MIDI

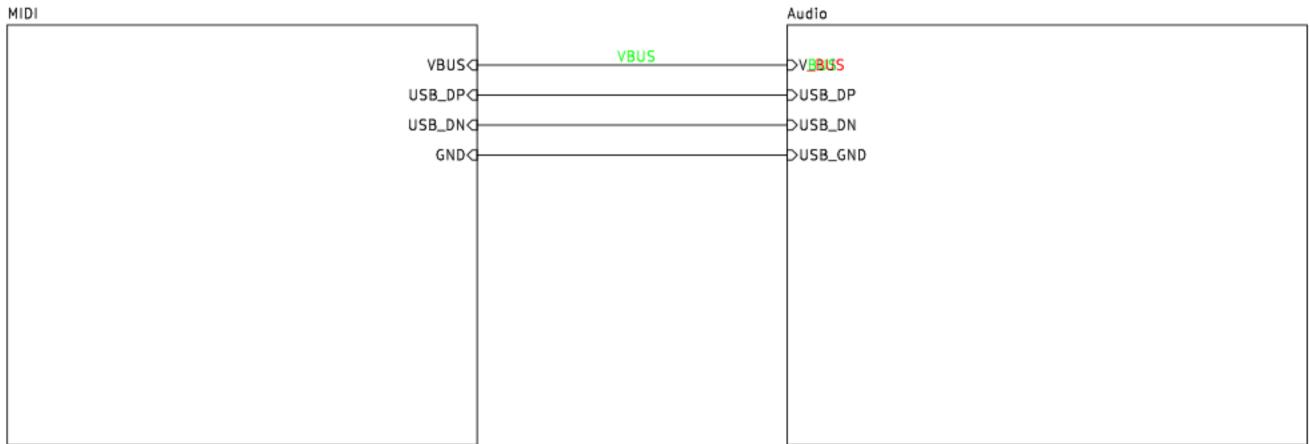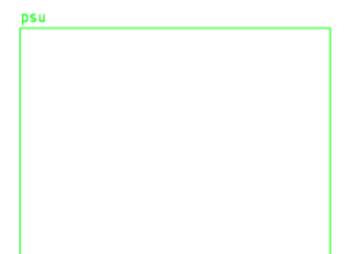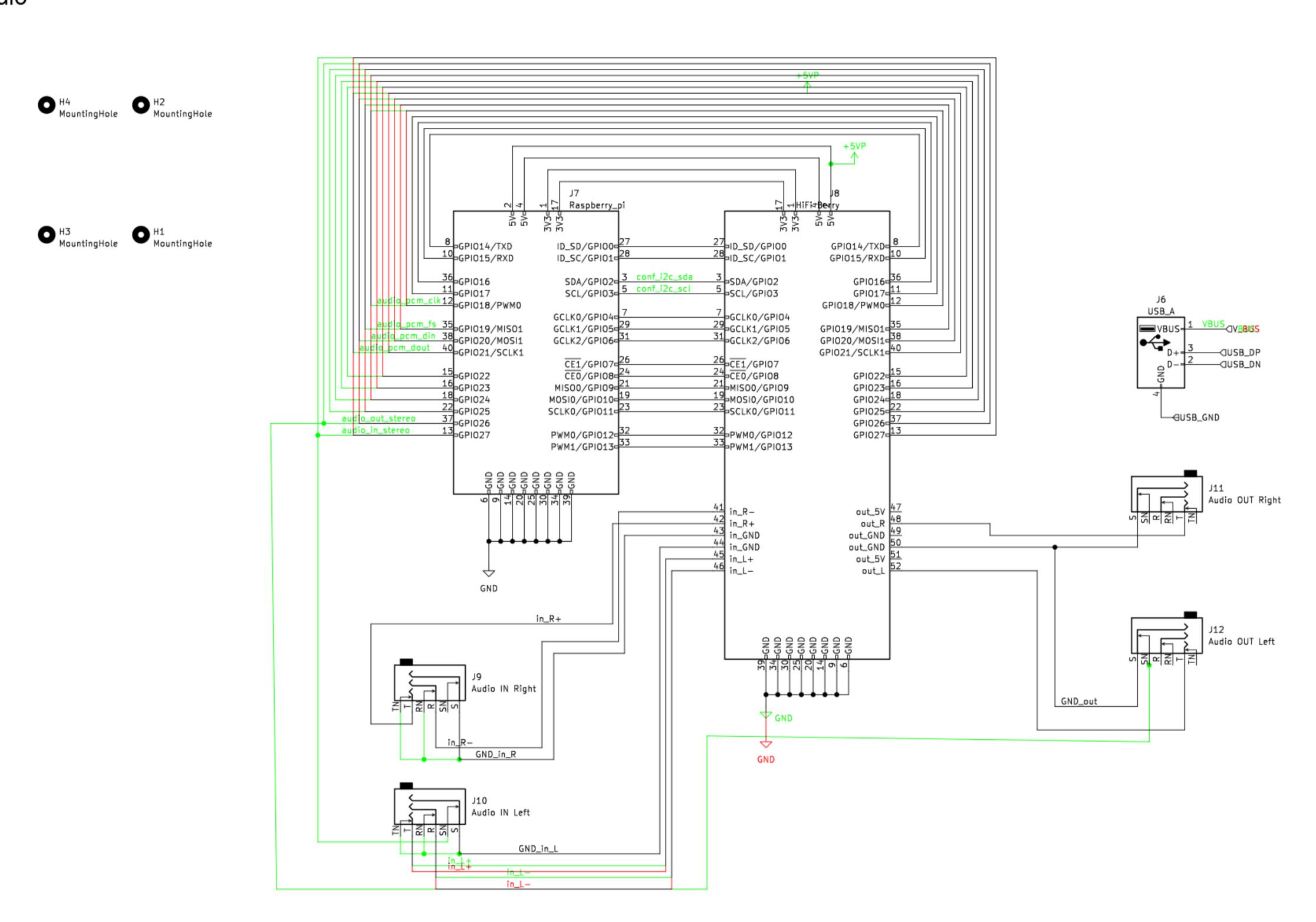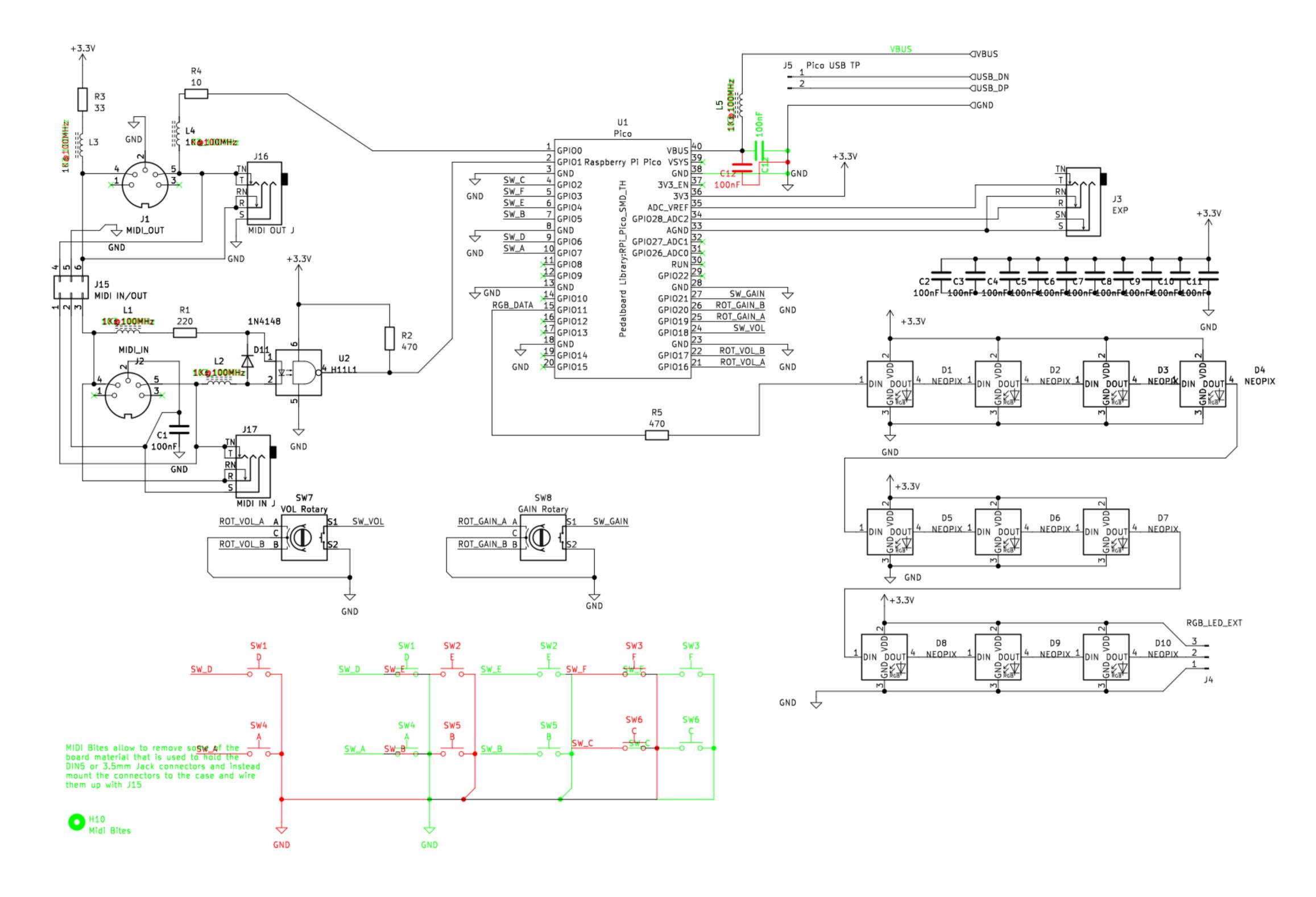| VBUS | VBUS | VBUS |
USB_DP		USB_DP
USB_DN		USB_DN
GND		USB_GND

Audio

File: pico.kicad_sch

File: audio.kicad_sch

psu

File: psu.kicad_sch

H6
MountingHole

H7
MountingHole

H8
MountingHole

H5
MountingHole

H9
MountingHole

MIDI Schematic

Power Supply

+3.3V

R3
33

L3
1K@100MHz

R4
10

GND

L4
1K@100MHz

J1 MIDI_OUT

J16 MIDI OUT J

TN
T
RN
R
S

GND

GND

MIDI IN/OUT

J15 MIDI IN/OUT

L1
1K@100MHz

R1
220

1N4148

D11

L2
1K@100MHz

U2
H11L1

R2
470

+3.3V

GND

J2 MIDI_IN

C1
100nF

GND

J17 MIDI IN J

TN
T
RN
R
S

GND

U1 Pico — Raspberry Pi Pico

Pedalboard Library:RPI_Pico_SMD_TH

Pin	Name		Name	Pin
1	GPIO0		VBUS	40
2	GPIO1		VSYS	39
3	GND		GND	38
4	GPIO2 SW_C		3V3_EN	37
5	GPIO3 SW_F		3V3	36
6	GPIO4 SW_E		ADC_VREF	35
7	GPIO5 SW_B		GPIO28_ADC2	34
8	GND		AGND	33
9	GPIO6 SW_D		GPIO27_ADC1	32
10	GPIO7 SW_A		GPIO26_ADC0	31
11	GPIO8		RUN	30
12	GPIO9		GPIO22	29
13	GND		GND	28
14	GPIO10		GPIO21 SW_GAIN	27
15	GPIO11 RGB_DATA		GPIO20 ROT_GAIN_B	26
16	GPIO12		GPIO19 ROT_GAIN_A	25
17	GPIO13		GPIO18 SW_VOL	24
18	GND		GND	23
19	GPIO14		GPIO17 ROT_VOL_B	22
20	GPIO15		GPIO16 ROT_VOL_A	21

R5
470

USB

J5 Pico USB TP

1
2

VBUS
USB_DN
USB_DP
GND

L5
1K@100MHz

C12
100nF

C12
100nF

GND

+3.3V

J3 EXP

TN
T
RN
R
SN
S

+3.3V

Decoupling Capacitors

C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
100nF	100nF	100nF	100nF	100nF	100nF	100nF	100nF	100nF	100nF

GND

NeoPixels

+3.3V

D1 NEOPIX — D2 NEOPIX — D3 NEOPIX — D4 NEOPIX

DIN VDD DOUT GND RGB

GND

+3.3V

D5 NEOPIX — D6 NEOPIX — D7 NEOPIX

GND

+3.3V

D8 NEOPIX — D9 NEOPIX — D10 NEOPIX

RGB_LED_EXT

GND

J4

3
2
1

SW7 VOL Rotary

ROT_VOL_A A
C
ROT_VOL_B B

S1 SW_VOL
S2

GND

SW8 GAIN Rotary

ROT_GAIN_A A
C
ROT_GAIN_B B

S1 SW_GAIN
S2

GND

Switches

SW1 D   SW_D
SW4 A   SW_A

SW1 D   SW_D
SW2 E   SW_E
SW4 A   SW_A
SW5 B   SW_B

SW2 E   SW_E
SW5 B   SW_B

SW3 F   SW_F
SW6 C   SW_C

SW3 F
SW6 C

GND

GND

MIDI Bites allow to remove some of the
board material that is used to hold the
DIN5 or 3.5mm Jack connectors and instead
mount the connectors to the case and wire
them up with J15

H10
Midi Bites

/psu only in new file

5.5mm x 2.1mm, Center Negative.

+5VP

J14

vo

C18
1nF

F1
Polyfuse_1.8A

L6
2.2uH

vin

PS1
PDQE15-Q24-S5-D

unfused

fused

3   VIN   +VO   4

1   CTRL   TRIM   5

2   GND   0V   6

C13
220uF

C16
4.7uF

C17
4.7uF

C14
220uF

C15
220uF

gnd

Barrel_Jack_MountingPin
J13

C19
1nF

GND