J_MIDI1
PJ366ST
T MIDI_5T
TN MIDI_4R
S
GND

+3.3V
100k
RV_POT1
2 POT_1
GND

J4
Conn_02x02_Odd_Even
BTN_1 1 2
BTN_2 3 4 BTN_LED_1

J5
Conn_02x03_Odd_Even
LED_1 1 2 LED_6
LED_2 3 4 LED_5
LED_3 5 6 LED_4

J_AUDIO_CV_IN1
PJ398SM
T AUDIO_CV_IN_1
TN
S
GND

J_AUDIO_CV_IN2
PJ398SM
T AUDIO_CV_IN_2
TN
S
GND

J_PULSE_IN1
PJ398SM
T PULSE_IN
TN
S
GND
10k
R2
GND

+3.3V
100k
RV_POT2
2 POT_2
GND

J6
Conn_02x02_Odd_Even
MIDI_5T 1 2 PULSE_IN
MIDI_4R 3 4 PULSE_OUT

J7
Conn_02x05_Odd_Even
POT_3 1 2
POT_2 3 4
POT_1 5 6 AUDIO_CV_IN_1
7 8
9 10 AUDIO_CV_IN_2

J_AUDIO_CV_OUT1
PJ398SM
T AUDIO_CV_OUT_1
TN
S
GND

J_AUDIO_CV_OUT2
PJ398SM
T AUDIO_CV_OUT_2
TN
S
GND

J_PULSE_OUT1
PJ398SM
T PULSE_OUT
TN
S
GND

+3.3V
100k
RV_POT3
2 POT_3
GND

J8
Conn_02x03_Odd_Even
1 2 AUDIO_CV_OUT_2
3 4
AUDIO_CV_OUT_1 5 6
GND

U_BTN1
SW_SPST_Push_LED
1 2 BTN_1
3 4
BTN_LED_1 R1 L1 L2
1k
GND

U_BTN2
SW_SPST_Push
1 2 BTN_2
3 4
L1 L2
GND

LEDs
LED_1 LED_1
LED_2 LED_2
LED_3 LED_3
LED_4 LED_4
LED_5 LED_5
LED_6 LED_6
File: sheets/leds.kicad_sch

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

+12V   UI power connection
PWR_FLAG
Conn_02x03_Odd_Even
J1
2 1
4 3
6 5
PWR_FLAG GND   −12V   PWR_FLAG   GND

1 J2
2 Conn_01x02
GND

+3.3V +12V
1 J3
2 Conn_01x02
PWR_FLAG

Shmøergh
Sheet: /
File: brain−ui.kicad_sch
Title: Brain UI
Size: A4 | Date: 2026−02−21 | Rev: v1.1
KiCad E.D.A. 9.0.6 | Id: 1/2

+12V

4.7k
R5

D1
LED

LED_1

2
R3
47k

3

Q1
2N3904

1

GND

+12V

4.7k
R9

D2
LED

LED_2

2
R7
47k

3

Q2
2N3904

1

GND

+12V

4.7k
R13

D3
LED

LED_3

2
R11
47k

3

Q3
2N3904

1

GND

+12V

4.7k
R6

D4
LED

LED_4

2
R4
47k

3

Q4
2N3904

1

GND

+12V

4.7k
R10

D5
LED

LED_5

2
R8
47k

3

Q5
2N3904

1

GND

+12V

4.7k
R14

D6
LED

LED_6

2
R12
47k

3

Q6
2N3904

1

GND