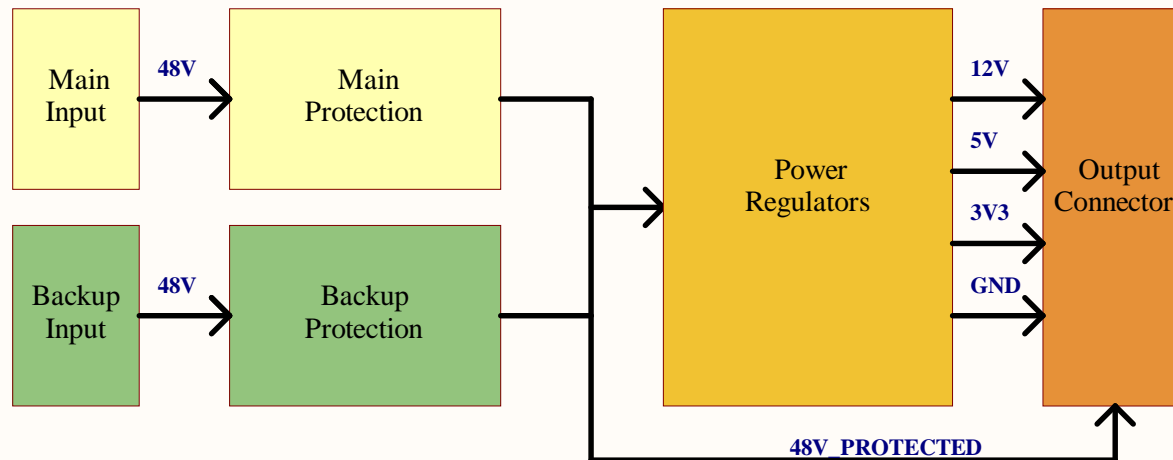
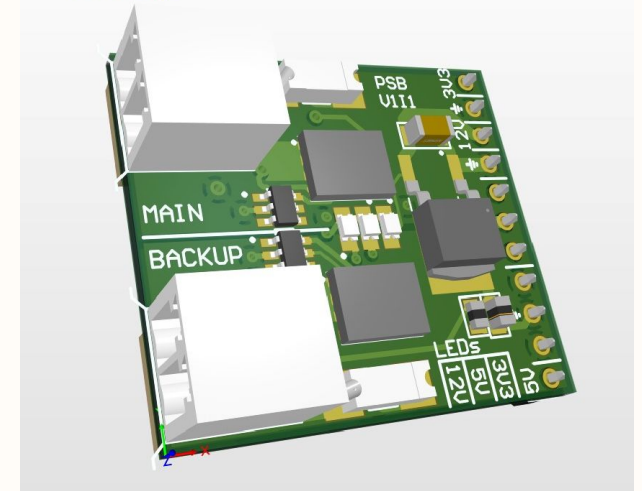


Power Supply Board (PSB) Cover Page

4/11/2020
VIII

Page	Index
1	Cover Page
2	Power Supply Board
3	Fabrication Layers And Assembly
4	Layer Stack Legend
5	PDN Analysis

3D Image



DESIGN NOTE:
Example text for critical design notes.

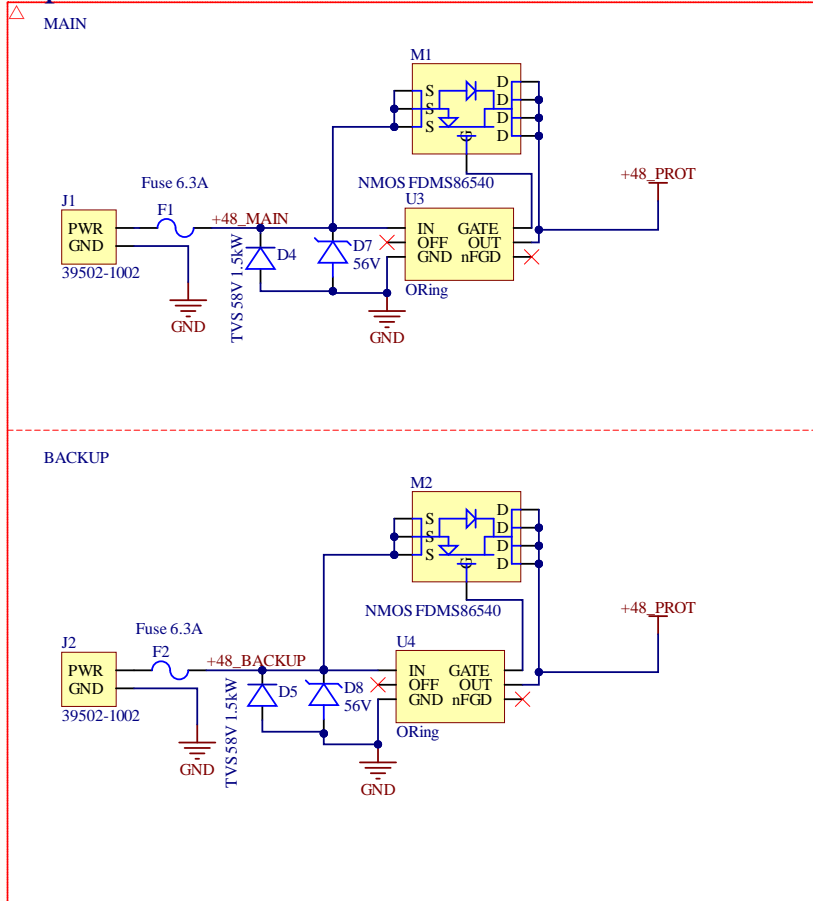
LAYOUT NOTE:
Example text for critical layout guidelines.

DRAFT

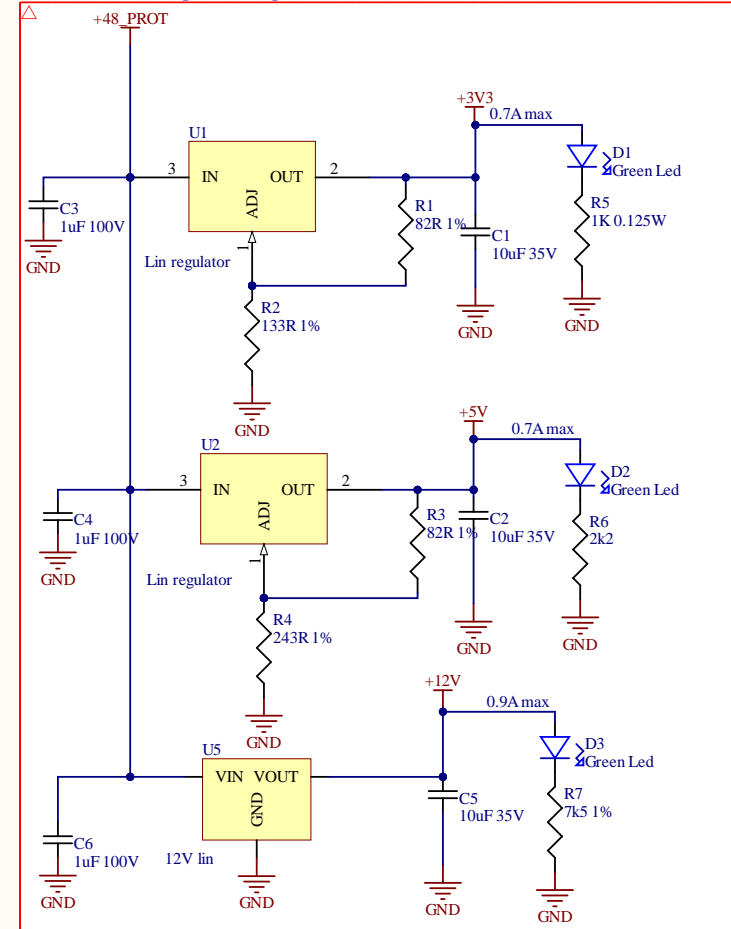
Title: Power Supply Board		Variant: [No Variations]	
Page Contents: [1] Cover Page.SchDoc		Designed By Federico De Benedetti	
Size:	DWG NO		Revision: VIII
Date:	4/11/2020	Sheet 1 of 2	

Power Supply Board (PSB)

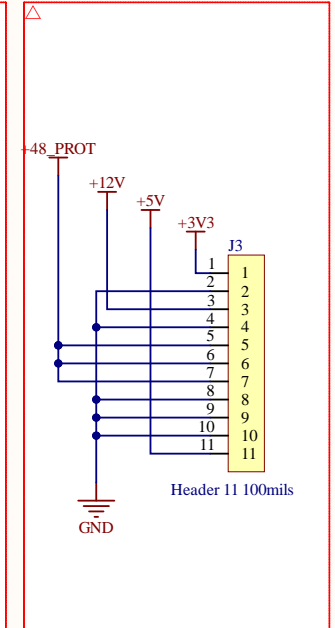
Input Protection



Low Voltage Regulators



Output Connector



DESIGN NOTE:
Input Nominal Voltage 48V

Title: Power Supply Board		Variant: [No Variations]	
Page Contents: [2] Power Supply Board.SchDoc		Designed By Federico De Benedetti	
Size:	DWG NO	Revision: VIII	
Date:	4/11/2020	Sheet	2 of 2

32,00

28,00

PSB
U111

MAIN

BACKUP

LEDs

3V3

12V

48V

12V

5V

3V3

5V

Comment	Description	Designator	Footprint	LibRef	Quantity
10uF 35V	CAP CER 10UF 35V X7R 1206	C1, C2, C5	Capacitor 1206	GMK316AB7106KL-TR	3
1uF 100V	Cap Ceramic 1uF 100V X7S 10% Pad SMD 0805 125C T/R	C3, C4, C6	C0805	GRM21BC72A105KE01 L	3
Green Led	LED 0805 GREEN 20MCD	D1, D2, D3	Led Green 0805 Dialight 5988	598-8170-107F	3
TVS 58V 1.5kW	TVS DIODE 58VWM 93.6VC SMC	D4, D5	TVS SMCJSeries	SMCJ58CA	2
56V	Diodes Zener 56V 1.5W	D7, D8	DIODE ZENER 56V 1SMA5943BT3G	1SMA5943BT3G	2
Fuse 6.3A	Fuse 2410 SMD FAST- ACTING PRECISION W	F1, F2	FUSE SMD 6.3A SF- 2410FP630W	SF-2410FP630W-2	2
39502-1002	Terminal Block, 2 Contacts, PIN ;RoHS Compliant: Yes	J1, J2	Terminal Block 0395021002	39502-1002	2
Header 11 100mils	HEADER 11 pins Male 2.54MM	J3	Header 11 pos Male 2.54	PREC011SAAN-RC	1
NMOS FDMS86540	MOSFET 60V N- Channel PowerTrench MOSFET	M1, M2	NMOS FDMS86540	FDMS86540	2
82R 1%	Res Thick Film 0805 82R, 150 V, Thick Film, 125 mW	R1, R3	Resistor R0805 Panasonic ERJ	ERJ6ENF82R0V	2
133R 1%	Res Thick Film 0805 133R, 125 mW, 1%, 150 V	R2	Resistor R0805 Panasonic ERJ	ERJ-6ENF1330V	1
243R 1%	Res Thick Film 0805 243 R, 125 mW, 1%, 150 V	R4	Resistor R0805 Panasonic ERJ	ERJ-6ENF2430V	1
1K 0.125W	Res 0805, 1K, 0.125W	R5	Resistor R0805 Panasonic ERJ	ERJ6ENF1001V	1
2k2	Res Thick Film 0805 2.2K 1% 1/8W 0805	R6	Resistor R0805 Panasonic ERJ	ERJ6ENF2201V	1
7k5 1%	Res Thick Film 7.5k 125mW, ±1%;	R7	Resistor R0805 Panasonic ERJ	ERJ-6ENF7501V	1
Lin regulator	Linear Regulator, Adjustable, 20V primary input, 1.25V to 125V/700 mA/1 Output, TO-263-3	U1, U2	Linear TL783CKTTR	TL783CKTTR	2
ORing	IC OR CTRLR N+1 6SOT	U3, U4	LM5050	LM5050MK-2/NOPB	2
12V lin	LINEAR 12V 60MA TO252-3	U5	Linear ZXTR2012K	ZXTR2012K-13	1