

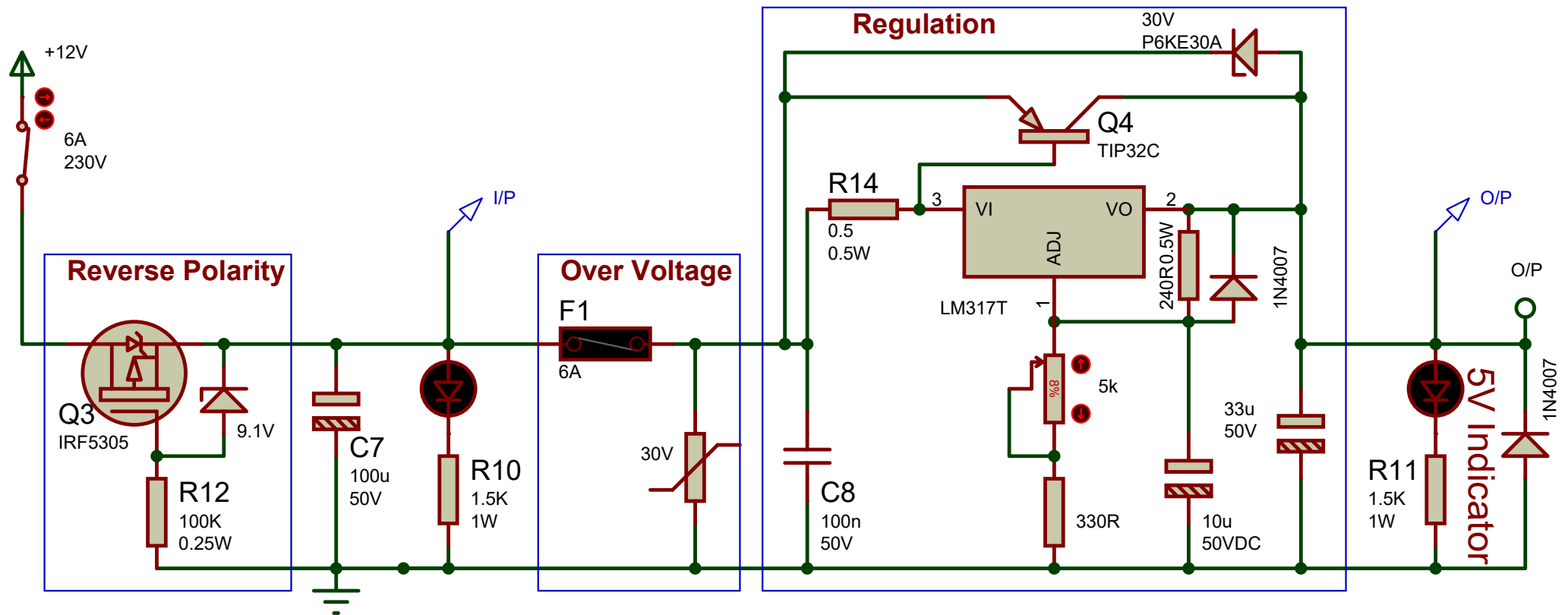
Power Circuit

Author: Mahmoud Karam

Version:1

I/P: (5~28)VDC

O/P: (3~25)VDC

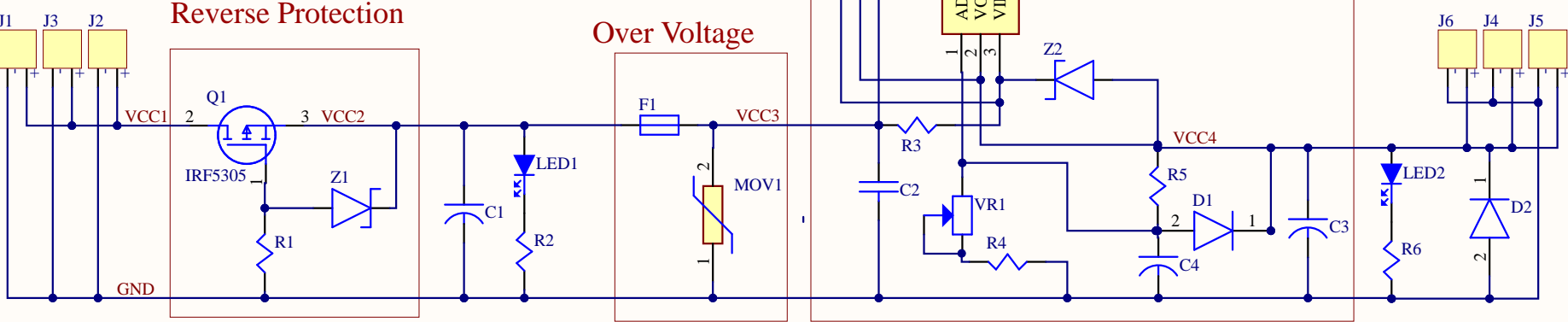


Power Circuit

Specs:

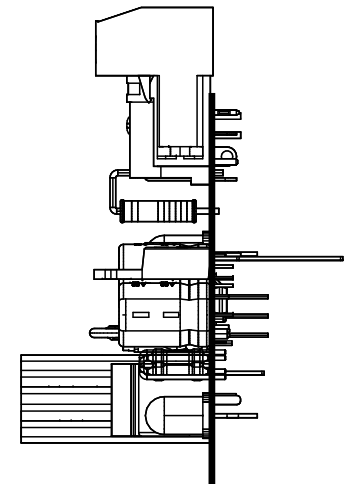
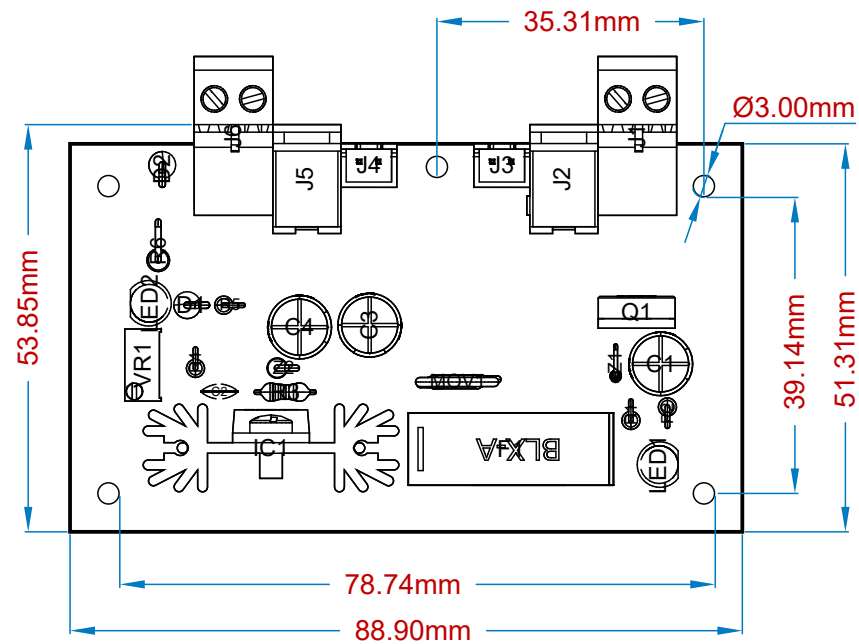
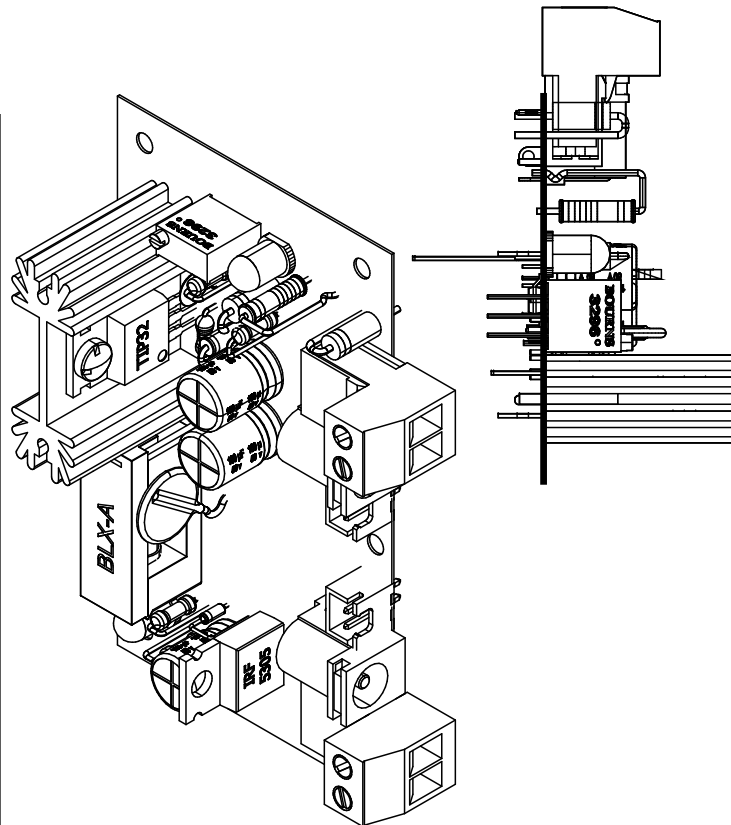
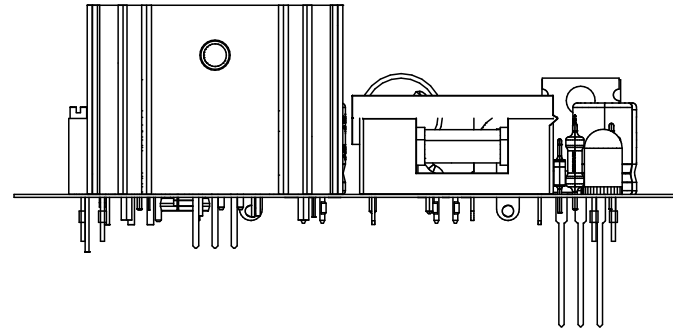
I/O power: Input Power range [5-28]V. Output range [3-25]V.
Protection: Reverse Polarity protection. Over Voltage Protection.

Short Circuit protection.

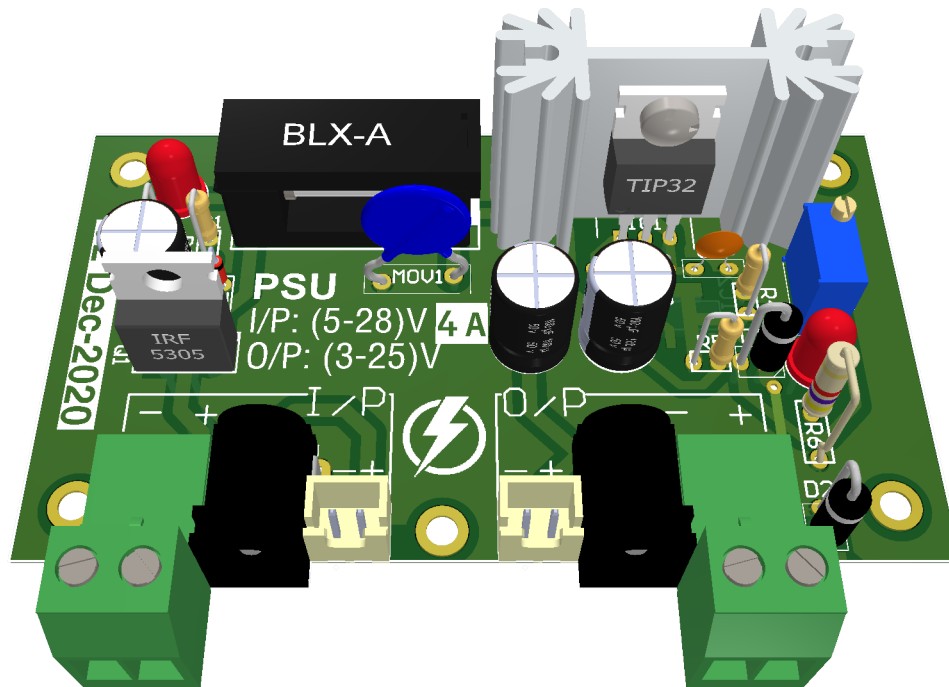


Board Assembly View

Scale = 1:1



3D View & BOM



PSU Bill Of Materials

Line #	Designator	Comment	Quantity
1	C1	Polarized Cap 100uF 50V	1
2	C2	Cap Ceramic 100nF 50V	1
3	C3	Polarized Cap 33u 50V	1
4	C4	Polarized Cap 10uF 50V	1
5	D1, D2	1N4007	2
6	F1	Fuse 6A Ceramic	1
7	IC1	TIP32C With Heatsink	1
8	IC2	LM317	1
9	J1	Terminal Block Green 5.08mm	1
10	J2, J5	DC Power Jack PJ002	2
11	J3, J4	JST on PCB Connector 2 pins	2
12	J6	Terminal Block Blue 5.08mm	1
13	LED1, LED2	RED 5mm	2
14	MOV1	Varistor 30VDC	1
15	Q1	IRF5305	1
16	R1	100K 0.25W	1
17	R2, R6	1.5K 1W	2
18	R3	0.5R 0.5W	1
19	R4	330R 0.25W	1
20	R5	240R 0.25W	1
21	VR1	Trimmer 5K 0.5W	1
22	Z1	Zener 9.1V	1
23	Z2	Zener 30V	1

A

B

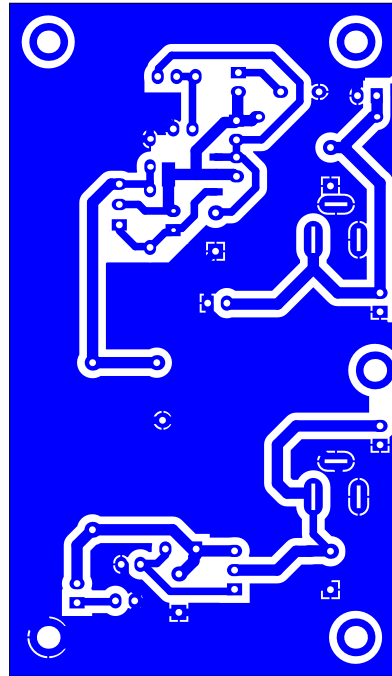
C

D

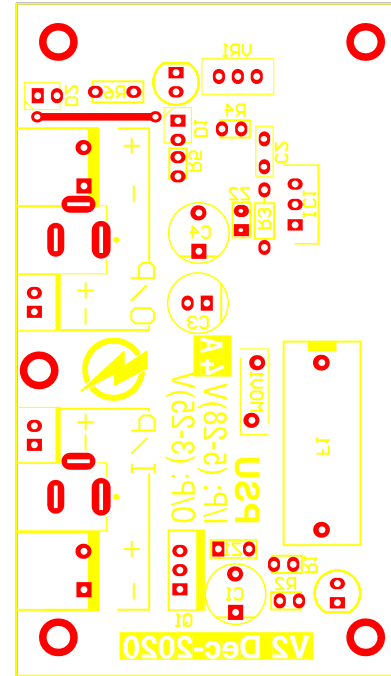
Board Fabrication

Scale = 1:1

1



2



1

2

A

B

C

D