

Resistor to Current (Tranform Ratio 3000:1)

Current	Rcurr	Current Type
1000A	2.2Ω	0
750A	3Ω	1
500A	3.9Ω	2
300A	6.8Ω	3
200A	10Ω	4
120A	18Ω	5
80A	27Ω	6

Resistor to Voltage (Primary)

Voltage	RPvolt	Voltage Type
440Vac	270kΩ	0
380Vac	270kΩ	1
220Vac	150kΩ	2
127Vac	100kΩ	3

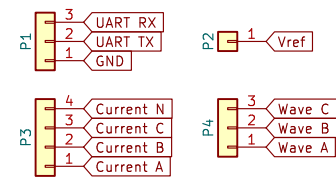
Resistor to Voltage (Secondary)

Voltage	RSvolt	Voltage Type
440Vac	430Ω	0
380Vac	470Ω	1
220Vac	390Ω	2
127Vac	430Ω	3

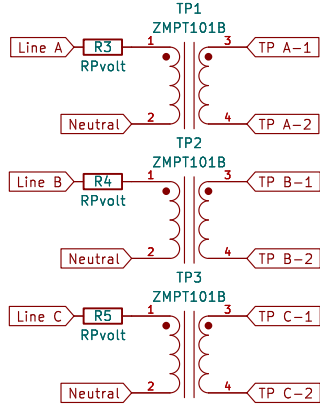
Type of Electrical System

Type	System Type
Single-phase (P+N)	0
Biphasic (2P)	0
Biphasic (2P+N)	1
Three-phase (3P+N)	2

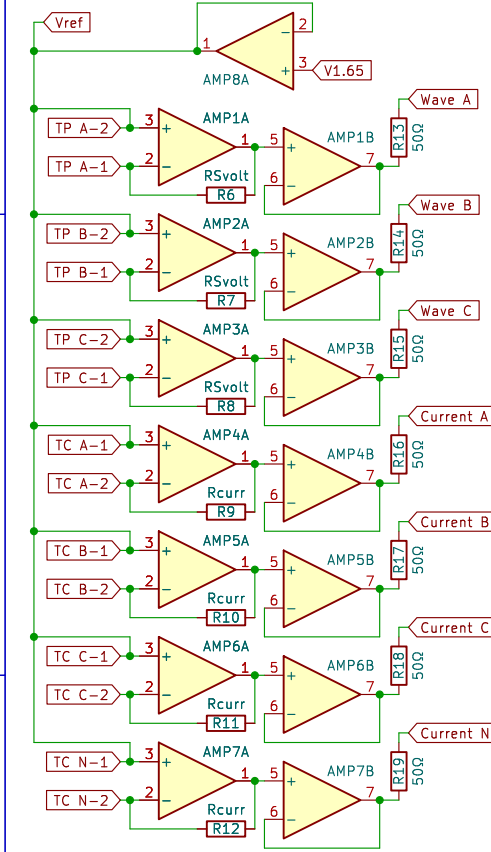
Proof pins



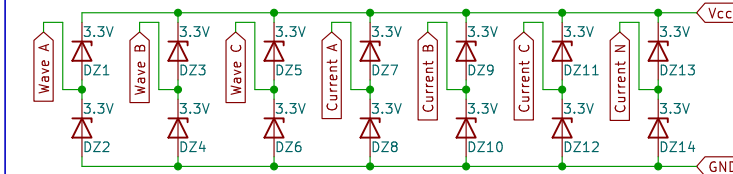
Voltage Transformation



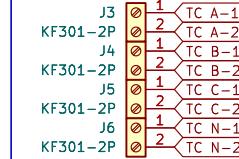
Signals Conditioning



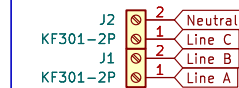
Protection Zeners



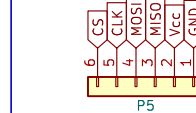
TCs Connections



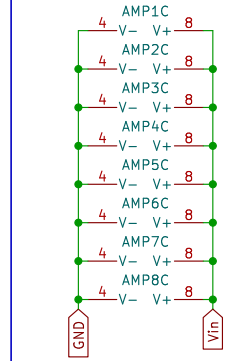
Voltage Inputs



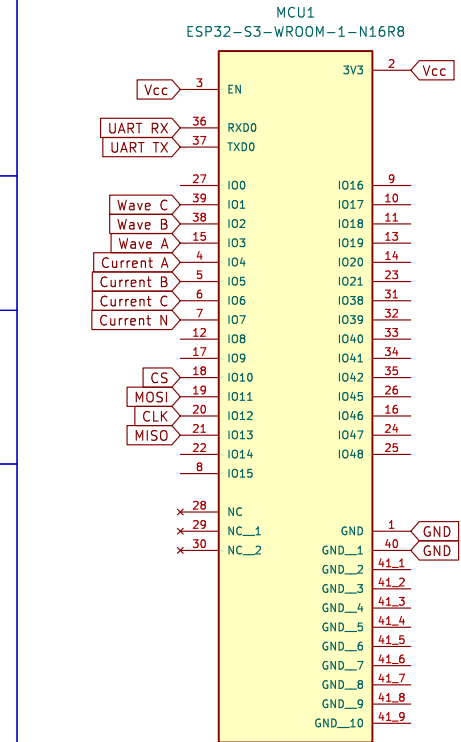
SPI Pins



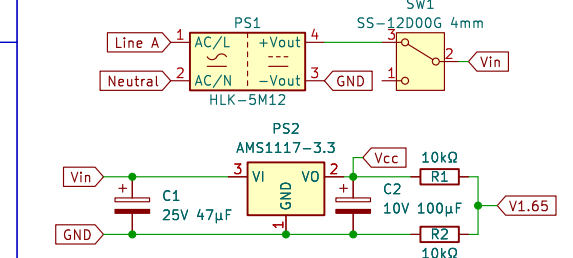
TL082s Power



MCU



Power



Observation

After selecting the ideal resistor for your application, according to the tables, remember to modify the value of the variables "CURRENT TYPE", "VOLTAGE_TYPE" and "SYSTEM_TYPE" in the MCU code according to what's in the tables

github.com/lucasguerra/power_vision
linkedin.com/in/lucasguerra

Sheet: /
File: board.kicad_sch

Title: Power Vision V3.4 Schematic

Size: A4 Date: 26/06/2024
KiCad E.D.A. kicad 7.0.10

Rev: 1.3
Id: 1/1