

Specifications

Rating	Value	Unit
Maximum Input Voltage	30	Vdc
Minimum Input Voltage	7	
Nominal Current	3	A
Short circuit current	6	
Potency	18	W
Operating Temperature Range	0 to +60	

Type of Electrical System

Electrical System	Type
Monophasic (P+N)	0
Biphasic (2P)	0
Biphasic (2P+N)	1
Triphasic (3P+N)	2

Observation

After selecting the ideal resistor for your application, according to the table, remember to modify the value of the variable "SYSTEM_TYPE" in the microcomputer code according to what's in the table

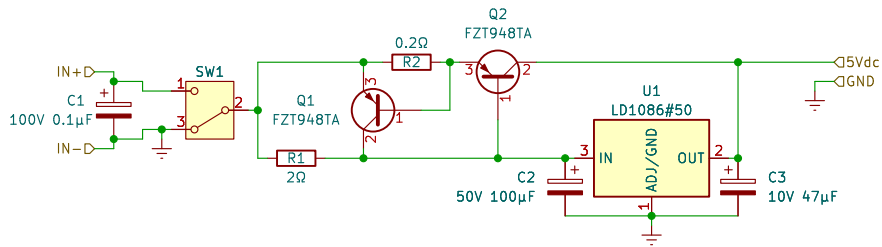
github.com/lucasguerra/power_vision
[linkedin.com/in/lucasguerra](https://www.linkedin.com/in/lucasguerra)
Lucas Rayan Guerra da Silva

Sheet: /
File: board.kicad_sch

Title: Power Vision V5.0 Schematic

Size: A4 Date: 2024-09-27
KiCad E.D.A. kicad 7.0.10

Rev: 1.0
Id: 1/6



Specifications

Rating	Value	Unit
Maximum Input Voltage	30	Vdc
Minimum Input Voltage	7	
Output Voltage	5	
Nominal Current	3	A
Short circuit current	7	
Operating Temperature Range	-55 to +125	°C
FZT948TA Operation Temperature	-55 to +150	
LD1086 Operation Temperature	-65 to +150	
Capacitor Operation Temperature	-55 to +125	

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Sheet: /Power/

File: Power.kicad_sch

Title: Power Schematic

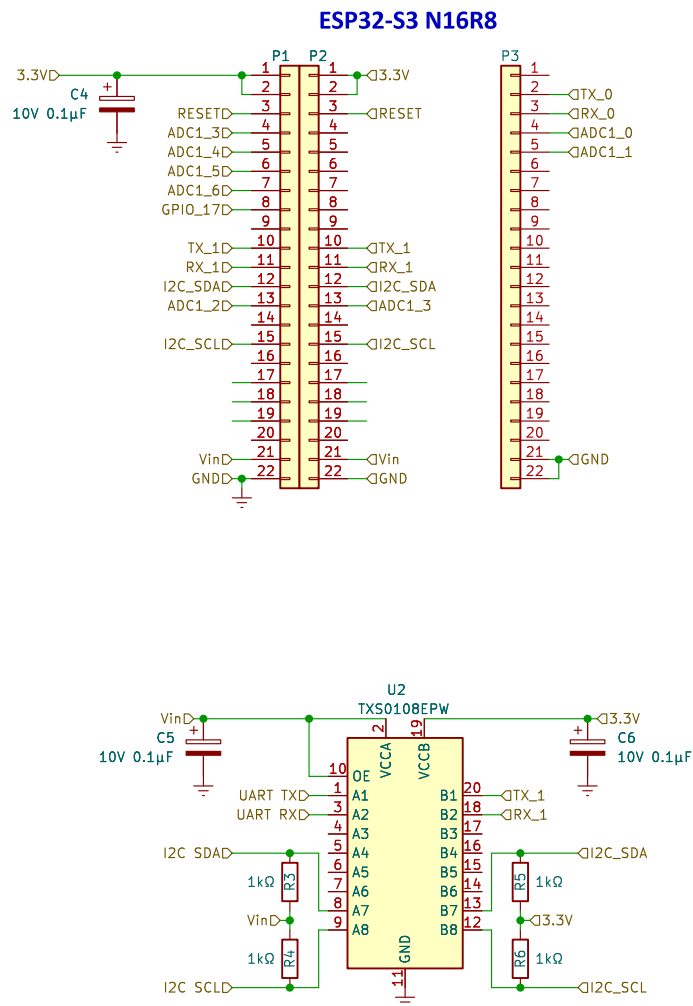
Size: A4

Date: 2024-09-27

Rev: 1.0

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Id: 2/6



Specifications

Rating	Value	Unit
Input Voltage - Vin	5	Vdc
Nominal Current	0.2	A
Operating Temperature Range	-40 to +65	°C
ESP32-S3 Operation Temperature	-40 to +65	
TXS0108E Operation Temperature	-40 to +85	
Capacitor Operation Temperature	-55 to +125	

github.com/lucasguerra/power_vision

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Lucas Rayan Guerra da Silva

Sheet: /Microcontroller/

File: Microcontroller.kicad_sch

Title: Microcontroller

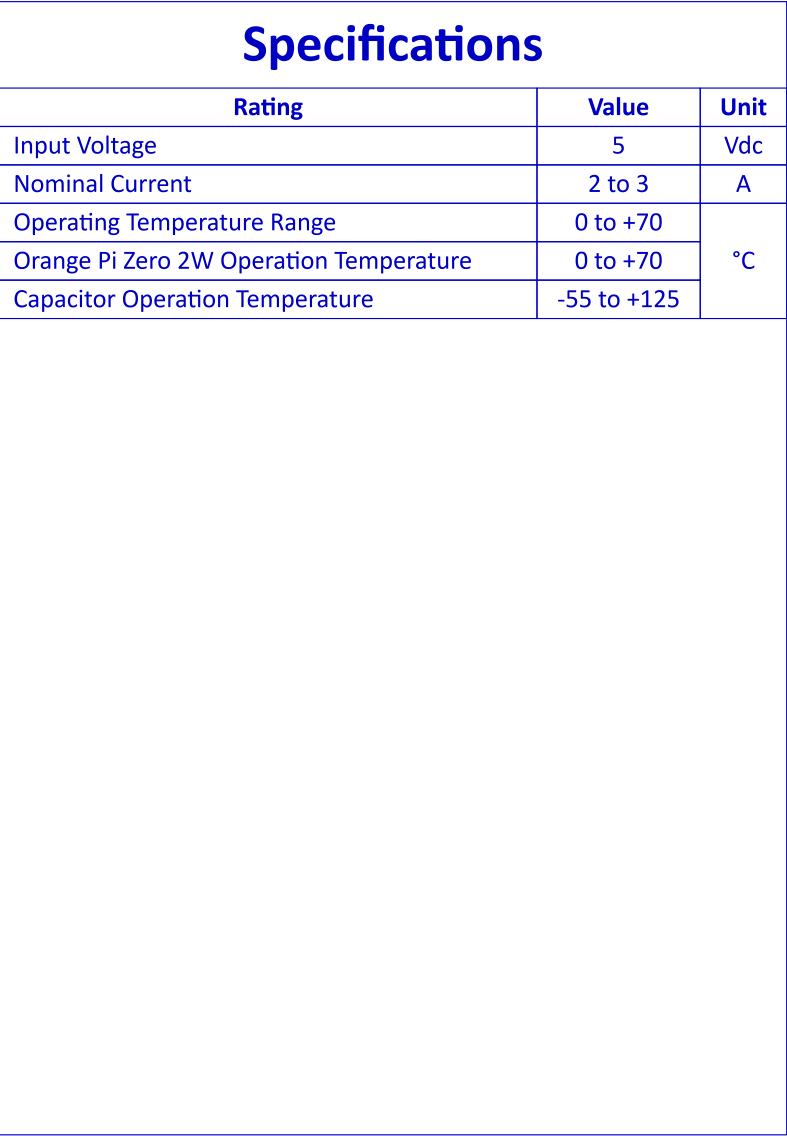
Size: A4

Date: 27/09/2024

Rev: 1.0

KiCad E.D.A. kicad 7.0.10

Id: 3/6



Id: 4/6

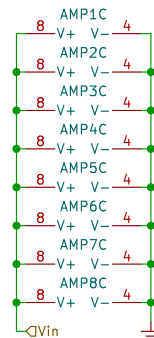


A
B
C

System Voltage (RMS)	RVolt	Type
440Vac	510kΩ	0
380Vac	470kΩ	1
220Vac	300kΩ	2
127Vac	180kΩ	3

After selecting the ideal resistor for your application, according to the table, remember to modify the value of the variable "VOLTAGE_TYPE" in the microcomputer according to what's in the table

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