

Filename: PMP5177\_REV\_D\_bom.xls

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## PMP5177\_REV\_D BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	Area
3	C1, C2, C14	0.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
	C100, C101, C102,						
4	C103	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	0603	Std	TDK	
1	C104	1000pF	Capacitor, Ceramic, 2KV, X7R, 10%	1812	C4532X7R3D102K	TDK	
1	C105	1000pF	Capacitor, Ceramic, 100V, C0G, 10%	0603	Std	Std	
1	C106	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	0805	Std	TDK	
1	C13	DNP	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	std	
1	C15	470pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	Std	
1	C16	0.47uF	Capacitor, Ceramic, 16-V, X7R, 15%	0603	Std	TDK	
1	C17	330pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	Std	
3	C18, C24, C202	100uF	Capacitor, Aluminum, 25V, 20%	8x6.2mm	EEEFK1H470P	Panasonic	
1	C20	6800pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C21	0.047uF	Capacitor, Ceramic, 250V, X7R, 10%	1206	Std	Std	
2	C25, C26	10uF	Capacitor, Ceramic, 25V, X7R, 10%	1210	C3225X7R1E106K	TDK	
3	C27, C30, C200	2.2uF	Capacitor, Ceramic, 100V, X7R, 10%	1210	Std	Std	
2	C28, C29	22uF	Capacitor, Aluminum, 100V, ±20%	8x10.2mm	EEVFK2A220P	Panasonic	
1	C32	1.0uF	Capacitor, Ceramic, 25V, X7R, 10%	0805	Std	Std	
1	C33	22uF	Capacitor, Aluminum, 25V, 20%	5x5.8mm	EEVFK1E220R	Panasonic	
1	C35	47pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	Std	
1	C36	1uF	Capacitor, Ceramic, 16V, X7R, 10%	0603	Std	Std	
1	C37	22nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C38	10pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	Std	
1	C39	15nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
	C4, C7, C9, C10,						
5	C11	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C40	1uF	Capacitor, Ceramic, 16V, X7R, 10%	0805	Std	Std	
1	C41	2200pF	Capacitor, Ceramic, 2KV, X7R, 10%	1812	C4532X7R3D222K	TDK	
4	C5, C19, C34, C201	3.3uF	Capacitor, Ceramic, 50V, X7R, 10%	1210	C3225X7R1H335K	TDK	
3	C6, C8, C12	100pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	Std	Std	
2	D1, D3	MBRD835L	Diode, Schottky, 8.0-A,35-V,	TO-252AA	MBRD835L	On Semi	
	D100, D101, D102,						
	D103, D105, D106,						
8	D107, D108	B2100	Diode, Schottky Rectifier, 2A, 100V	SMB	B2100	Diodes, Inc	
1	D104	SMAJ58A	Diode, SMT TVS 400W, 4.3-A, 58-V	SMA	SMAJ58A	Diodes	

1	D13	BAT54C	Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54C	Vishay-Liteon
2	D14, D200	B340	Diode, Schottky, 3A, 40V	SMC	B340	Diodes, Inc
2	D2, D4	1N4148	Diode, Signal, 300-mA, 75-V, 350-mW	SOD-123	1N4148W	Diodes, Inc.
3	D201, D202, D203	12V	Diode, Zener, 12V, 500mW	SOD123	MMSZ5242BT1	On Semi
1	D21	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	Vishay-Liteon
1	D25	BAV99	Diode, Dual Ultra Fast, Series, 200-mA, 70-V	SOT23	BAV99	Fairchild
1	D41	DNP	Diode, Schottky, 200-mA, 30-V	SOT23	BAT54	Vishay-Liteon
3	D5, D6, D7	ES2D	Diode, Super Fast Rectifier, 200V, 2A	0.220 x 0.115 ir	ES1x	Diodes
2	FB100, FB101	150	Bead, Ferrite, SMT, xxOhms, 1.5A	0805	MMZ2012R150A	TDK
2	J100, J101	520252	Connector, Jack, Modular, 8 POS	0.705 x 0.820 ir	520252-4	AMP
1	J4	PTC36SAAN	Header, Male 8-pin, 100mil spacing, (36-pin strip)	0.100 inch x 8	PTC36SAAN	Sullins
1	L1	100uH	Inductor, SMT, 1.2A, 253milliohm	0.402 x 0.394 ir	MSS1048-104L	Coilcraft
1	L3	3.3uH	Inductor, SMT, 1.53A, 32milliohm	5.1x5.1mm	MSS5131-332MX	Coilcraft
1	Q1	Si7463DP	MOSFET, PChan, -40V, -18.6A, 9.2milliohm	PWRPAK S0-8	Si7463DP	Vishay
1	Q10	MMBT A56	Bipolar, PNP, 80V, 500mA, 225W	SOT23	MMBT A56LT1	On Semi
1	Q11	MJD45H11	Transistor, Power PNP, 80V, 8A, 20W	DPAK	MJD45H11	On Semi
1	Q2	MMBT2907ALT1	Transistor, PNP, -60V, -600mA, 225-W	SOT23	MMBT2907ALT1	On Semi
1	Q3	IRF5803	MOSFET, P-ch, 40-V, yy-A, 112-milliOhms	Micro6	STD	STD
1	Q9	Si4848DY	MOSFET, N-ch, 150V, 3.7A, 85 milliohm	SO8	Si4848DY	Vishay
4	R1, R20, R43, R200	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R100, R101, R102,					
4	R103	DNP	Resistor, Chip, 1/10W, 1%	0805	Std	Std
	R104, R105, R106,					
4	R107	75	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R11	16.2K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R12	13.7K	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
2	R13, R16	200	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
2	R14, R21	20k	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
1	R15	10k	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
1	R18	0.02	Resistor, Chip, 1/2W, 1%	2010	Std	Std
1	R19	3.01K	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
1	R22	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R24	7.87K	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
4	R25, R26, R31, R50	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R27	15K	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
1	R28	0.2	Resistor, Chip, 1/4W, 1%	1206	Std	Std
1	R29	4.99K	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
	R3, R4, R7, R8,					
6	R17, R23	100K	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R32	5.36k	Resistor, Chip, 1/16-W, 1%	0603	Std	Std

1	R37	12.4K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R38	69.8K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R39	80.6K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R40	63.4K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R41	63.4	Resistor, Chip, 1/10W, 1%	0805	Std	Std
1	R42	10	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R44	0.15	Resistor, Chip, 1W, 1%	2512	Std	Std
1	R45	1	Resistor, Chip, 1/4W, 1%	1206	Std	Std
1	R46	348	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R47	1.2	Resistor, Chip, 1W, 1%	2512	Std	Std
2	R48, R51	2K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R52	41.2K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R54	4.75K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R55	4.02k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R56	20K	Resistor, 1/4W, yy%	1210	Std	Std
4	R6, R30, R49, R53	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	T1	125 uH	Transformer, Flyback, ±12%	26.00 X 27.00 mm	G104002LF	GCI
2	T100, T101	ETH1-230LD	XFMR, Mid-Power PoE Magnetics	S0 14 Wide	ETH1-230LD	Coilcraft
6	TP13, TP21, TP24, TP26, TP27, TP28 TP14, TP15, TP20,	5011	Test Point, Black, Thru Hole	0.125 x 0.125 in	5011	Keystone
4	TP23	5010	Test Point, Red, Thru Hole	0.125 x 0.125 in	5010	Keystone
2	TP16, TP22 TP18, TP19, TP25,	5013	Test Point, Orange, Thru Hole	0.125 x 0.125 in	5013	Keystone
4	TP100 TP5, TP6, TP7,	5012	Test Point, White, Thru Hole	0.125 x 0.125 in	5012	Keystone
6	TP8, TP11, TP12	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 in	5000	Keystone
2	TP9, TP10	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 in	5001	Keystone
1	U1	TLC372CD	IC, Dual Comparator, 200-ns	SO8	TLV372CD	TI
1	U2	LM4040A25IDBZ	IC, Shunt Voltage Reference, 100ppm/°C Max, 45uA-15mA	SOT23	LM4040A25IDBZ	TI
1	U3	LM358AD	IC, Dual Operational Amplifiers	SO-8	LM358AD	TI
1	U4	TPS40200D	IC, Low Cost Sync Buck Controller	SO-8	TPS40200D	TI
1	U5	INA194AIDBV	IC, Current Shunt Monitor, 50V/V	SOT23-5	INA194AIDBV	TI
1	U6	TPS23754PWP	IC, IEEE 802.3at PoE Interface and Isolated Converter Controller	PWP20	TPS23754PWP	TI
2	U7, U9	FOD817AS	IC, Optocoupler, 5300V, 80-160% CTR	0.380 x 0.180 in	FOD817AS	Fairchild
1	U8	TL431ACDBVR	IC, Shunt Regulator, 2.49-V ref, 36-V, 10-mA, 1%	SOT23-5	TL431ACDBVR	TI

Notes: 1. These assemblies are ESD sensitive, ESD precautions shall be observed.  
2. These assemblies must be clean and free from flux and all contaminants.  
Use of no clean flux is not acceptable.

3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
4. Ref designators marked with an asterisk ('\*\*') cannot be substituted.  
All other components can be substituted with equivalent MFG's components.

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