

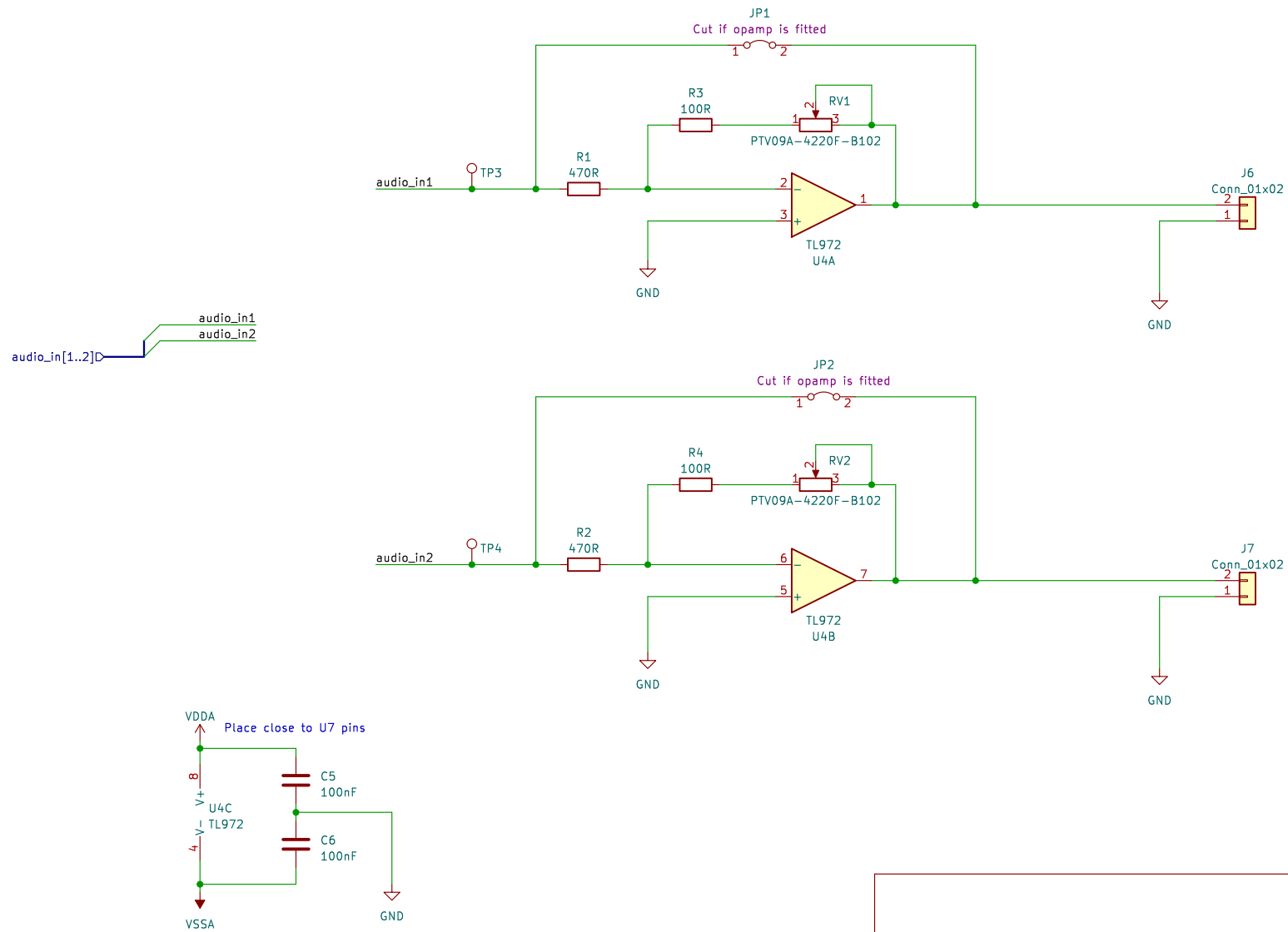
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File: audio_input.kicad_sch

Title:

Size: A4
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Date:

Rev:
Id: 3/12



Sheet: /AudioOutput/
File: audio_output.kicad_sch

Title:

Size: A4
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Date:

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Id: 4/12

adrs_in2.terma
adrs_in2.termb
adrs_in2.sw

adrs_in1.terma
adrs_in1.termb
adrs_in1.sw

gatecv_in1
gatecv_in2

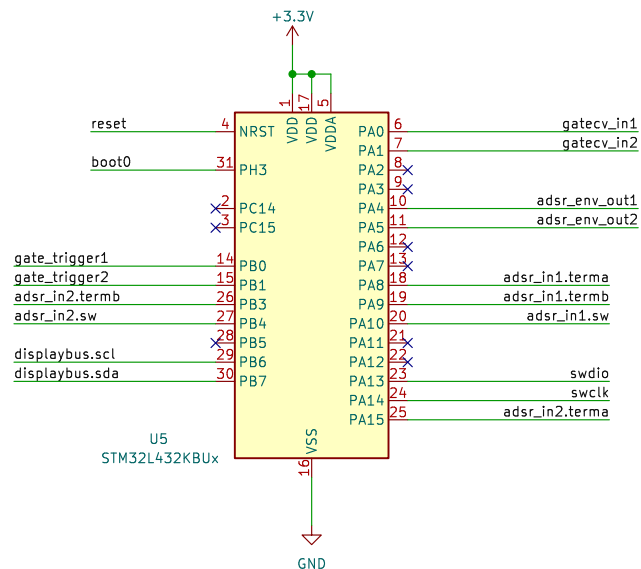
SW3
gate_trigger1
SW4
gate_trigger2
GND

+3.3V
J8
Conn_02x05_Odd_Even
1 2
3 4
5 6
7 8
9 10
SWD
swdio
swclk
reset
GND

Fit near VDD pins
+3.3V
C7 100nf
C8 100nf
C9 4.7uf
GND

Fit near VDDA pin
+3.3V
C10 10nf
C11 1uf
GND

+3.3V
JP3
boot0
R5 10K
GND



adrs_env_out1
adrs_env_out2
adrs_env_out[1..2]

displaybus.scl
displaybus.sda
displaybus[scl sda]

STM32L432KBx6 documents:

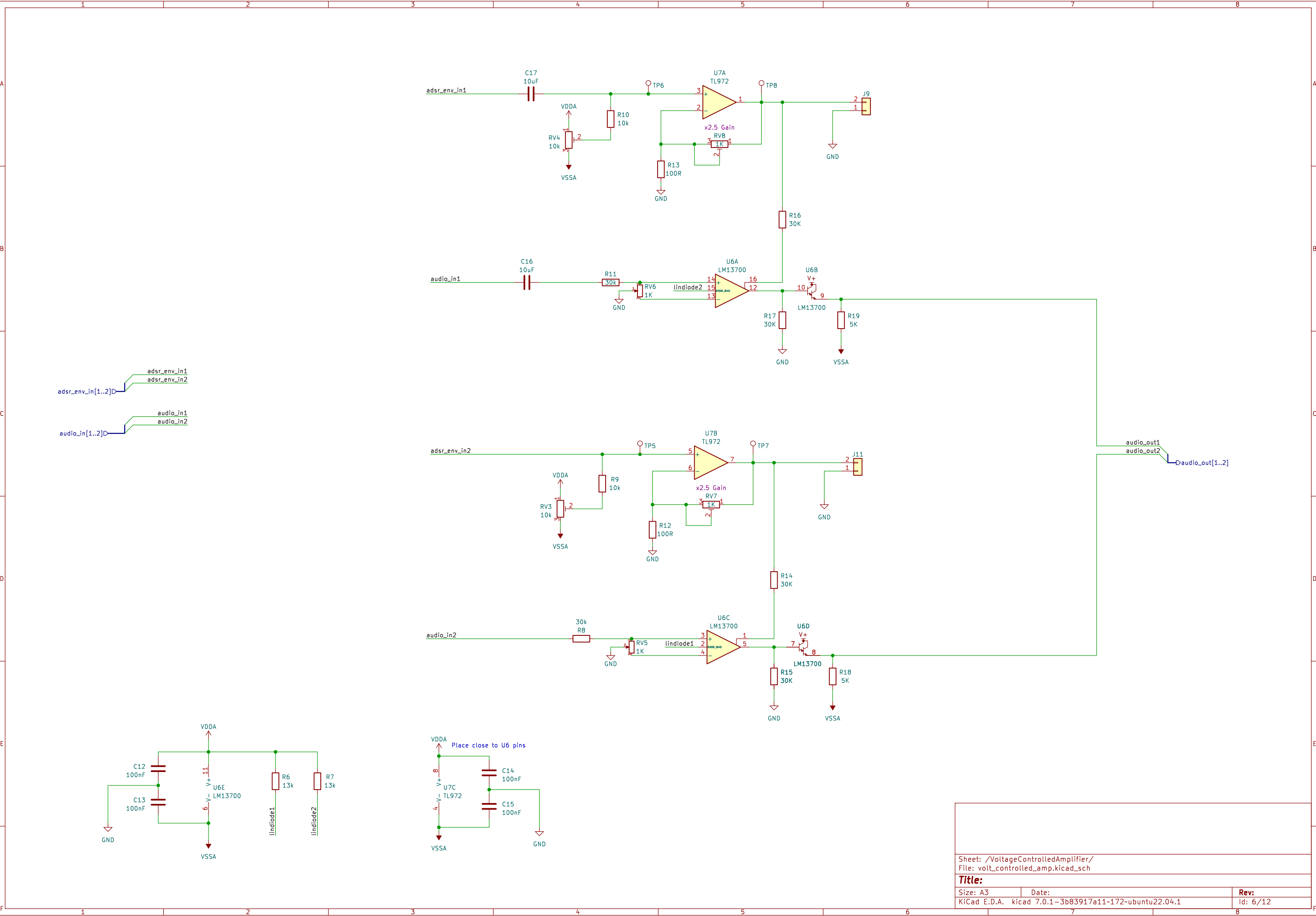
- View datasheet
- View Reference Manual
- View Erata
- View Nucleo Schematic
- View Cube Report
- View Crystal Appnote

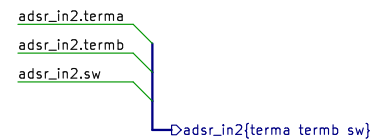
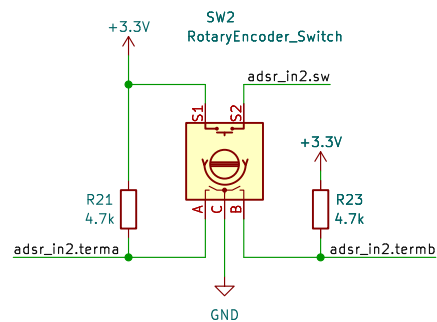
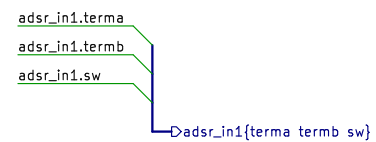
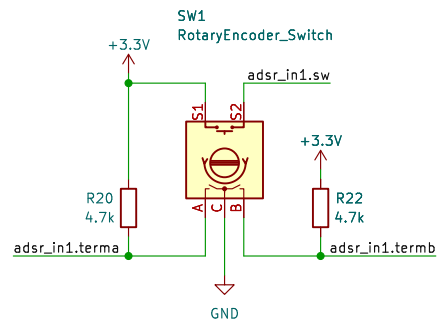
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File: envelope_generator.kicad_sch

Title:

Size: A4
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Date:
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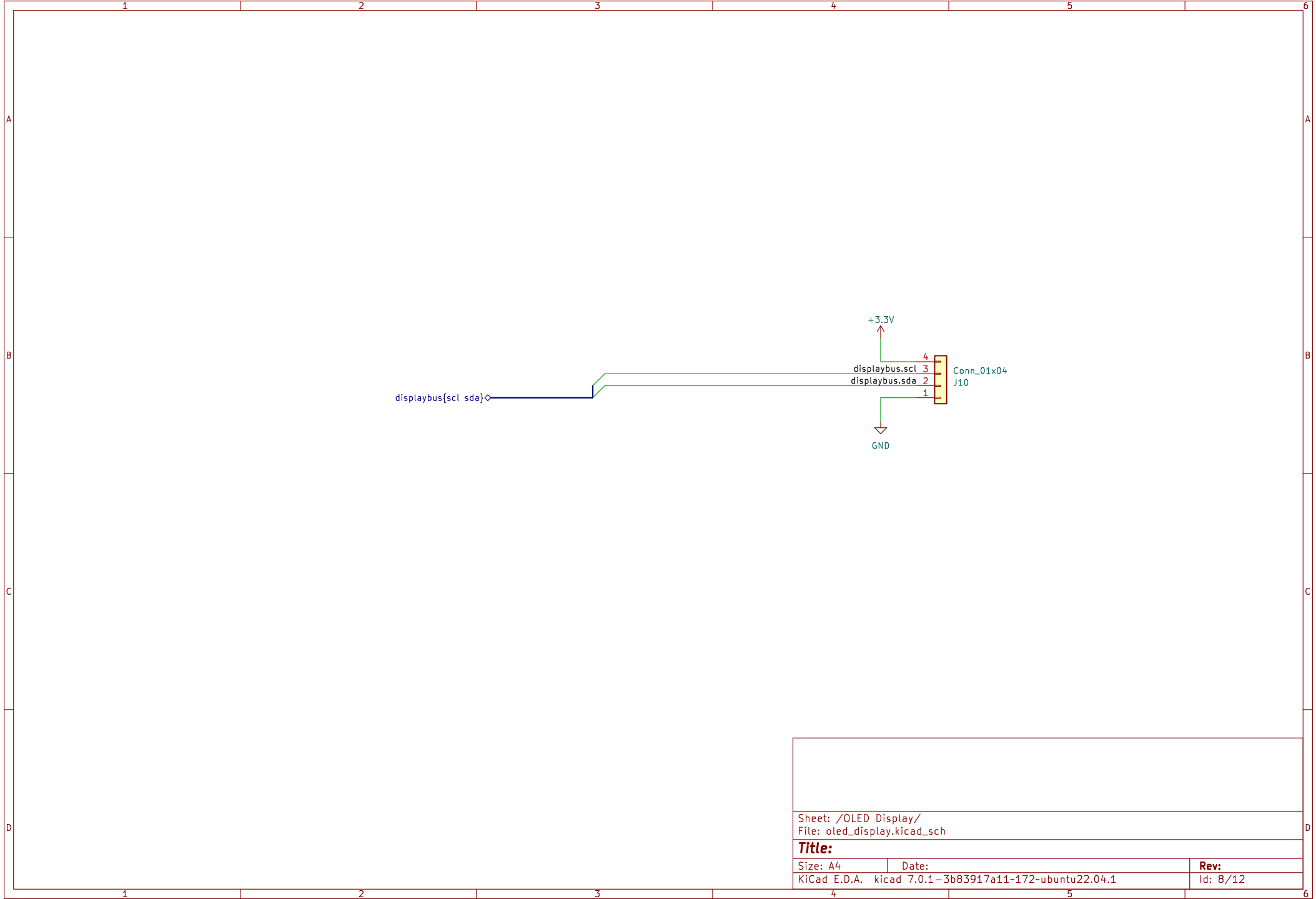


Sheet: /Rotary Encoders/
File: rotary_encoders.kicad_sch

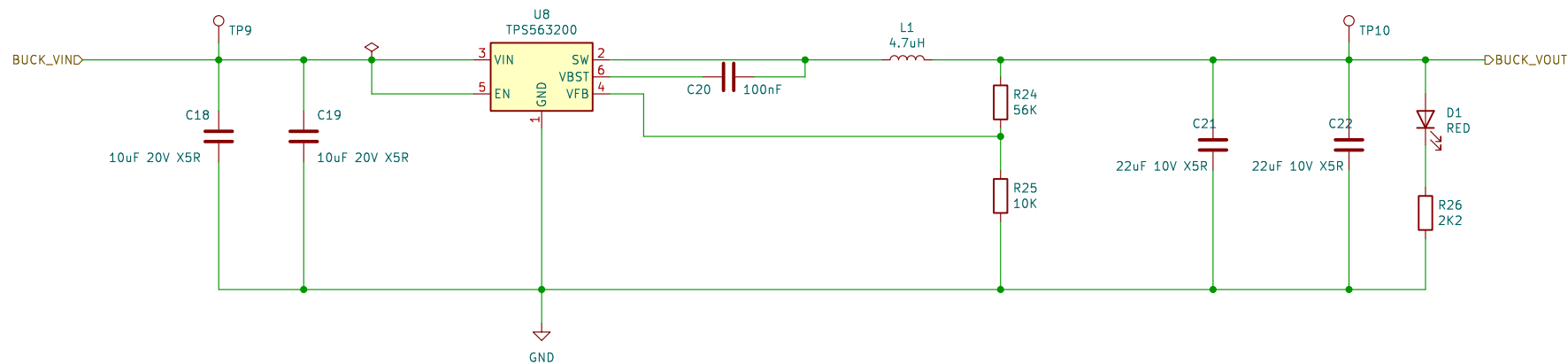
Title:

Size: A4 Date:
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Rev:
Id: 7/12



Sheet: /OLED Display/ File: oled_display.kicad_sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1		Id: 8/12



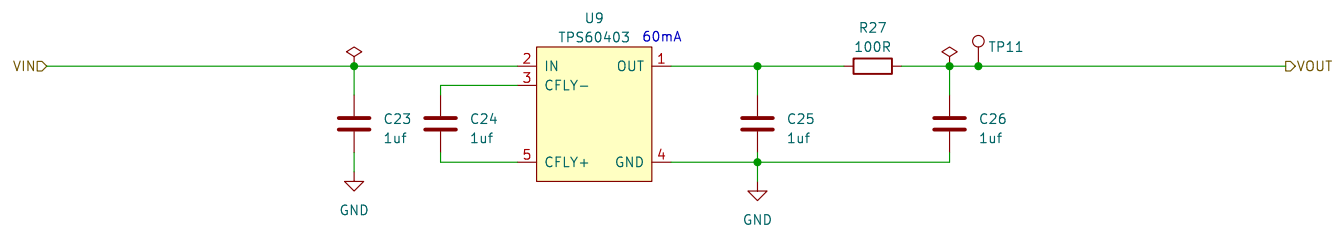
Created by C Sutton

Sheet: /PowerSupply/SMPS/
File: TPS563200_BUCK.kicad_sch

Title: PSU – TPS563200 Buck Regulator

Size: A4 Date: 2021-06-05
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Rev: B
Id: 9/12



TPS60403 Output Ripple in Volts

$$V_o(\text{ripple}) = I_o / (f_{\text{osc}} * C_o) + 2 * I_o * \text{ESR}_{C_o}$$

$$V_o(\text{ripple}) = 0.060\text{A} / (250000\text{Hz} * 0.000001\text{F}) + 2 * 0.060\text{A}$$

$$V_o(\text{ripple}) = 0.144\text{V}$$

Sheet: /PowerSupply/Voltage Inverter/
File: TPS60403_NEGVOLT.kicad_sch

Title:

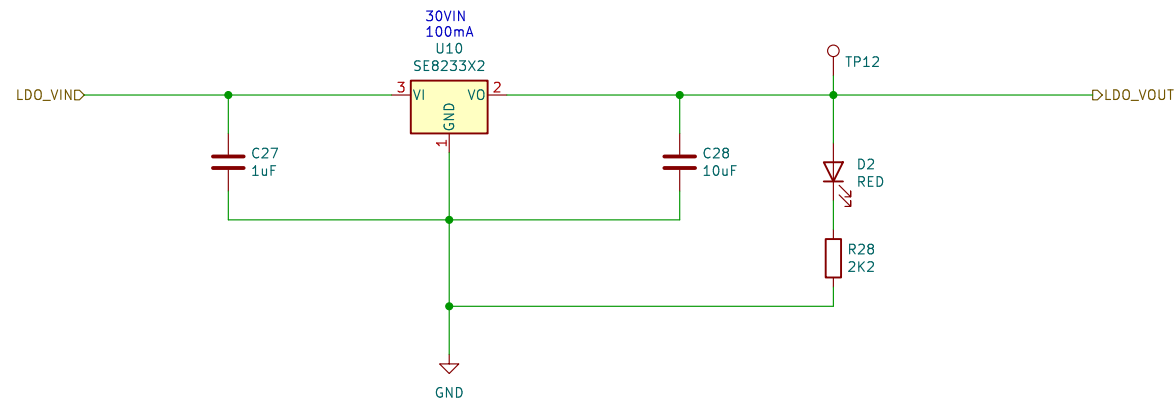
Size: A4

Date:

Rev:

KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

Id: 10/12



Created by C Sutton

Sheet: /PowerSupply/LDO 3.3V/

File: SE8233X2_LDO.kicad_sch

Title: PSU – LDO 3.3V @ 100mA

Size: A4

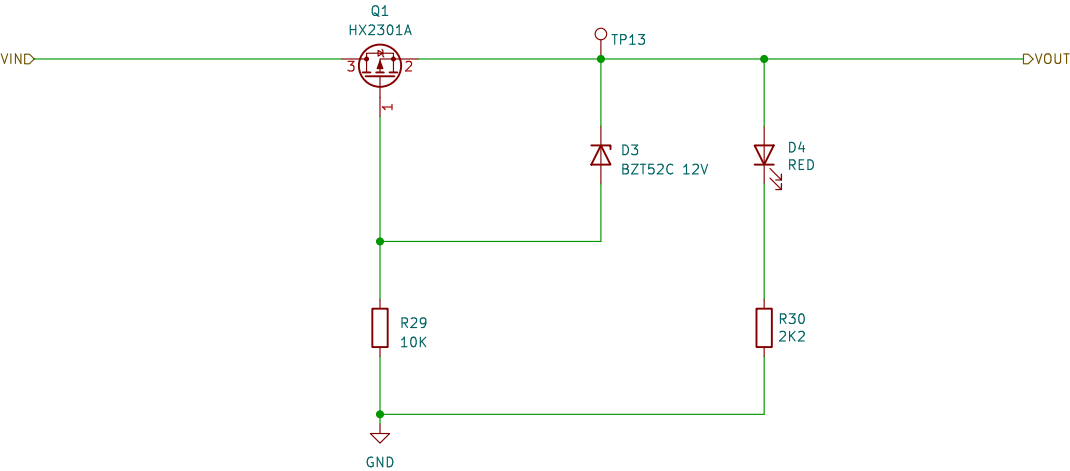
Date: 2021-06-05

Rev: B

KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1

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See "MOSFET Protection" and fig3 for explanation of reverse polarity



Sheet: /PowerSupply/PolarityProtection/
File: polarity_protection.kicad_sch

Title:

Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.1-3b83917a11-172-ubuntu22.04.1		Id: 12/12