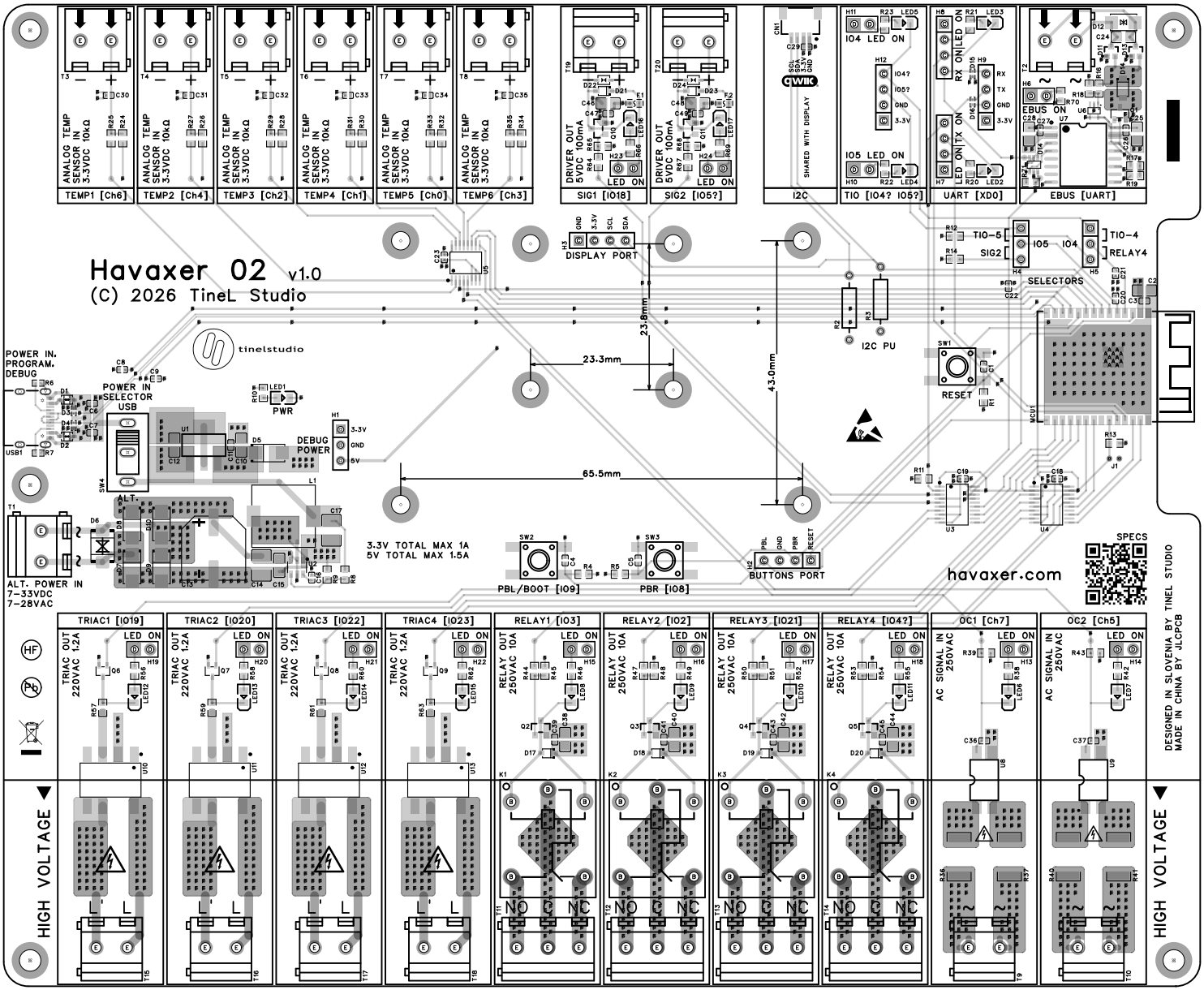
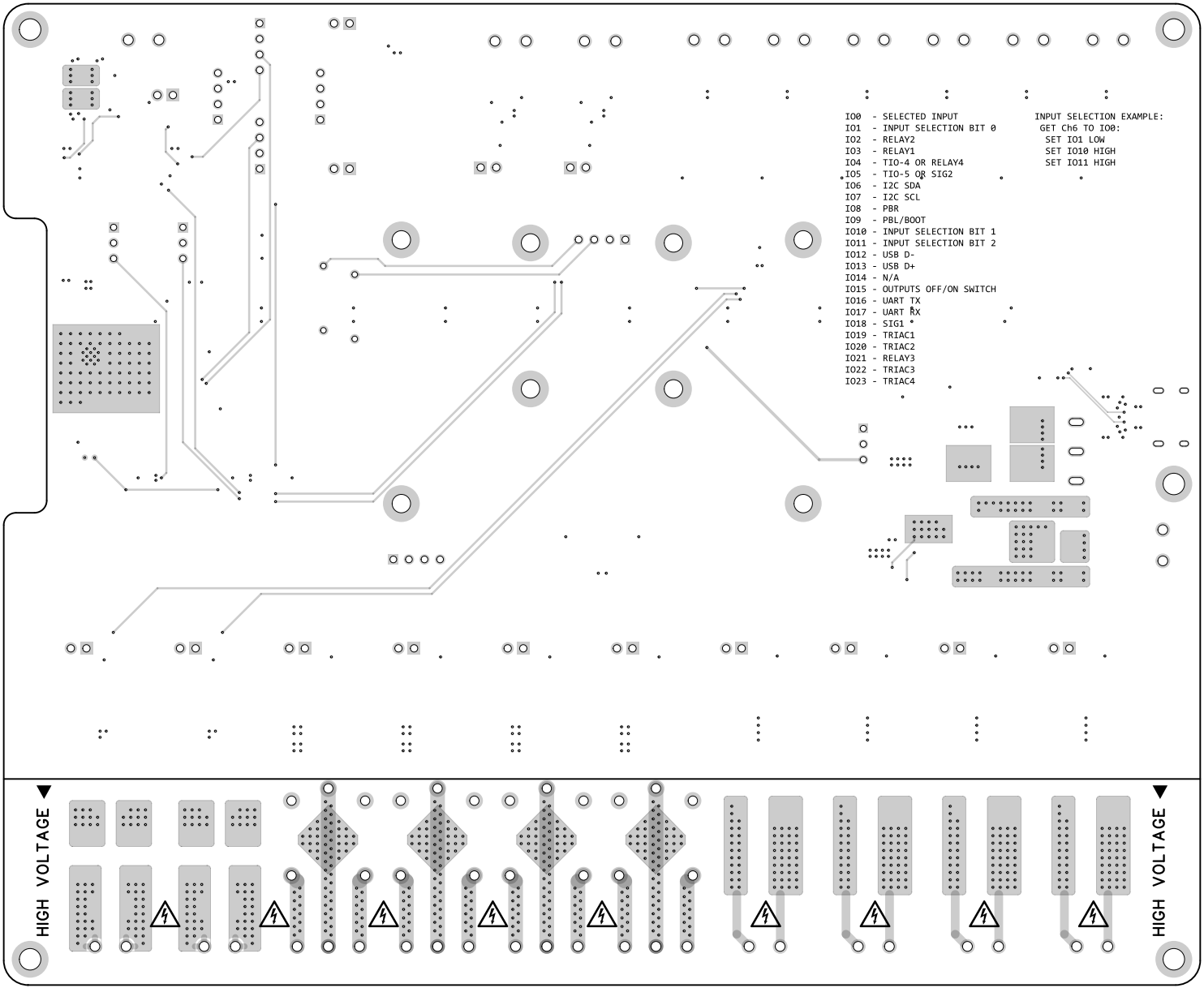

Havaxer 02 v1.0
(C) 2026 TineL Studio
tinelstudio
TEMP1 [Ch6]
TEMP2 [Ch4]
TEMP3 [Ch2]
TEMP4 [Ch1]
TEMP5 [Ch0]
TEMP6 [Ch3]
ANALOG TEMP SENSOR IN 3.3VDC 10kΩ
SIG1 [IO18]
SIG2 [IO5?]
DRIVER OUT 5VDC 100mA
LED ON
I2C
SHARED WITH DISPLAY
TIO [IO4? IO5?]
IO4 LED ON
IO5 LED ON
UART [XD0]
RX ON LED ON
TX ON
EBUS [UART]
EBUS ON
DISPLAY PORT
TIO-5
SIG2
IO5
IO4
TIO-4
RELAY4
SELECTORS
I2C PU
RESET
POWER IN. PROGRAM. DEBUG
POWER IN SELECTOR USB
PWR
DEBUG POWER
3.3V
GND
5V
ALT.
ALT. POWER IN 7-33VDC 7-28VAC
23.8mm
23.3mm
43.0mm
65.5mm
3.3V TOTAL MAX 1A
5V TOTAL MAX 1.5A
PBL/BOOT [IO9]
PBR [IO8]
BUTTONS PORT
PBL
GND
PBR
RESET
SPECS
havaxer.com
TRIAC1 [IO19]
TRIAC2 [IO20]
TRIAC3 [IO22]
TRIAC4 [IO23]
TRIAC OUT 220VAC 1.2A
RELAY1 [IO3]
RELAY2 [IO2]
RELAY3 [IO21]
RELAY4 [IO4?]
RELAY OUT 250VAC 10A
OC1 [Ch7]
OC2 [Ch5]
AC SIGNAL IN 250VAC
DESIGNED IN SLOVENIA BY TINEL STUDIO
MADE IN CHINA BY JLCPCB
HIGH VOLTAGE
L' L
NO C NC


IO0 - SELECTED INPUT
IO1 - INPUT SELECTION BIT 0
IO2 - RELAY2
IO3 - RELAY1
IO4 - TIO-4 OR RELAY4
IO5 - TIO-5 OR SIG2
IO6 - I2C SDA
IO7 - I2C SCL
IO8 - PBR
IO9 - PBL/BOOT
IO10 - INPUT SELECTION BIT 1
IO11 - INPUT SELECTION BIT 2
IO12 - USB D-
IO13 - USB D+
IO14 - N/A
IO15 - OUTPUTS OFF/ON SWITCH
IO16 - UART TX
IO17 - UART RX
IO18 - SIG1
IO19 - TRIAC1
IO20 - TRIAC2
IO21 - RELAY3
IO22 - TRIAC3
IO23 - TRIAC4
INPUT SELECTION EXAMPLE:
GET Ch6 TO IO0:
SET IO1 LOW
SET IO10 HIGH
SET IO11 HIGH
HIGH VOLTAGE
HIGH VOLTAGE