

SOLAR AUDIO – Little Sun

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MUX – POTS

MOUNTING HOLES



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H102



H103



H104

Joël Ucedo

Sheet: /
File: ESP32 synth.kicad_sch

Title: ESP32 SYNTH

Size: A3 Date: 2023-06-02
KiCad E.D.A. kicad (6.0.7)

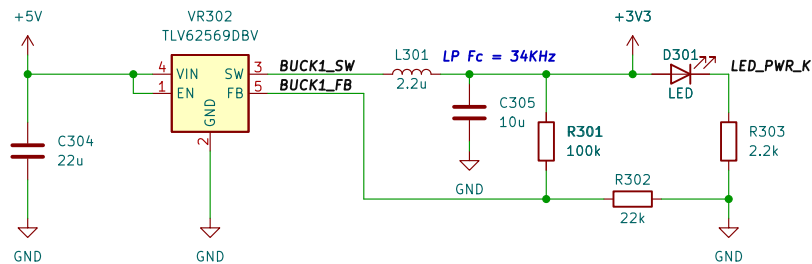
Rev: 0
Id: 1/7

BLOCK DIAGRAM

Joël Ucedo		
Sheet: /BLOCK DIAGRAM/ File: block_diagram.kicad_sch		
Title: ESP32 SYNTH		
Size: A3	Date: 2023-06-02	Rev: 0
KiCad E.D.A. kicad (6.0.7)	Id: 2/7	

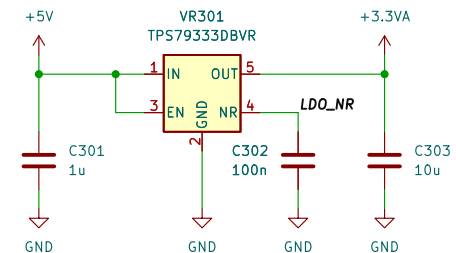
POWER

+5V > +3V3 DIGITAL



$$V(\text{out}) = 0.6 * (1 + 100k / 22k) = 3.327V$$

+5V > +3V3 ANALOG



Only for analog audio circuit

Joël Ucedo

Sheet: /POWER/
File: power.kicad_sch

Title: ESP32 SYNTH

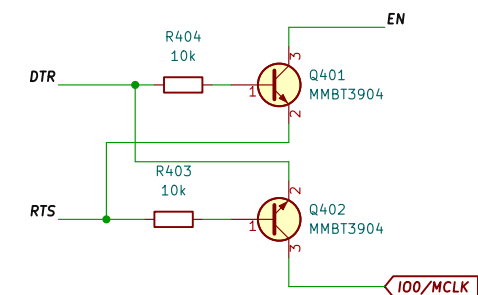
Size: A4 Date: 2023-06-02

KiCad E.D.A. kicad (6.0.7)

Rev: 0

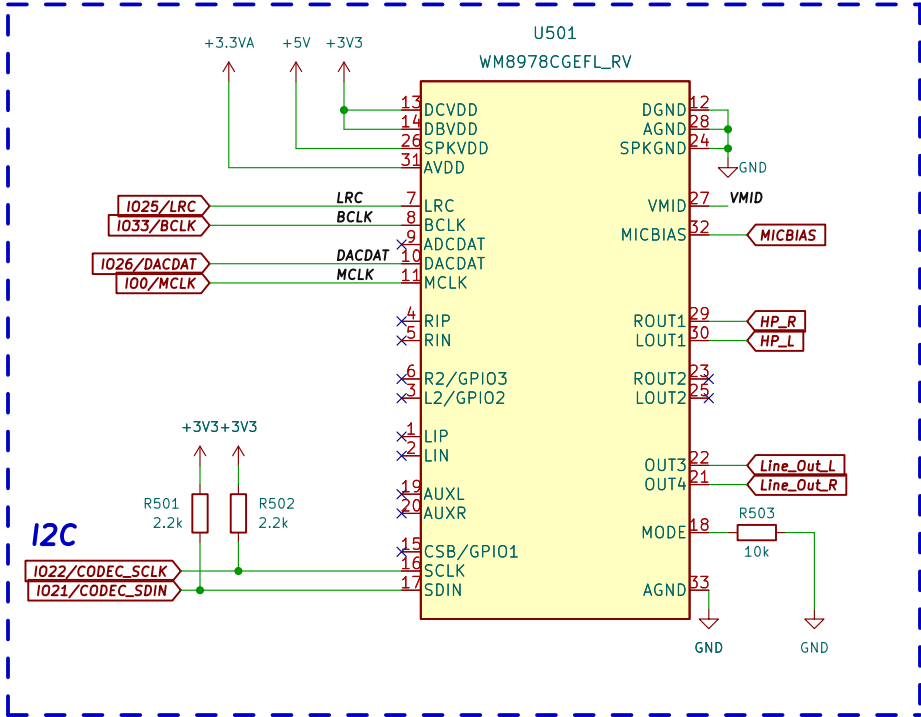
Id: 3/7

USB TO UART CONVERTER

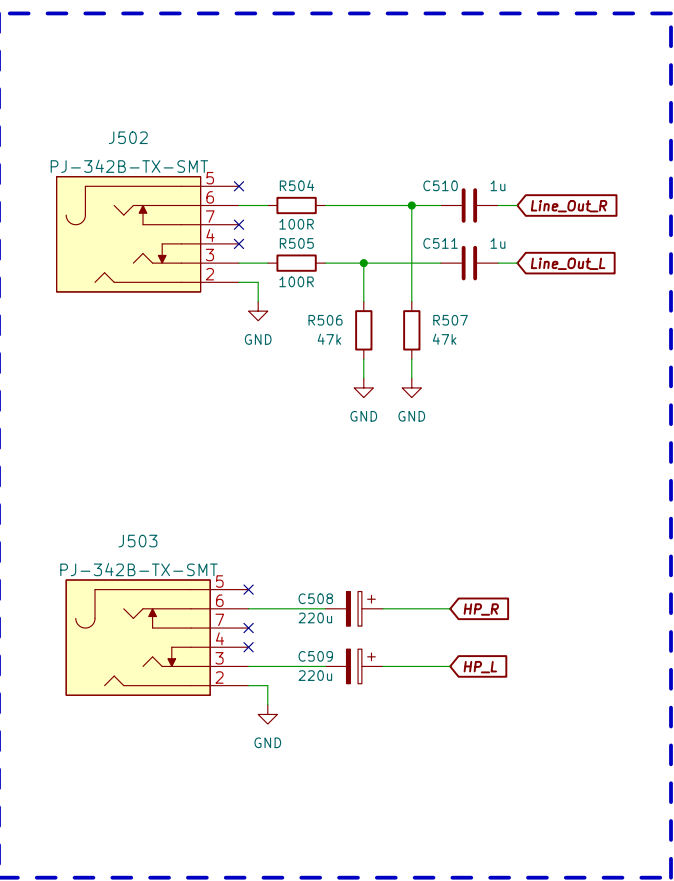


AUDIO

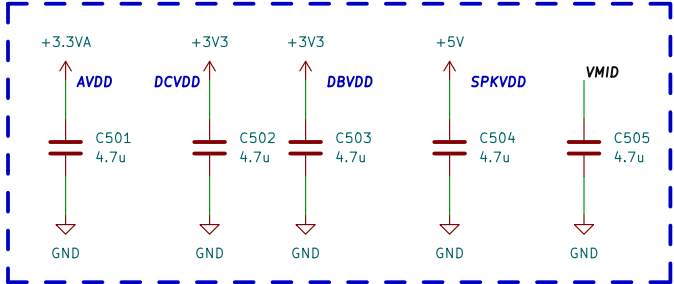
AUDIO CODEC



LINE OUT & HEADPHONE



DECOUPLING



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Sheet: /AUDIO/
File: audio.kicad_sch

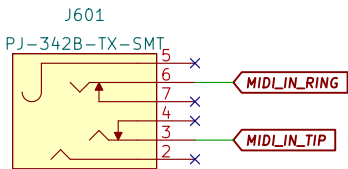
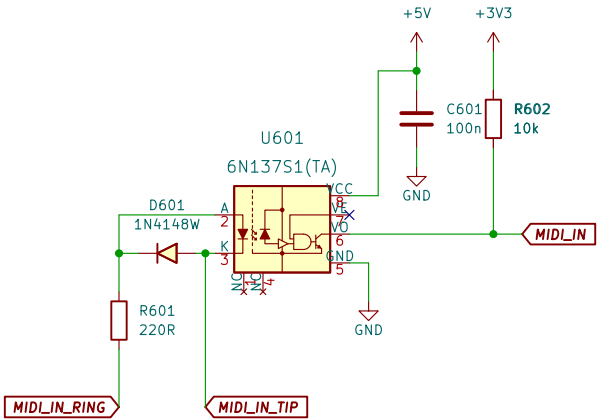
Title: ESP32 SYNTH

Size: A3 Date: 2023-06-02
KiCad E.D.A. kicad (6.0.7)

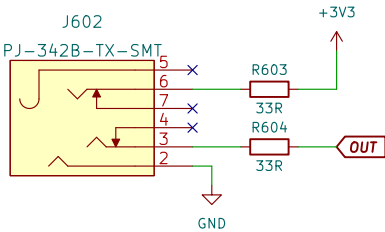
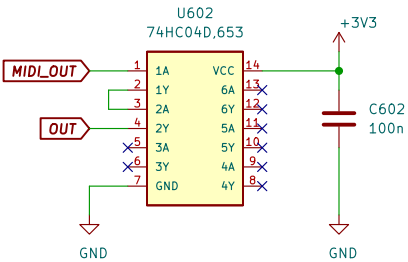
Rev: 0
Id: 5/7

MIDI

MIDI IN



MIDI OUT & THRU



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Sheet: /MIDI/
File: midi.kicad_sch

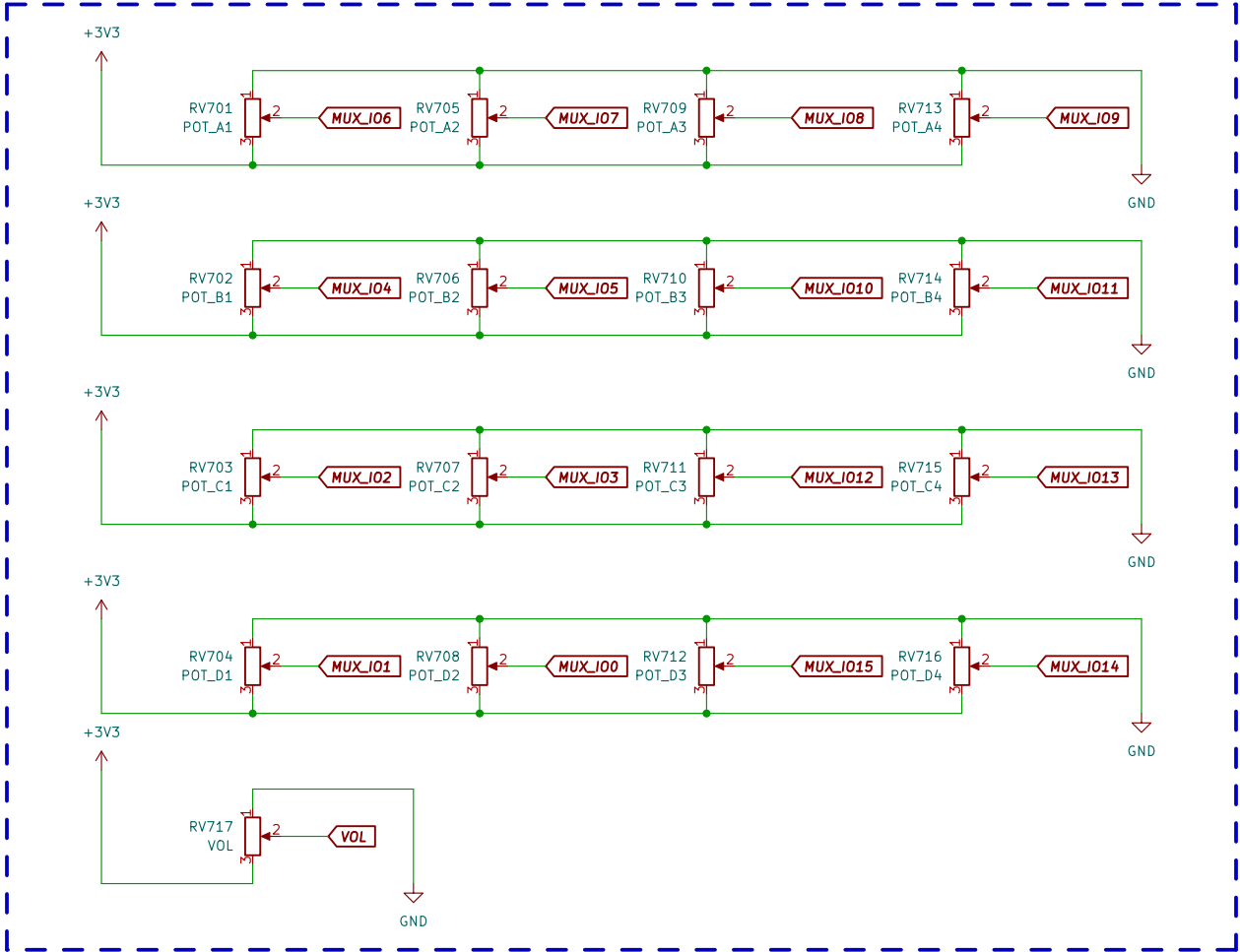
Title: ESP32 SYNTH

Size: A3 Date: 2023-06-02
KiCad E.D.A. kicad (6.0.7)

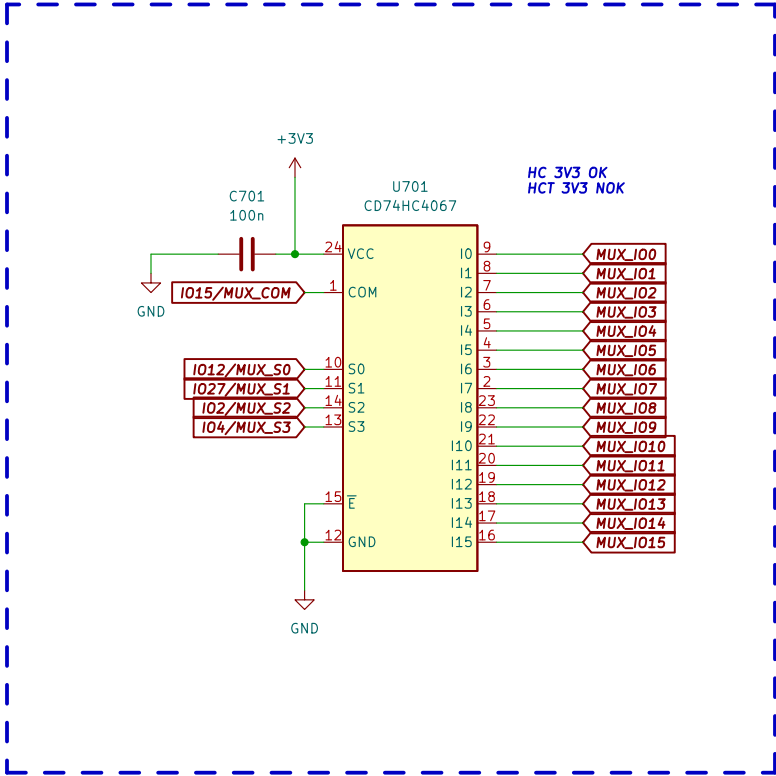
Rev: 0
Id: 6/7

MUX – POTS

POTENTIOMETERS



MULTIPLEXER



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Sheet: /MUX – POTS/
File: mux_pots.kicad_sch

Title: ESP32 SYNTH

Size: A3 Date: 2023-06-02
KiCad E.D.A. kicad (6.0.7)

Rev: 0
Id: 7/7