Root

U1

Pin	Signal		Signal	Pin
1	EN		GPIO33	17
2	GPIO1		U0TXD/GPIO43	18
3	GPIO2		GPIO37	19
4	GPIO3		U0RXD/GPIO44	20
5	GPIO4		GPIO38	21
6	GPIO5		GPIO36	22
7	GPIO12		GPIO34	23
8	GPIO6		GPIO35	24
9	GPIO13		GPIO21	25
10	GPIO7		GPIO18	26
11	GPIO11		GPIO17	27
12	GPIO8		GPIO16	28
13	GPIO10		GND	29
14	GPIO9		GND	30
15	3V		GPIO15	31
16	GPIO14		VBUS	32

Labels around U1: RFID2_CS, RFID3_CS, RFID1_CS, RFID4_CS, CAN_TX, RFID_SCK, CAN_RX, RFID_MISO, DMX_TX, RFID_RESET, DMX_DE, RFID_MOSI, DMX_RX, 3.3V, Buzzer

SW1, SW2, SW3, LED4_IN, SDA, SCL, LED3_IN, LED2_IN, AUDIO_TX, LED1_IN, AUDIO_RX, +5V_SYS, GND

3.3V
R1 4.7kΩ R2 4.7kΩ
C1 516? C1 516?

C8 10uF C9 100nF
GND

U2
Pin	Signal		Signal	Pin
2	RX		SPK1	6
3	TX		SPK2	8
1	VCC			
14	USB-		DAC_R	4
15	USB+		DAC_L	5
12	ADKEY_1		BUSY	16
13	ADKEY_2			
9	IO_1		GND	7
11	IO_2		GND	10

AUDIO_RX, AUDIO_TX
+5V_SYS
JST_02 J2
JST_02 J3
C10 10uF C11 100nF
GND

SW1 SW_Push
SW2 SW_Push
SW3 SW_Push
SW1, SW2, SW3
GND

RFID
File: rfid.kicad_sch

IO
File: io.kicad_sch

LEDs
File: leds.kicad_sch

Buzzer
R3 1kΩ
BZ1 Buzzer
GND

JP2 Jumper_2_Open
3.3V
U3 SN65HVD230
D	VCC
R	
Vref	CANH
Rs	CANL
GND	
CAN_TX, CAN_RX
R4 10KΩ
C227 8?
R5 120Ω
+5V_SYS
CAN_BUS1
GND

3.3V
DISPLAY1
1 2 3 4
SCL, SDA
GND

3.3V
U4 SP3485CN
RO	VCC
RE	A
DE	B
DI	GND
DMX_TX, DMX_DE, DMX_RX
C266 01
DMX_Out1
GND

PWR_FLAG
+5V_SYS
PWR_FLAG
+5V_LED
PWR_FLAG
GND
+5V_SYS +5V_LED
JP1 Jumper_2_Open

Q1
DOINGTER DOD60N02
+5V_SYS
J1 5V SYS
GND

MountingHole
MountingHole
MountingHole
MountingHole

HOUSETRAP

Author : Jacques Supcik
HouseTrap
Sheet: /
File: pcb-m.kicad_sch

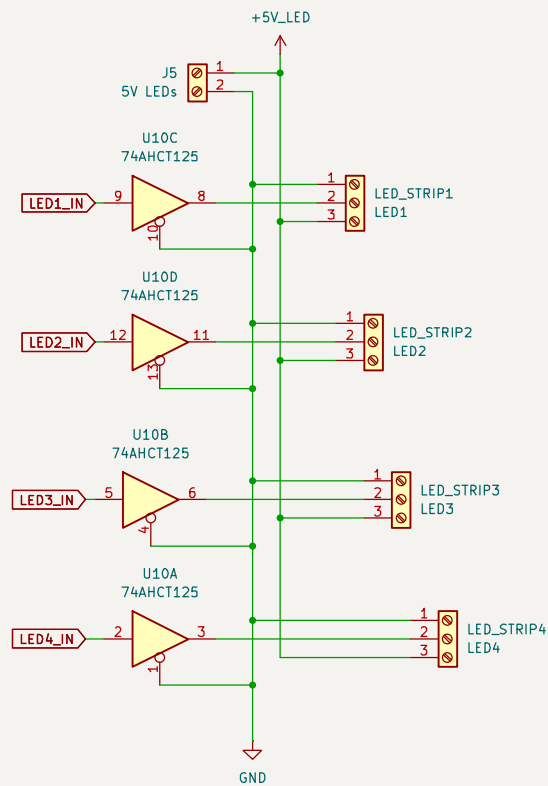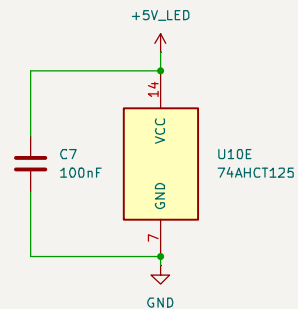TLP:AMBER Proprietary

Title: Root
Size: A4   Date: 2025-05-17   Rev: 0.2
KiCad E.D.A. 9.0.2   Id: 1/4

RFID1 RFID2 RFID3 RFID4

SH SH SH SH

RFID_SCK
RFID_MOSI
RFID_MISO
RFID_RESET

RFID1_CS
RFID2_CS
RFID3_CS
RFID4_CS

3.3V_RFID

GND

+5V_SYS

U5
AMS1117-3.3

C1
100uF

C2
22uF

GND

HOUSETRAP

TLP:AMBER
Proprietary

Title: RFIDs

Size: A4 | Date: 2025-05-17 | Rev: 0.2
KiCad E.D.A. 9.0.2 | Id: 2/4

HOUSETRAP

Author: Jacques Supcik
HouseTrap
Sheet: /IO/
File: io.kicad_sch

TLP:AMBER
Proprietary

Title: Input / Output

| Size: A4 | Date: 2025-05-17 | Rev: 0.2 |
| KiCad E.D.A. 9.0.2 | | Id: 3/4 |

+5V_LED

C7
100nF

U10E
74AHCT125
VCC 14
GND 7

GND

+5V_LED

J5
5V LEDs
1
2

U10C
74AHCT125
LED1_IN 9 8
10

LED_STRIP1
1
2
3
LED1

U10D
74AHCT125
LED2_IN 12 11
13

LED_STRIP2
1
2
3
LED2

U10B
74AHCT125
LED3_IN 5 6
4

LED_STRIP3
1
2
3
LED3

U10A
74AHCT125
LED4_IN 2 3
1

LED_STRIP4
1
2
3
LED4

GND

HOUSETRAP

TLP:AMBER
Proprietary

Title: LED Strips

Size: A4   Date: 2025-05-17

KiCad E.D.A. 9.0.2

Rev: 0.2

Id: 4/4