

**PMP5114\_REVB BOM**

**with rev B PCB**

COUNT	RefDes	Value	DESCRIPTION	SIZE	PART NUMBER	MFR
2	C1, C2	10uF/25V	Capacitor, Ceramic, 25V, X5R, 20%	1206	STD	STD
1	C10	68pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	STD	STD
1	C15	330uF	Capacitor, Aluminum, 2V, 20% (SX Series)	7343	EEF-SX0D331R	Panasonic
1	C18	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0603	STD	STD
1	C19	10nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD
2	C27, C28	100pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	STD	STD
1	<b>C29</b>	<b>1000pF</b>	<b>Capacitor, Ceramic, 50V, X7R, 10%</b>	<b>0603</b>	<b>STD</b>	<b>STD</b>
1	C3	1uF	Capacitor, Ceramic, Low Inductance, 16V, X7R, 20%	0603	STD	STD
9	C37, C38, C66, C47, C49, C50, C58, C67, C68	10uF/6V	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	STD	STD
1	C5	1000pF	Capacitor, Ceramic, 50V, X7R, 10%	0402	STD	STD
2	C74, C75	1uF	Capacitor, Ceramic, 25V, X5R, 10%	0603	STD	STD
1	C82	10nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD
3	C9, C13, C17	1uF	Capacitor, Ceramic, 25V, X5R, 10%	0603	STD	STD
3	D16, D17, D23	GREEN	Diode, LED, Green Clear, 20mcd	0.079 X 0.049	LTST-C170CKT	Lite On
2	D21, D24	AMBER	Diode, LED, Amber Clear, 6mcd	0.079 X 0.049	LTST-C170AKT	Lite On
2	D22, D25	RED	Diode, LED, Red Clear, 20mcd	0.079 X 0.049	LTST-C170CKT	Lite On
1	D4	MBR0530	Diode, Schottky, 0.5A, 30V	SOD-123	MBR0530T	On Semi
3	J1, J2, J3	PEC04DAAN	Header, 2x4-pin, 100mil spacing	0.20 x 0.40 inc	PEC04DAAN	Sullins
1	J11	PEC07DAAN	Header, 2x7 pin, 100mil spacing	0.100 inch x 2X	PEC07DAAN	Sullins
1	J4	PEC02SAAN	Header, Male 2-pin, 100mil spacing	0.100 inch x 2	PEC02SAAN	Sullins
1	J5	PEC02DAAN	Header, 2x2-pin, 100mil spacing	0.20 x 0.20 inc	PEC02DAAN	Sullins
1	J7	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED1514	OST
2	J8, J10	ED1609-ND	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	ED1609	OST
1	JP1	PEC02SAAN	Header, 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	L1	1uH	Inductor, SMT, 11.1A, 7.81 milliohm	0.256 x 0.280 in	SPM6530T-1R0M120	TDK
1	Q1	CSD16301Q2	Trans, Nch, 25V, [TBD] A, 24milliohm	SuperSOT-6	CSD16301Q2	TI
3	Q13, Q14, Q15	BSS83P	MOSFET, Pch, -60V, -0.33A, 2 Ohm	SOT23	BSS83P	Infineon
3	Q17, Q18, Q19	BSS123	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	BSS123	Fairchild
1	Q2	<b>CSD16407Q5</b>	MOSFET, Nch, 25V, 3.3mOhms max @ Vgs=4.5V	TDSON-8	<b>CSD16407Q5</b>	<b>TI[Ciclon]</b>
1	Q3	CSD16406Q3	MOSFET, NChan, 25V, 19A, 5.9 milliohm	QFN3.3X3.3mm	CSD16406Q3	TI[Ciclon]
2	R1, <b>R71</b>	10K	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R10	<b>12.1</b>	Resistor, Chip, 1/16W, 5%	0603	STD	STD
1	R11	0	Resistor, Chip, 1/16W, 5%	0603	STD	STD
1	<b>R12</b>	<b>1</b>	<b>Resistor, Chip, 1/4W, 5%</b>	<b>1206</b>	<b>STD</b>	<b>STD</b>
1	R18	78.7k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R2	45.3k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
2	R21, R22	470	Resistor, Chip, 1/16W, 5%	0402	STD	STD
2	R23, R31	0	Resistor, Chip, 1/16W, 5%	0603	STD	STD
1	R3	330	Resistor, Chip, 1/16W, 5%	0603	Std	Std
1	R39	1	Resistor, Chip, 1/10W, 5%	0805	Std	Std
2	R4, R7	<b>0.1</b>	Resistor, <b>100</b> milliohm, 1W, 5%	2512	STD	STD
1	R40	100k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R41	324k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R6	5.76k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
6	R66, R69, R70, R97, R98, R100	180	Resistor, Chip, 1/16W, 5%	0603	STD	STD
4	R67, R68, R102, R108	1.0k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
5	R72, R87, R89, R95, R96	10k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R8	0.003	Resistor, Metal Film, 1/4 watt, 1%	1206	STD	Vishay
1	R9	0.005	Resistor, 5 milliohm, 1W, 1%	2512	STD	Vishay
1	R91	1	Resistor, Chip, 1/16W, 5%	0603	STD	STD
2	R92, R93	100k	Resistor, Chip Array, 62.5 mW, 5%	612	TC164-JR-07100KL	Yageo
1	R94	10k	Resistor, Chip Array, 100 mW, 5%	1210	EXB-38V103JV	Panasonic
1	RT1	150K	NTC Thermistor, 0603, 5%,	0603	ERTJ1VV154J	Panasonic
1	S3	EG1218A	Switch, SPDT, Slide, PC-mount,	0.457 x 0.157 in	EG1218A	E_Switch
1	TP3	131-4244-00	Adaptor, 3.5-mm probe clip ( or 131-5031-00)	0.200 inch	131-4244-00	Tektronix
1	U1	PS51610/51610IRH	IC, Single Phase, D-Cap+ Synchronous Buck Controller	QFN-32	TPS51610RHB	TI
1	U2	TPS76133DBV	IC, Low-Power 100 mA LDO Regulator	SOT23-5	TPS76133DBV	TI
1	U3	TPS71701DCK	IC, 150mA, Low Iq, Wide Bandwidth, LDO Linear Regulators	SC70	TPS71701DCK	TI
1	U4	UCC27324DGN	IC, Dual 4A High Speed Low-Side MOSFET Driver	MSOP-8	UCC27324DGN	TI
1	U8	TLV3404PW	IC, Nano Power, Open Output Comparators	PW14	TLV3404PW	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.
  5. **Items shown in the schematic and / or PCB assembly drawing, but not in this BOM are not to be populated**

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