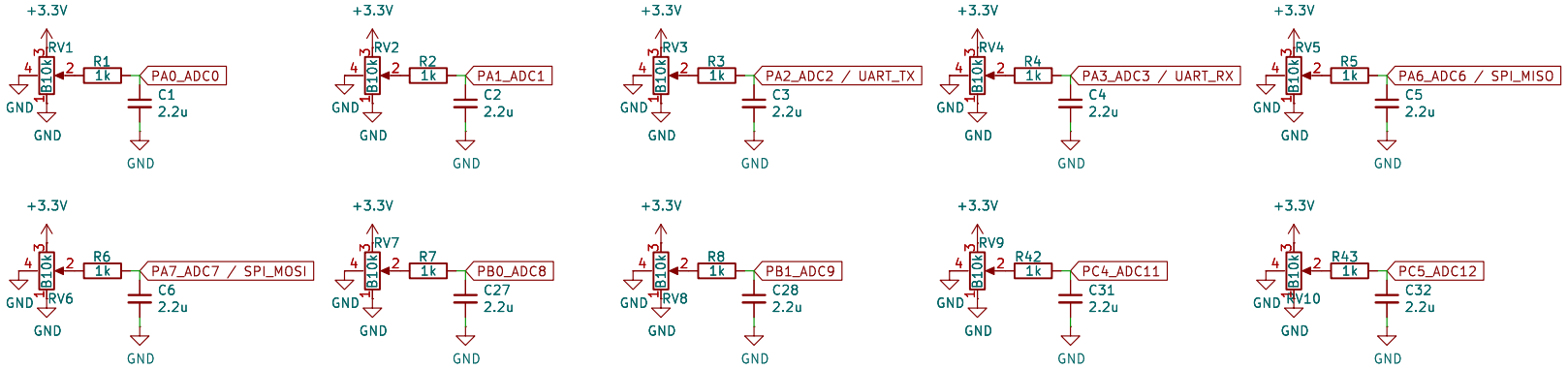
Sheet: /audio_io/
File: audio_io.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 3/10

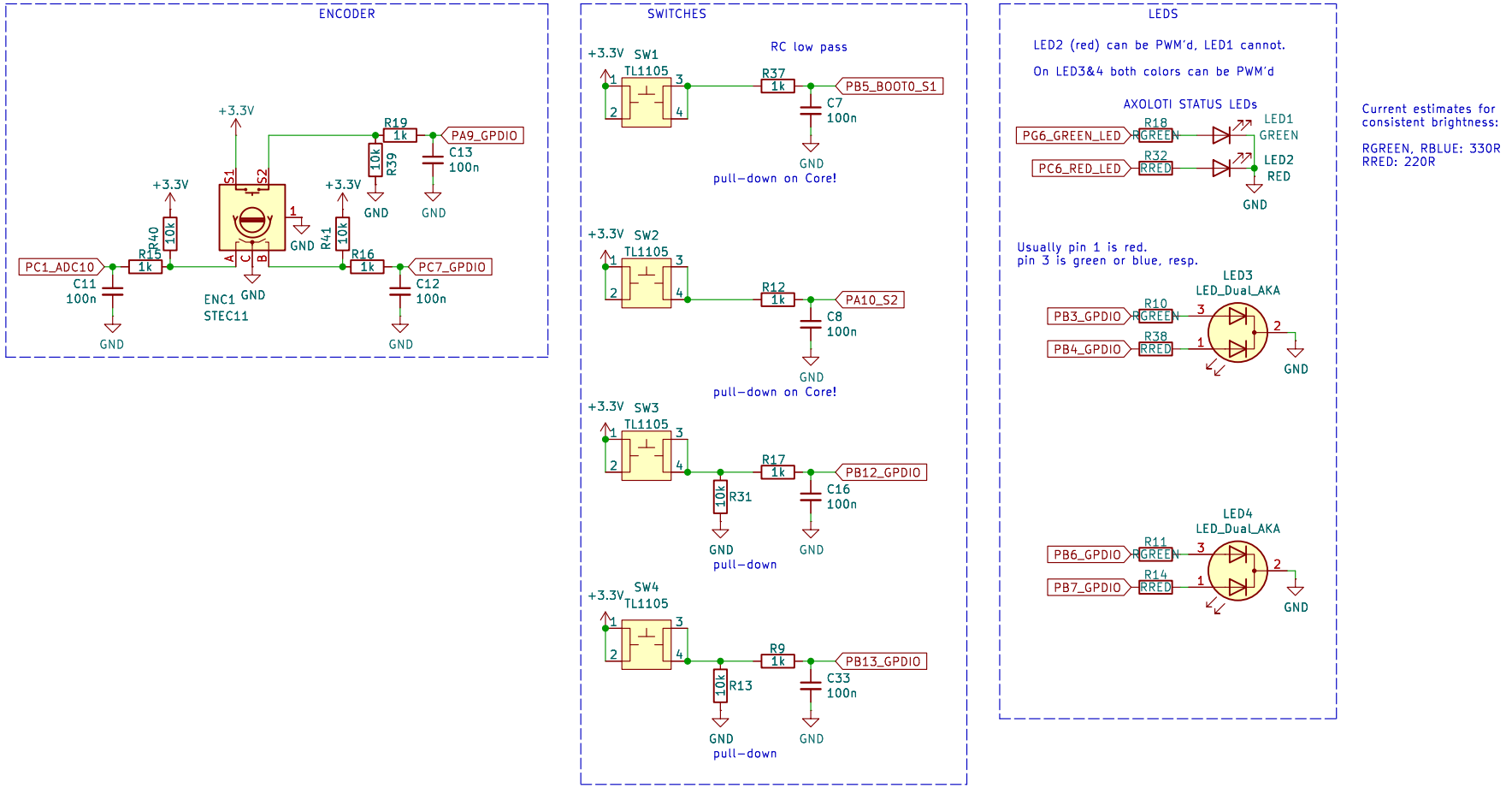
Potentiometers

RC lowpass cutoff ca. 72 Hz
full transient within ca. 10 ms



Sheet: /pots/		
File: pots.kicad_sch		
Title: https://github.com/ksoloti/ksoloti-gills		
Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 4/10

LEDs, Switches

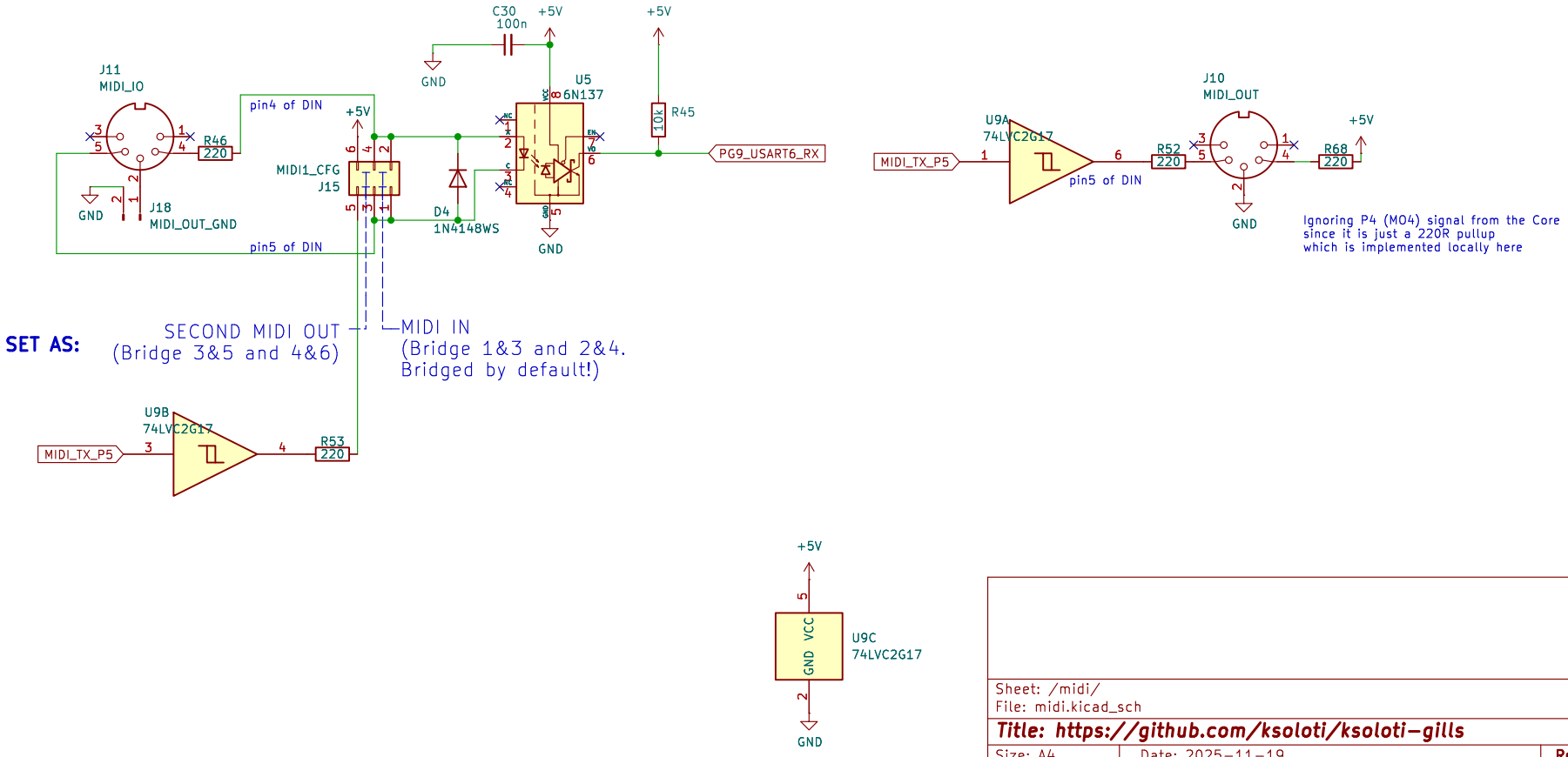


Sheet: /leds_switches/
File: leds_switches.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

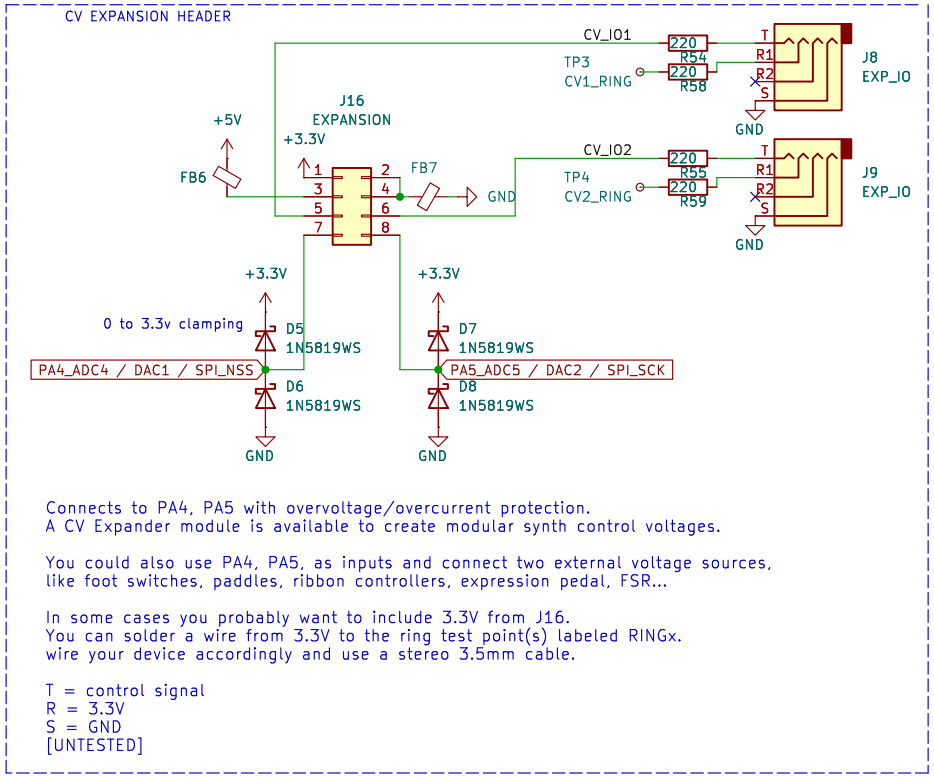
Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 5/10

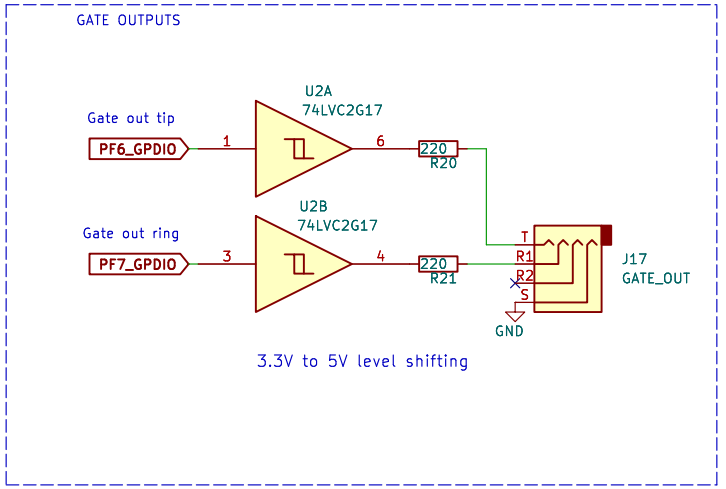
MIDI I/O



Sheet: /midi/		
File: midi.kicad_sch		
Title: https://github.com/ksoloti/ksoloti-gills		
Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 6/10

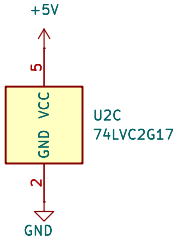
CV I/O





In case you need to run wires
to the other side of the PCB ->

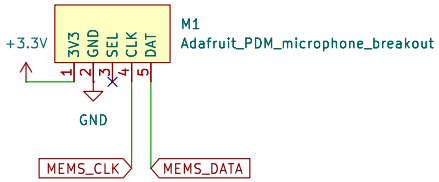
MH9
EMPTY_HOLE



Sheet: /cv_expansion/
File: cv.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

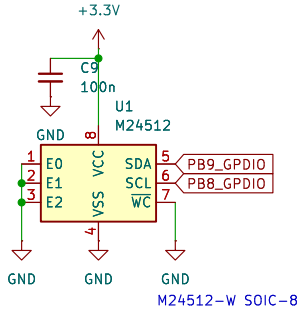
Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 7/10



Sheet: /digital_mic/
File: digital_mic.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 8/10



Sheet: /eeprom/
File: eeprom.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

Size: A4	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 9/10

v0.1 done

- initial commit

v0.2 done

- Change OUT EXPANSION stereo 3.5mm jack to two mono jacks (so no adapter required), slimmer and more readily available PJ-320A footprint
- Add 3.3V to CV expansion header (if external pots etc. are to be connected)
- Add GND jumper to MIDI configuration header
- Adjust DIN MIDI socket footprint
- Bottom panel: additional M3 screw holes for more stability
- Fix swapped LED1 and LED2 labels (to conform with Axo tradition): LED1 green, LED2 red
- Swap colors on LED3 and LED4 (to conform with LED1 and LED2. Now the "color 1" of each dual-color LED is green/blue and "color2" is red)
- Increase LED resistors to 1k (green), 680R (red)
- Move encoder east by 2.5mm
- Add footprint for optional 1000uF cap on the 5V rail (if you encounter Core reboot when (un)plugging DC)
- Use 0805 resistors for LEDs and place in accessible spot

v0.3 done

- Move two mounting holes 2mm north
- Add SUM_IN_* pads for summing audio input signals. External cap and resistor required!
- Add OUTPUT_INSERT header. Can be set up as a send-receive before the output volume pot.
- Increase vertical board dimension. Adjust pot, buttons, LED vertical spacing
- Adjust gain of U7 (optional radio module amp)

v0.4 done

- Reroute some traces that were at risk of touching potentiometer chassis.
- Use NRJ6HF footprints for Line I/O Jacks instead of NRJ4HF.
- Move optional HP pot header north by 5mm.
- Tweak case dimensions, thicker silkscreen for white case option.

v0.5 - Production

- Add footprint for Adafruit PDM mic and a mic hole in the panel.
- Remove additional I2C header (avoid I2C lines running across the board), add generic power header.
- Improve DC power filtering, power and ground "entering" and "leaving" Core at only one location.
- Simplified audio signal path, doing away with the opamp buffers. Confine audio path to the 6-pin line in/out header coming from the Core.
- Edit "output insert" header to now include SGND pin.

v0.6 - Open Source

- Add RC low pass filters to encoder AB pins and switch.
- Add I2C EEPROM for easy preset memory handling (or other non-volatile data).
- Rework "Ksoloti unified" output insert header. Perhaps for a stereo filter daughterboard?
- Add socket for pins PF6-PF9.
- Add Gate Output TRS jack with 3.3V to 5V level shifting. Tip: PF6, ring: PF7.

Sheet: /changelog/
File: changelog.kicad_sch

Title: https://github.com/ksoloti/ksoloti-gills

Size: A3	Date: 2025-11-19	**Rev: v0.6**
KiCad E.D.A. 9.0.6		Id: 10/10