Filename: PMP7146 REV\_B\_bom.xls

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## PMP7146 REV\_B BOM

COUNT	RefDes	Value	Description	Size	Part Number	Mfr
1	C2	0.1uF	Capacitor, Polyprop. Metall. 1KVdc, 250Vac, 10%	0.709 x 0.236 inch	B32652A0103K	Epcos
1	C4	open	open	0603	open	open
1	C7	820uF	Capacitor, Aluminum Electrolytic, 25V	0.315 inch	EKZM250ESS821MJ20S	Nippon Chemi-Con
1	C10	330uF	Capacitor, Aluminum Electrolytic, 10V	0.248 inch	EKZM100ESS331MF11D	Nippon Chemi-Con
1	C13	2.2nF	Capacitor, Safety Y1/X1, Ceramic Disk, 250V	0.394 X 0.315 inch Max.	ECKANA222MB	Panasonic
1	C14	0.047uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H473K	TDK
1	C15	560pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	TDK
1	C16	1uF	Capacitor, Ceramic, 16V, X7R, 20%	0603	C1608X7R1C105M	TDK
1	C17	4.7nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	TDK
1	C18	470pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H221K	TDK
1	C19	5.6nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	TDK
1	C20	4.7uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	C2012X7R1E475K	TDK
1	C21	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	Std	TDK
1	C25	22pF	Capacitor, Ceramic, 50V, NP0/C0G	0603	Std	TDK
1	C26	15nF	Capacitor, Ceramic, 25V, X7R, 10%	0603	Std	TDK
1	C27	2.2nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	TDK
1	C29	4.7uF	Capacitor, Ceramic Chip, 6.3V, ±10%	0603	C1608X5R0J475K	TDK
1	C30	33pF	Capacitor, Ceramic, 50V, NPO, 10%	0603	std	TDK
3	C1 C9 C12	0.1 uF	Capacitor, Leaded, 305 VAC, X2		B32921A2104M289	EPCOS
3	C28 C31-32	10uF	Capacitor, Ceramic, 6.3-V, X5R, 20%	0805	C2012X5R0J106M	TDK
2	C3 C8	47uF	Capacitor, Electrolytic PTH, 350V, 16x20mm	0.571 inch	EKXG351ESS470ML20S	Nippon Chemi-Con
6	C5-6 C11 C22-24	10uF	Capacitor, Ceramic, 25V, X5R, 20%	1210	C3225X5R1E106M	TDK
1	D2	STPS3150U	Diode, Schottky, 3A, 150V	SMB	STPS3150U	ST
1	D3	US1M	Diode, Rectifier, 1A, 1KV	SMA	US1M	Diodes
1	D5	MBRA140LT3	Diode, Schottky, 1-A, 40-V	SMA	MBRA140LT3	ON Semi
1	D6	BAS19	Diode, Switching, 120V, 200mA	SOT23	BAS19LT1	On Semiconductor
1	D7	6V	Diode, Transient Voltage Suppressor, 400W, xxV	SMA	SMAJ5.0A	MDE Semi
1	D8	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	On Semiconductor
1	D9	MBRS130	Diode, Schottky, 1-A, 30-V	SMB	MBRS130	ONsemi
2	D1 D4	MB8S	Diode, Bridge Rectifier, 0.5A, 800V	SO-4	RH06-T	Fairchild
2	D100-101	64V	Diode, SMT TVS 400W, 4.3-A, 64-V	SMA		Diodes
1	J5	PEC12SAAN	Header, Male 12-pin, 100mil spacing,	0.100 inch x 12	PEC12SAAN	Sullins
4	J1-4	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	5002	Sullins
4	JMP1-4	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	L3	2.2uH	Inductor, SMT, 2.3A, 70-milliohm	0.26x0.09 inch	DO1608-222ML	Coilcraft
1	L8	47 uH	Inductor, SMT, 0.155A, 82milliohms	0.287 x 0.287 inch	MSS7341-473X_	Coilcraft
1	L9	4.7uH	Inductor, 788mA, 231-milliohm	0.080 x 0.080 inch	EPL2014-472ML	Coilcraft
6	L1-2 L4-7	1mH	Inductor, Filter Chocke, 0.42-A, 2.5-Ohm	0.350 x 0.300 inch	744743102	Wuerth
4	MH1-4		Through Hole for Screw #6	# 6-32	THT Screw Hole	
1	Q1	FQD2N100	MOSFET, Nch, 1KV, 1.6-A, 9-Ohm	DPAK	FQD2N100	Fairchild
1	Q2	MMBT3904LT1G	Trans, NPN, xx-V, yy-mA, zz-W	SOT23	MMBT3904LT1G	On Semi
1	R6	open	open	1210	open	open

4	R11	4.7	Decister Chip 1/1CM 10/	0603	Std	Std
1			Resistor, Chip, 1/16W, 1%			
1	R17	887K	Resistor, Chip, 1/4W, 5%	1210	Std	Std
1	R20	10	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R24	5.23k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R27	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R29	29.4k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R30	23.7k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R35	9.5k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R36	100k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R37	475	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R38	0.56	Resistor, Chip, 1/10W, 1%	0805	Std	Std
1	R39	2.61k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R40	49.9k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R41	100K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R42	221K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R43	22.1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R44	150K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R46	84.5K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R47	6.04K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R48	365k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R49	1	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R50	2.21M	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R51	182k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R52	1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R1 R12 R21	10	Resistor, Metal Film, 3W, ±5%	3W	PWR4522AS10R0JA	Bourns
7	R2 R5 R8 R13 R16 R22 R25	open	open	1206	open	open
2	R28 R45	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
6	R3 R7 R15 R19 R23 R34	10k	Resistor, Chip, 1/4W, 5%	1210	Std	Std
3	R31-33	4.99k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R4 R10 R14	1M	Resistor, Chip, 1/4W, 5%	1210	Std	Std
3	R9 R18 R26	275V	Varistor, 275V	0.472 x 0.213 inch	SIOV-S10K275E2	Epcos
1	T1	750811434	Transformer, Flyback	20.3x24.38 mm	750811434	WE
1	U1	LM5021-2	IC, AC-DC Current Mode PWM Controller	MSOP	LM5021MMX-2	TI
1	U2	TCMT1107	IC, Photocoupler	MF4	TCMT1107	Vishay
1	U3	TL431AIDBZ	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL431AIDBZ	TI
1	U4		IC, Swift DC-DC Converter With Eco-Mode, 0.5A, 42V	MSOP-10	TPS54040DGQ	TI
1	U5		IC, 2.25MHz 300mA Step-Down Converter	SOT23-5	TPS62240DDC	TI
1	U6		IC, Ultralow-Power 100 mA LDO Regulator	SOT23-5	TPS76933DBV	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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