18-60Vin 5Vout 2.5A modified from BK's PMP5040B

PMP11012_REVA BOM

Filename: PMP11012_REVA_bom.xls

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Build on PCB PMP5040 rev A C100, C101, R100 added by hand

COUNT	RefDes	Value	Description	Size	Part Number	Mfr
1	PCB		PMP5040 rev A PCB		PMP5040 rev A PCB	any
	C1	1000pF	Capacitor, Ceramic, 2kV, C0G, 10%	1812	Std	Std
1	C100	0.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H103K	TDK
1	C11	1uF	Capacitor, Ceramic, 16V, X7R, 20%	0603	C1608X7R1C105M	TDK
1	C12	100pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H101K	TDK
	C14	0.022uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H223K	TDK
1	C15	4.7uF	Capacitor, Ceramic, 16V, X7R, 15%	0805	Std	Std
1	C2	82uF	Capacitor, Aluminum Electrolytic, 63V	0.315 inch	63V ZL 82uF 10 X 12.5	Rubycon
1	C3	2.2uF	Capacitor, Ceramic, 100-V, X7R, 20%	1210	C3225X7R2A225M	TDK
1	C4	0.047uF	Capacitor, Ceramic, 100V, X7R	0603	Std	Std
3	C5, C6, C101	22uF	Capacitor, Ceramic, 16-V, X5R, 20%	1210	Std	Std
	C7	150uF	Capacitor, Aluminum, 10-V, FK Series	0.268 x 0.307	EEVFK1A151P	Panasonic
2	C8, C10	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H104K	TDK
1	C9	470pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H471K	TDK
1	D1	SBR1045D1	Diode, Schottky, 10-A, 45-V	D-PAK	SBR1045D1	Vishay
	D2	9.1V	Diode, Zener, 9.1-V	SOT23	BZX84C9V1LT1	ON Semiconductor
1	D3	MURA120	Diode, Rectifier, 1A, 200V	SMA	MURA120	ON Semi
1	D4	15V	Diode, Zener, 15-V	SOT23	BZX84C15LT1	ON Semiconductor
1	D5	BAV99	Diode, Dual Ultra Fast, Series, 200-mA, 70-V	SOT23	BAV99	Fairchild
2	J1, J2		Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25""	ED1514	OST
1	L1	1uH	Inductor, SMT, 10A, 6milliohm	0.402 x 0.394 inch	MSS1038-102NL	Coilcraft
1	Q1	FDS2572	MOSFET, N-Chan, 150V, 4.9A, 47milliOhm	SO8	FDS2572	Fairchild
	Q2	MMBT2222A	Bipolar, NPN, 40V, 600mA	SOT23	MMBT2222ALT1	ON Semiconductor
1	R1	7.5k	Resistor, Chip, 1-W, 5%	2512	Std	Std
1	R11	40.2k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R14, R18	6.19k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R2	402k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R3, R9, R15, R17	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R4, R100	20k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R5, R10	100k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R6, R12, R13, R16	1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R7	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R8	0.05	Resistor, Chip, 1/16W, 5%	0805	Std	Std
1	T1	POE13F-50L	Transformer, SMT For PoE/PD, 13W	0.677 x 0.865 inch	POE13F-50L	Coilcraft
	TP1, TP3	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	TP2, TP4	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
1	TP5	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100	5000	Keystone
1	U1	TPS40210DGQ	IC, 4.5V-52V I/P, Current Mode Boos Controller	DGQ10	TPS40210DGQ	TI
	U2	TCMT1107	IC, Photocoupler, CTR = 80% - 160%	MF4	TCMT1107	Vishay
1	U3	TL431AIDBZ	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL431AIDBZ	TI

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