

PMP7246RevB_BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C1	10n	Capacitor, X7R Ceramic, 500V	2220	STD	STD
2	C100-101	470u	Capacitor, Aluminum, 16VDC, ±20%	0.260x 0.307 inch	EEEFK1C471P	Panasonic
1	C102	10u	Capacitor, X7R Ceramic Chip, 25V, ±10%	1206	STD	STD
1	C106	220n	Capacitor, X7R Ceramic, 16V	0603	STD	STD
1	C107	1u	Capacitor, X7R Ceramic, 16V, 20%	0603	STD	STD
1	C108	100p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C110	4.7u	Capacitor, Ceramic Chip, 50V, ±10%	1210	STD	STD
1	C113	DNP	Capacitor, X7R Ceramic, 16V	0603	STD	STD
1	C115	DNP	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C116	68p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C117	3.3n	Capacitor, COG Ceramic, 16V	0603	STD	STD
2	C16-17	1u	Capacitor, X7R Ceramic, 100V	1206	STD	STD
1	C21	100n	Capacitor, X7R Ceramic, 200V, 20%	1206	STD	STD
1	C22	22n	Capacitor, X7R Ceramic, 200V, 20%	1206	STD	STD
1	C23	DNP	Capacitor, X7R Ceramic, 200V	1206	STD	STD
5	C2-4 C93-94	100U	Capacitor, Aluminum, 100V, 20%,	0.500 x 0.800	STD	Rubycon
2	C30-31	47u	Capacitor, X7R Ceramic, 16V	1210	STD	STD
16	C32-47	10u	Capacitor, Ceramic, 50V, 20%	2220	STD	STD
2	C48-49	100p	Capacitor, Ceramic Chip, 100V, ±10%	1206	STD	STD
1	C51	1n	Capacitor, COG Ceramic, 200V	1206	STD	STD
11	C5-14 C50	4.7u	Capacitor, X7R Ceramic, 100V	1812	STD	STD
3	C54, C77, C112	10n	Capacitor, X7R Ceramic, 16V	0603	STD	STD
8	C55-56 C28-29 C59-60 C24-25	22n	Capacitor, X7R Ceramic, 25V	0603	STD	STD
5	C61 C64 C70-71 C84	1u	Capacitor, X7R Ceramic, 16V	0805	STD	STD
2	C62 C65	10n	Capacitor, X7R Ceramic, 200V, 20%	1206	STD	STD
6	C69, C72, C75, C19-20 C26-27 C52-53 C57-58 C63 C66, C67-68, C76 C82-83 C86 C91 C103 C109 C111 C114	100n	Capacitor, X7R Ceramic, 25V	0603	STD	STD
1	C73	1n	Capacitor, X7R Ceramic, 50V	0603	STD	STD
1	C74	82p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C78	820p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C80	2.2n	Capacitor, X7R Ceramic, 16V	0603	STD	STD
1	C81	100p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C85	10n	Capacitor, X7R Ceramic, 16V	0805	STD	STD
1	C87	DNP	Capacitor, X7R Ceramic, 16V	0805	STD	STD
1	C88	DNP	Capacitor, Leaded, 63V, [5%]	0.177 x 0.287 inch	MKS 2	Wima
1	C89	100n	Capacitor, Leaded, 63V, [5%]	0.177 x 0.287 inch	MKS 2	Wima
2	C90 C79	47n	Capacitor, X7R Ceramic, 16V	0603	STD	STD
1	C92	2u2	Capacitor, X7R Ceramic, 16V	0805	STD	STD
4	C95-96 C104-105	4.7u	Capacitor, Ceramic X7R, 50V, ±10%	1210	STD	STD
1	C97	1n	Capacitor, X7R Ceramic, 16V	0603	STD	STD
1	C98	470p	Capacitor, COG Ceramic, 16V	0603	STD	STD
1	C99	100n	Capacitor, X7R Ceramic, 100V, 20%	0805	STD	STD
8	D1 D3-5 D10-13	MMSD914T1	Diode, Switching, 100-V, 200-mA, 225-mW,	SOD-123	MMSD914T1	On Semi
2	D14 D16	STPS1150A	Diode, Schottky, 1A, 150V	SMA	STPS1150A	ST
1	D17	LED_RED	Diode, LED, Red, 2.1-V, 20-mA, 6-mcd	0603	LTST-C190CKT	Lite On
4	D18 D21 D23 D25	HRW0202B	Diode, Dual Schottky, 200-mA, 20-V	SOT23	HRW0202B	Hitachi
1	D2	ES3C	Diode, Ultra Fast Rectifier, 3A, 150V	SMC	ES3C	On Semi
3	D22 D26 D34	BAT54A	Diode, Dual Schottky, 300-mA, 30-V	SOT23	BAT54A	ST
3	D24 D19 D33	BAT54C	Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54C	Vishay-Liteon
2	D27-28	TS4148RY	Diode, Hi-Speed, 150-mA, 100V, 500mW	0805	TS4148RY	Taiwan Semiconductor
1	D29	BCM61B	Trans, Dual NChan, 45V, 100 mA	SOT-143B	BCM61B	Philips
2	D30 D32	SS8PH9	Diode, High Current, Barrier Schottky, 90V, 8A	TO-277A[SMPC]	SS8PH9	Vishay
2	D31 D35	MMDL914T1	Diode, Switching, 100-V, 200-mA, 200-mW,	SOD-323	MMDL914T1	On Semi
4	D6-9	MBR0520L	Diode, Schottky, 0.5A, 20V	SOD-123	MBR0520L	Fairchild
3	J1-2 J6	ED120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	ED120/2DS	OST
2	J4-5	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
1	L1	1.9u	Inductor, Power Choke, ±20%	18.2 x 18.3 mm	7443556190	WE
1	L2	18uH	Inductor, ±20%	26x26 mm	PG1096.183.NL	Pulse
1	L3	3.7u	Inductor, Power Choke, ±20%	12.80x 13.2 mm	7443551370	WE
1	L4	15u	Inductor, Power Choke, ±20%	18.2 x 18.3 mm	74435571500	WE
4	Q1-2 Q11-12	3904	Bipolar, NPN, 40-V, 200-mA	SOT23	MMBT3904LT1G	STD
1	Q17	2N7002	MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002	Diodes
2	Q18-19	BSC123N08NS3	MOSFET, NChan, 80V, 123 milliohm	PWRPAK S0-8	BSC123N08NS3	Infineon
4	Q3-4 Q13-14	BSC057N08NS3	MOSFET, NChan, 80V, 57 milliohm	PWRPAK S0-8	BSC057N08NS3	Infineon
4	Q5-6 Q15-16	3906	Bipolar, PNP, -40-V, -200-mA	SOT23	MMBT3906LT1G	STD
2	Q8, Q9-10 Q7	BSC360N15NS3	MOSFET, NChan, 150V, 33A, 36 milliohm	PWRPAK S0-8	BSC360N15NS3	Infineon
1	R10	10m	Resistor, Chip, 3W, 1%	2512	STD	STD
1	R101	10	Resistor, Metal Film, 1/4W, 1%	1206	STD	STD
2	R102 R104	20k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R109	12	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R110	3.4k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R111	1.24k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R112	49.9	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R113	9.76k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R114	806	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R115	9.53k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R116	DNP	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R117	30.9k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R118	2.49k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
2	R119-120	120	Resistor, Chip, 1/2W, 1%	1812	STD	STD
1	R121	0	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
4	R13-14 R24-25	1	Resistor, Chip, 1/10W, 1%	0805	FRJ6RQJ1R0	Panasonic
6	R1-4 R32 R37	4k7	Resistor, Chip, 1-W, 5%	2512	STD	STD
2	R15-16	68	Resistor, Chip, 1W, 1%	1210	STD	STD
5	R17-21	0.27	Resistor, Chip, 1W, 1%	2512	STD	STD

1	R22	22R	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R23	6.8	Resistor, Current Sense, ± 1%	2010	STD	Vishay Dale
3	R33 R122-123	0R	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R36	5.23k	Resistor, Metal Film, 1/4W, 1%	1206	STD	STD
5	R38-39 R34-35 R106	0	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R40	open	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
7	R41 R72-73 R76 R103 R105 R107	10	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R42	open	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R43	19K1	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
2	R44 R96	49.9	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R45	390	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R46	1k96	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R47	10k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
3	R48-49 R52	13k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R50	18.7k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R51	13k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R54	26k7	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R55	18k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R56	56k	Potentiometer, SMT Pot, 0.25W, ±10%	0.209 x 0.154	3224W-x-xxxE	Bourns
14	R5-8 R11-12 R26-31 R53 R57	100	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R59	5k6	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R60	5k6	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R61	5k6	Potentiometer, SMT Pot, 0.25W, ±10%	0.209 x 0.154	3224W-x-xxxE	Bourns
1	R62	0R	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R63	8k2	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R64	DNP	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
5	R65-67 R58 R99	DNP	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
3	R68 R88 R69	0	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R70	10.2k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R71	4.42k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R74	115k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R75	24k3	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R77	15k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R78	100k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R79	4k7	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R80	1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R81	33k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R82	20k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
2	R83 R93	10k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
2	R84 R108	1k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
2	R85 R92	20k	Potentiometer, SMT Pot, 0.25W, ±10%	0.209 x 0.154	3224W-x-xxxE	Bourns
1	R86	33k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
2	R87 R91	10k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R89	221	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R9	DNP	Resistor, Chip 1/4 watt, ±1%	1206	STD	STD
1	R90	4k7	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	R95	64.9k	Resistor, Metal Film, 1/4W, 1%	1206	STD	STD
3	R97 R100 R94	100k	Resistor, Metal Film, 1/4W, 1%	1206	STD	STD
1	R98	4.12k	Resistor, Chip, 1/16-W, 1%	0603	STD	STD
1	S1	GT22MCXE	Switch, Ultraminiature Toggle, DPDT	0.177 x 0.276 inch	GT22MCXE	C & K
4	T1-2 T5-6	PA2002NL	Transformer, Gate Driver	0.340 X 0.355 inch	PA2002NL	Pulse
1	T3	55694	Power Transformer, 304W SMPS	34 X41.00 mm	55694	Payton
2	T4 T8	100 to 1	Current Transformer	0.284 x 0.330 inch	PA1005.100NL	Pulse
1	T7	80uH	XFMR, 3.3V, 30A	20.57 x 23.37 mm	NA6194-AL	Coilcraft
1	U10	LM317LIDR	IC, 3 Terminal Adjustable Regulator	SO8	LM317LIDR	Texas Instruments
1	U11	TCMT1113	IC, Photocoupler, 3750 VRMS, -40C, +110C	MF4	TCMT1113	Vishay
1	U12	TL431QDBZR	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL431QDBZR	Texas Instruments
2	U1-2	UCC27200A	IC, 120 V Boot, 2.5A Peak, High-Freq, High-Side Low-Side Driver	SO8	UCC27200DA	Texas Instruments
2	U3-4	UCC37324D	IC, Dual 4-A High Speed Low-Side Power MOSFET Drivers	SO-8	UCC37324D	Texas Instruments
1	U5	UCC28950PW	IC, Advanced Phase-Shifted PWM Controller	TSSOP-24	UCC28950PW	Texas Instruments
1	U6	TLV272CD	IC, 550 uA 3MHz R-R Output Op Amp	SO-8	TLV272CD	Texas Instruments
1	U7	INA194AIDBV	IC, Current Shunt Monitor, -16V to 80V Common-Mode Range	SOT23-5	INA194AIDBV	Texas Instruments
1	U8	TLV271IDBV	IC, 500 uA single Chan, R-R Output Op-Amp	SOT23-5	TLV271IDBV	Texas Instruments
1	U9	LM5039MH	IC, Half-Bridge PWM Controller with Average Current Limit	TSSOP	LM5039MH	Texas Instruments

- 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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