Sheet1

File: Sheet1.kicad_sch

Connector and Encoder

File: Connector.kicad_sch

LED0

U1
HT16K33A-24SOP

+5VP

LED0_A1
LED0_A0

24 VDD   ROW0/A1 21
          ROW1/A0 20
22 SCL   ROW2/K1 19
23 SDA   ROW3/K2 18
          ROW4/K3 17 KWM-20882CPGB
          ROW5/K4 16
1 VSS   ROW6/K5 15
          ROW7/K6 14
          ROW8/K7 13
GND   ROW9/K8 12
          ROW10/K9 11
          ROW11/K10/INT 10

I2C_LED_SCL
I2C_LED_SDA

+5VP

C1   C2
10u   0.1u
16V   16V

GND

LED0_AD

COM0/AD 2   9
COM1/KS0 3   14
COM2/KS1 4   8
COM3/KS2 5   12
COM4 6   1
COM5 7   7
COM6 8   2
COM7 9   5

LED0

13 3 4 10 6 11 15 16

LED1

U2
HT16K33A-24SOP

+5VP

LED1_A1
LED1_A0

24 VDD   ROW0/A1 21
          ROW1/A0 20
22 SCL   ROW2/K1 19
23 SDA   ROW3/K2 18
          ROW4/K3 17 KWM-20882CPGB
          ROW5/K4 16
1 VSS   ROW6/K5 15
          ROW7/K6 14
          ROW8/K7 13
GND   ROW9/K8 12
          ROW10/K9 11
          ROW11/K10/INT 10

I2C_LED_SCL
I2C_LED_SDA

+5VP

C3   C4
10u   0.1u
16V   16V

GND

LED1_AD

COM0/AD 2   9
COM1/KS0 3   14
COM2/KS1 4   8
COM3/KS2 5   12
COM4 6   1
COM5 7   7
COM6 8   2
COM7 9   5

LED1

13 3 4 10 6 11 15 16

LED2

U3
HT16K33A-24SOP

+5VP

LED2_A1
LED2_A0

R1   R2
10k   10k

24 VDD   ROW0/A1 21
          ROW1/A0 20
22 SCL   ROW2/K1 19
23 SDA   ROW3/K2 18
          ROW4/K3 17 KWM-20882CPGB
          ROW5/K4 16
1 VSS   ROW6/K5 15
          ROW7/K6 14
          ROW8/K7 13
GND   ROW9/K8 12
          ROW10/K9 11
          ROW11/K10/INT 10

I2C_LED_SCL
I2C_LED_SDA

+5VP

C5   C6
10u   0.1u
16V   16V

GND

LED2_AD

COM0/AD 2   9
COM1/KS0 3   14
COM2/KS1 4   8
COM3/KS2 5   12
COM4 6   1
COM5 7   7
COM6 8   2
COM7 9   5

LED2

13 3 4 10 6 11 15 16

I2C ADDRESSES

D1
1N4148W

D2
1N4148W

D3
1N4148W

LED0_AD   LED1_AD   LED2_AD

R3   R8   R10 R14   R16 R18
10k 10k   10k 10k   10k 10k

LED0_A1   LED1_A1   LED2_A1
LED0_A0   LED1_A0   LED2_A0

Sheet: /Sheet1/
File: Sheet1.kicad_sch

Title:

Size: A4   Date: Rev:
KiCad E.D.A. 8.0.6   Id: 2/3

MT1
PEC11R-4215F-S0024

SWITCH_IN

C9
0.1u
16V
GND

+5VP   +5VP

R5   R4   R6
10k   10k   10k

ENC_A

ENC_B

R9
0

COM   COM   A   A
S1   SHIELD   B   B
S2   SHIELD__1

R7
10k

C7   C8
0.1u   0.1u
16V   16V

GND   GND

GND   GND

+5VP

J1
SHF-106-01-L-D-TH

01	01	02	02	SWITCH_IN
03	03	04	04	ENC_A
05	05	06	06	ENC_B
07	07	08	08	I2C_LED_SDA
09	09	10	10	I2C_LED_SCL
11	11	12	12	

GND

GND
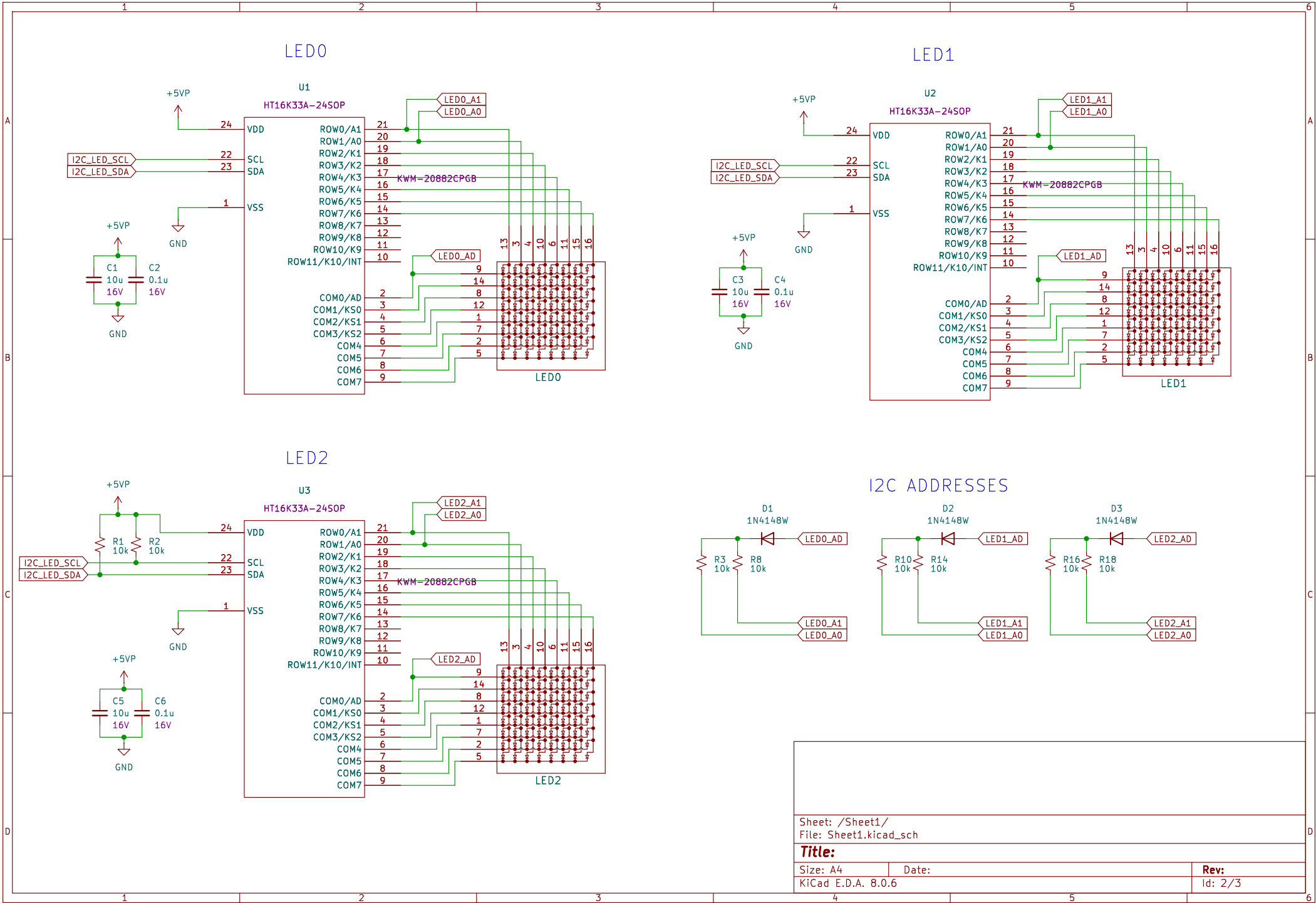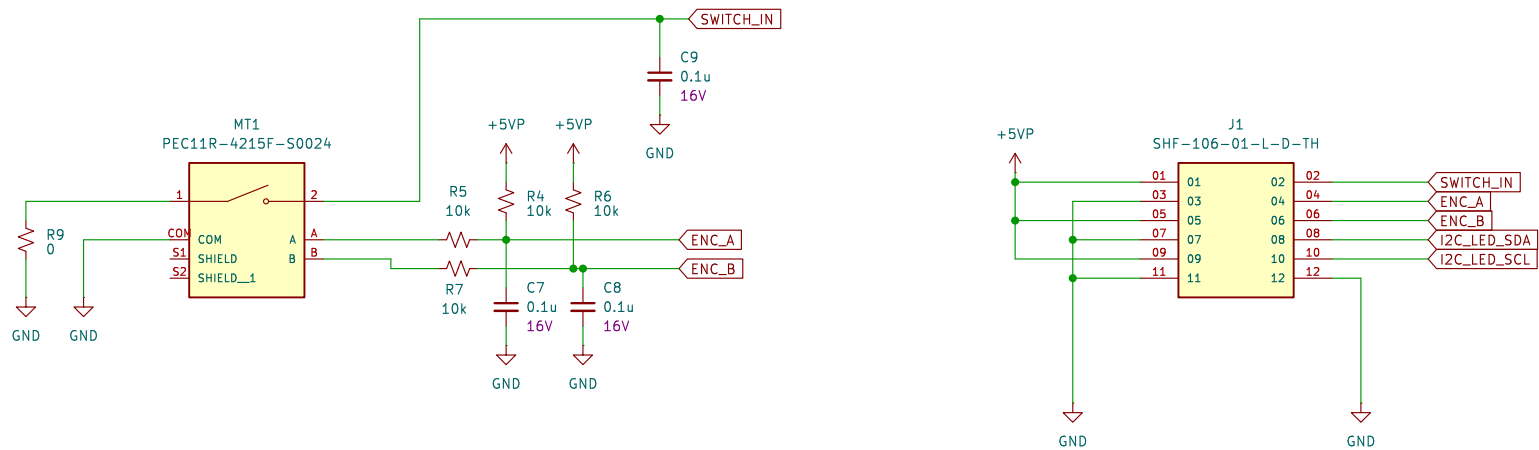
H1
MountingHole

H3
MountingHole

H2
MountingHole