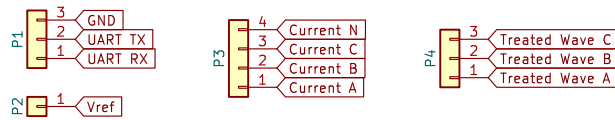


Proof pins



Resistor to Current (Tranform Ratio 3000:1)

| Current | Rcurr | Current Type |
|---------|-------|--------------|
| 1000A | 3.3Ω | 0 |
| 750A | 4.3Ω | 1 |
| 500A | 6.8Ω | 2 |
| 300A | 10Ω | 3 |
| 200A | 15Ω | 4 |
| 120A | 27Ω | 5 |
| 80A | 43Ω | 6 |

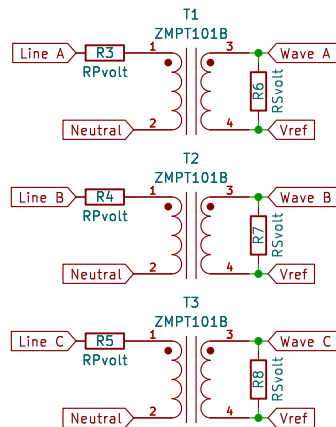
Resistor to Voltage (Primary)

| Voltage | RPvolt | Voltage Type |
|---------|--------|--------------|
| 440Vac | 270kΩ | 0 |
| 380Vac | 270kΩ | 1 |
| 220Vac | 180kΩ | 2 |
| 127Vac | 100kΩ | 3 |

Resistor to Voltage (Secondary)

| Voltage | RSvolt | Voltage Type |
|---------|--------|--------------|
| 440Vac | 510Ω | 0 |
| 380Vac | 560Ω | 1 |
| 220Vac | 560Ω | 2 |
| 127Vac | 510Ω | 3 |

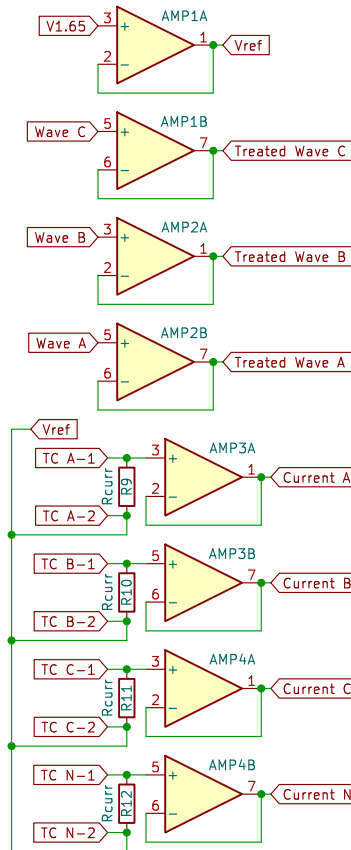
Voltage Transformation



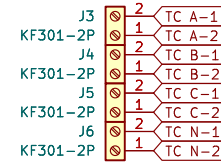
Observation

Then select the ideal resistor for your application, according to the tables, so remember to modify the value of the variables "CURRENT_TYPE" and "VOLTAGE_TYPE" in the MCU code according to what is in the table!

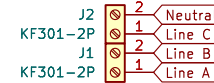
Signals Conditioning



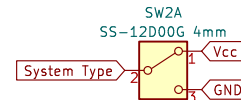
TCs Connections



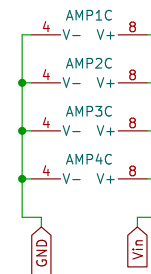
Voltage Inputs



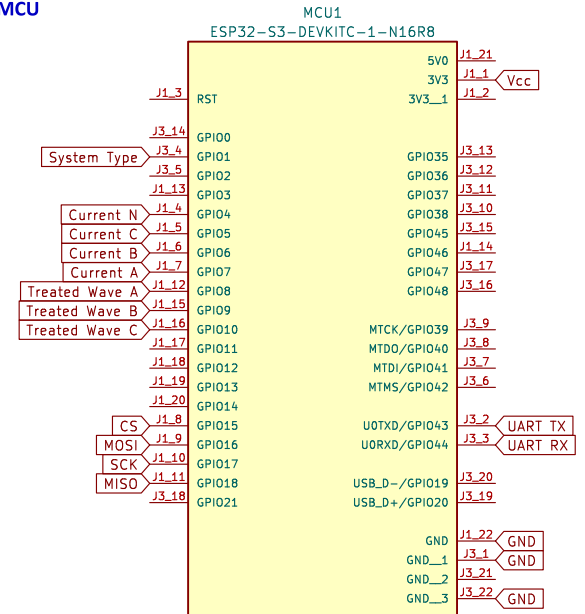
Switch System Type



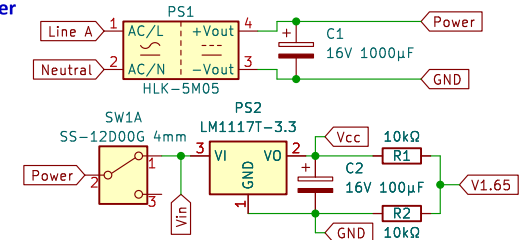
TL082s Power



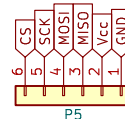
MCU



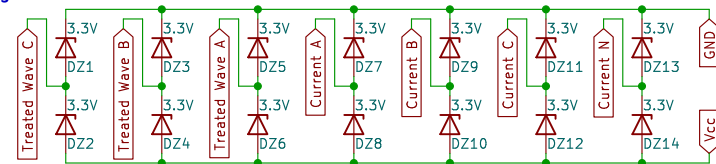
Power



SD Card



Protection Zeners



<https://www.linkedin.com/in/lucasguerra>

Sheet: /

File: board.kicad_sch

Title: Power Vision V3.1 Schematic

Size: A4 Date: 12/05/2024

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Rev: 1.1

Id: 1/1