

PMP4648_REVC BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
4	C1	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	0603	Std	Std	
	C2	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	0603	Std	Std	
	C3	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	0603	Std	Std	
	C4	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	0603	Std	Std	
1	C5	1000pF	Capacitor, Ceramic, 100V, X7R, 10%	0805	Std	Std	
2	C6	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	0805	Std	Std	
1	C7	1000pF	Capacitor, Ceramic, 2kV, X7R 10%	1808	C4520X7R3D102K	TDK	
1	C8	470pF	Capacitor, Ceramic, 100V, C0G, 10%	0805	Std	Std	
1	C9	22uF	Capacitor, Aluminum, 100V, 20%	8x10.2mm	EEVFK2A220P	Panasonic	
2	C10	2.2uF	Capacitor, Ceramic, 100V, X7R, 10%	1210	Std	Std	
	C11	2.2uF	Capacitor, Ceramic, 100V, X7R, 10%	1210	Std	Std	
	C12	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	0805	Std	Std	
3	C13	22uF	Capacitor, Ceramic, 16V, X7R, 10%	1210	C3225X7R1C226K	TDK	
1	C14	100uF	Capacitor, Aluminum, 16V, 20%	6.3x5.8mm	EEEFK1C101P	Panasonic	
2	C15	1uF	Capacitor, Ceramic, 25V, X7R, 10%	0805	Std	Std	
1	C16	22uF	Capacitor, Aluminum, 16V, ±20%	4x5.8mm	EEVFK1C220UR	Panasonic	
1	C17	DNP	Capacitor, Ceramic, 100V, C0G, 10%	0603	Std	Std	
1	C18	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C19	2200pF	Capacitor, Ceramic, 2KV, X7R, 20%	1812	C4532X7R3D222K	TDK	
1	C20	DNP	Capacitor, Ceramic, 200V, C0G, 10%	0805	Std	Std	
1	C21	10pF	Capacitor, Ceramic, 16V, X7R, 10%	0603	Std	Std	
1	C22	0.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C23	1800pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
	C24	1uF	Capacitor, Ceramic, 25V, X7R, 10%	0805	Std	Std	
	C25	22uF	Capacitor, Ceramic, 16V, X7R, 10%	1210	C3225X7R1C226K	TDK	
	C26	22uF	Capacitor, Ceramic, 16V, X7R, 10%	1210	C3225X7R1C226K	TDK	
2	C27	150uF	Capacitor, Aluminum, SMD, ±20%, vvV,	D Code	10CV150AX	Sanyo	
	C28	150uF	Capacitor, Aluminum, SMD, ±20%, vvV,	D Code	10CV150AX	Sanyo	
6	C42	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
1	C43	33pF	Capacitor, Ceramic, 50V, C0G, 5%	0603	Std	Std	
	C44	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
	C45	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
	C46	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
	C47	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
	C48	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	C2012X5R0J106M	TDK	
2	C83	470pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	
2	C84	0.047uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	
2	C85	10uF	Capacitor, Ceramic, 6.3V, X5R	0805	GRM21BR60J226M	muRata	
1	C86	10uF	Capacitor, Ceramic, 6.3V, X7R, 15%	0603	STD	STD	
	C87	0.047uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	
	C88	470pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	
2	C89	10uF	Capacitor, Ceramic, 25V, X5R, 20%	1210	C3216X5R1E106M	TDK	
1	C90	6.8nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	
1	C91	4.7nF	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD	
	C92	10uF	Capacitor, Ceramic, 6.3V, X5R	0805	GRM21BR60J226M	muRata	
	C93	10uF	Capacitor, Ceramic, 25V, X5R, 20%	1210	C3216X5R1E106M	TDK	
1	D1	SMAJ58A	Diode, TVS, 58-V, 1W	SMA	SMAJ58A	Diodes Inc.	
2	D2	HD01	Bridge Rectifier, 100V, 0.8A	MINI DIP4	HD01	Diodes, Inc	

	D3	HD01	Bridge Rectifier, 100V, 0.8A	MINI DIP4	HD01	Diodes, Inc
1	D4	DNP	Rectifier, Ultrafast Power, 200V 1A	SMA	MURA120T3	On Semi
1	D5	MBRS2040LT3G	Diode, Schottky, 2-A, 40-V	SMB	MBRS2040LT3G	On Semi
2	D6	MURA120	Rectifier, Ultrafast Power, 200V 1A	SMA	MURA120T3	On Semi
1	D7	BAV20W	Diode, Switching, 150V, 200mA, 250mW,	SOD-123	BAV20W	Diodes, Inc
1	D8	BAV99	Diode, Dual Ultra Fast, Series, 200-mA, 70-V	SOT23	BAV99	Fairchild
	D9	MURA120	Rectifier, Ultrafast Power, 200V 1A	SMA	MURA120T3	On Semi
1	D10	MBRD360	Diode, Schottky, 3A, 60V,	DPAK	MBRD360	On Semi
2	D25	B320B-13	Diode, Schottky, 3-A, 20-V	SMB	B320B-13	Diodes Inc
	D26	B320B-13	Diode, Schottky, 3-A, 20-V	SMB	B320B-13	Diodes Inc
2	FB1	{Value}	Bead, Ferrite, SMT, 600 Ohms, 2A	0805	MPZ2012S601A	TDK
	FB2	{Value}	Bead, Ferrite, SMT, 600 Ohms, 2A	0805	MPZ2012S601A	TDK
2	J1	5520252-4	Connector, Jack, Modular, 8 POS	0.705 x 0.820	5520252-4	AMP
	J2	5520252-4	Connector, Jack, Modular, 8 POS	0.705 x 0.820	5520252-4	AMP
5	J3	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
	J4	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
	J5	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
2	J7	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	ED1514	
	J8	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	ED1514	
	J16	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
	J18	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
1	L1	10uH	Inductor, SMT, 1.25A, 200milliohm	4x4mm	LPS4018-103ML	Coilcraft
2	L5	10uH	Inductor, SMT, 3.5A, 71-milliohm	0.255 x 0.270 inch	IHLP2525CZER10RM01	Vishay
2	L6	2.2uH	Inductor, SMT, 1.2A, 100milliohm	0.102 x 0.110 inch	VLF3014AT-2R2M1R2	TDK
	L9	2.2uH	Inductor, SMT, 1.2A, 100milliohm	0.102 x 0.110 inch	VLF3014AT-2R2M1R2	TDK
	L10	10uH	Inductor, SMT, 3.5A, 71-milliohm	0.255 x 0.270 inch	IHLP2525CZER10RM01	Vishay
1	Q1	Si4848DY	MOSFET, N-ch, 150V, 3.7A, 85milliOhms	SO8	Si4848DY	Vishay
4	R1	75	Resistor, Chip, 1/16W, 5%	0603	Std	Std
	R2	75	Resistor, Chip, 1/16W, 5%	0603	Std	Std
	R3	75	Resistor, Chip, 1/16W, 5%	0603	Std	Std
	R4	75	Resistor, Chip, 1/16W, 5%	0603	Std	Std
1	R5	47	Resistor, Chip, 1/4 watt, 5%	1206	Std	Std
1	R6	24K	Resistor, Chip, 1/10W, 5%	0805	Std	Std
1	R7	24.9K	Resistor, Chip, 1/16W,1%	0603	Std	Std
1	R8	20	Resistor, Chip, 1/10W, 5%	0805	Std	Std
1	R9	60.4K	Resistor, Chip, 1/16W,1%	0603	Std	Std
1	R10	100K	Resistor, Chip, 1/16W,1%	0603	Std	Std
1	R11	90.9	Resistor, Chip, 1/16W,1%	0603	Std	Std
	R12	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R13	4.7	Resistor, Chip, 1/16W, 5%	0603	Std	Std
	R14	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R15	2.49K	Resistor, Chip, 1/16W,1%	0603	Std	Std
3	R16	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R17	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R18	DNP	Resistor, Chip, 1/2W, 5%	2010	Std	Std
	R19	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R20	0.27	Resistor, Chip, 1/4W, 1%	1206	Std	Std
1	R21	20K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R22	1.5K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R23	100K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R24	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R25	5.23K	Resistor, Chip, 1/16W,1%	0603	Std	Std
1	R26	392K	Resistor, Chip, 1/16W, 1%	0603	Std	Std

1	R27	17.8K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R37	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R38	182K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R39	365K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R40	100K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R41	100K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
6	R42	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R43	182K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R44	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R46	182K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R48	DNP	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R84	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R85	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R86	10	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R87	3.16k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R88	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R89	1.5k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R90	1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R91	0	Do Not Populate	0603	N/A	N/A
	R92	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R93	10	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R94	3.65k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R95	15.4k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R100	0	Resistor, Chip, 1/2W, 5%	2010	Std	Std
1	T1	H2019	Xfmr, Center-tapped, Voice Over IP	0.500 x 0.370	H2019	Pulse
1	T2	POE13F-12L	Transformer, SMT For PoE/PD	0.677 x 0.865 inch	POE13F-12L	Coilcraft
9	TP1	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP3	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
1	TP4	5012	Test Point, White, Thru Hole	0.125 x 0.125 inch	5012	Keystone
	TP19	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP20	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	TP65	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
	TP66	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP69	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
	TP70	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP71	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP72	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
1	TP73	5011	Test Point, Black, Thru Hole	0.125 x 0.125 inch	5011	Keystone
1	TP74	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5010	Keystone
1	U1	TPS23753PW	IC, IEEE 802.3af Integrated Primary Side Controller	TSSOP14	TPS23753PW	TI
1	U2	TCMT1107	IC, Photocoupler, 3750VRMS, 80-160% CTR	MF4	TCMT1107	Vishay
1	U3	TL431AIDBVR	IC, Precision Adjustable Shunt Regulator	SOT23-5	TL431AIDBVR	TI
1	U6	TPS54286PWP	IC, 2A, 600KHz Dual Converter	HTSSOP-14	TPS54286PWP	TI
1	U8	TPS62410DRC	IC, 2.25 MHz Dual Step Down Converter	QFN10	TPS62410DRC	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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