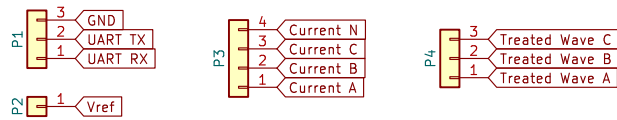


Proof pins



Resistor to Current (Transform 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

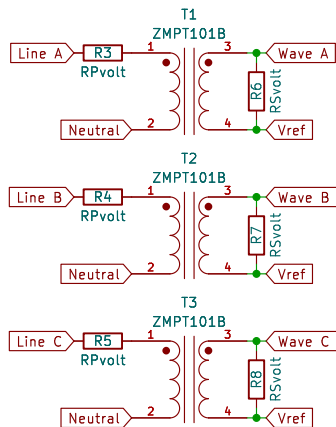
Resistor to Voltage (Primary)

Voltage	RPvoltage	Voltage Type
440Vac	270kΩ	0
380Vac	270kΩ	1
220Vac	180kΩ	2
127Vac	100kΩ	3

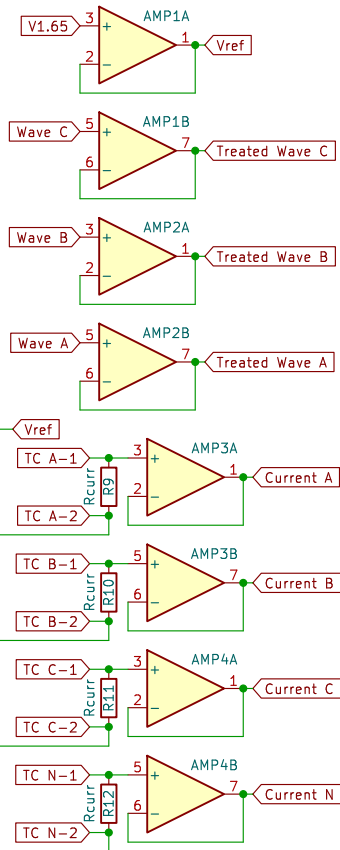
Resistor to Voltage (Secondary)

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

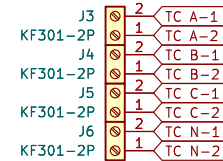
Voltage Transformation



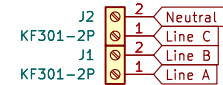
Signals Conditioning



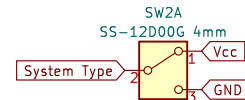
TCs Connections



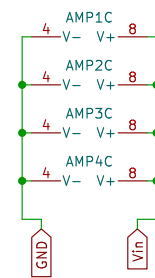
Voltage Inputs



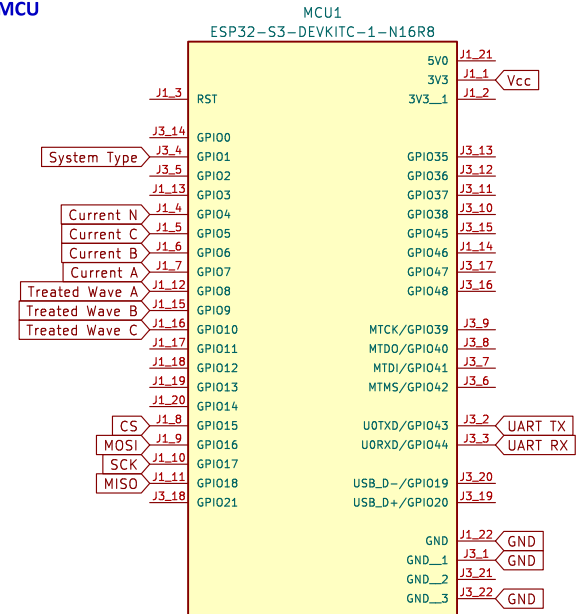
Switch System Type



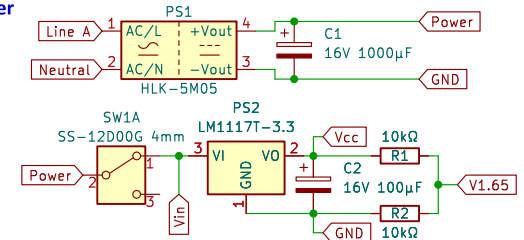
TL082s Power



	MCU
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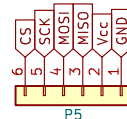
Power



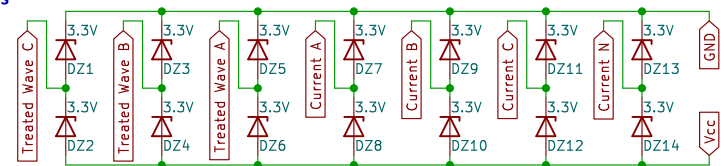
Observation

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!

SD Card



Protection Zeners



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

Sheet: /
File: board.kicad_sch

Title: Energy Guardian V3.1 Schematic

Size: A4	Date: 12/05/2024
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Size: 711	Date: 12/08
KiCad E.D.A.	eeschema 7.0.10

Rev: 1.1

Id: 1/1