

PMP6776F_BOM

Count	RefDes	Value	Description	Size	Part_Number	MFR
1	C86	0.01 uF	Capacitor, Ceramic, 0.01uF, 25V, X7R, 20%	402	04023C103MAT2A	AVX
1	C35	0.1uF	Capacitor, Ceramic, 16V, X5R, 20%	402	0402YD104KAT2A	AVX
1	C52	0.1uF	Capacitor, Ceramic, 16V, X5R, 20%	402	0402YD104KAT2A	AVX
1	C60	0.1uF	Capacitor, Ceramic, 0.1uF, 16V, X7R, 20%	402	0402YD104KAT2A	AVX
2	C1, C17	1.0uF	Capacitor, Ceramic, 25V, X5R, 20%	805	08053D105MAT2A	AVX
2	C11, C27	22uF	Capacitor, Ceramic, 6.3V, X5R, 20%	1206	12066D226MAT2A	AVX
2	C12, C28	100nF	Capacitor, Ceramic, 16V, X7R, 20%	402	0402YD104MAT2A	AVX
0	C13, C78	Open	Capacitor, Ceramic,	1206	1206ZD226MAT2A	AVX
2	C14, C30	820pF	Capacitor, Ceramic, 25V, X7R, 10%	402	06033C821KAZ2A	AVX
1	C15	18pF	Capacitor, Ceramic, 25V, C0G, 10%	402	04023A180JAT2A	AVX
2	C16, C32	680pF	Capacitor, Ceramic, 25V, C0G, 10%	402	04023C681KAT2A	VX
2	C2, C18	4.7uF	Capacitor, Ceramic, 10V, X5R, 20%	805	0805ZD475MAT2A	AVX
2	C3, C19	0.47uF	Capacitor, Ceramic, 0.47uF, 16V, X7R, 20%	402	04026D474KAT2A	AVX
1	C31	22pF	Capacitor, Ceramic, 25V, C0G, 10%	402	04023A220JAT2A	AVX
	C33, C44, C57, C61,					
5	C81	22uF	Capacitor, Ceramic,	1210	1210YD226MAT2A	AVX
2	C34, C58	0.1uF	Capacitor, Ceramic, 25V, X5R 10%	603	06033D104KAT2A	AVX
	C36, C37, C38, C39,					
	C53, C54, C55, C56,					
10	C72, C73	100uF	Capacitor, Ceramic,	1210	12104D107MAT2A	AVX
2	C4, C20	1.0uF	Capacitor, Ceramic, 25V, X7R, 20%	805	08053C105MAT2A	AVX
2	C40, C59	330 pF	Capacitor, Ceramic, 330pF, 25V, X7R, 10%	402	04025C331KAT2A	AVX
2	C41, C62	100nF	Capacitor, Ceramic, 50V, X7R, 10%	603	06035C104KAT2A	AVX
2	C42, C80	22nF	Capacitor, Ceramic, 6.3V, X5R	603		STD
0	C43, C64	open	Capacitor, Ceramic, 50V, C0G, 5%	603	Std	Std
3	C45, C46, C65	22uF	Capacitor, Ceramic, 6.3V, X5R, 10%	1206	12066D226MAT2A	AVX
2	C48, C68	0.1uF	Capacitor, Ceramic, 0.1uF, 25V, X7R, 10%	603	06033C104MAT2A	AVX
2	C49, C66	68pF	Capacitor, Ceramic, 68pF	402	04023A680KAT2A	AVX
	C5, C6, C7, C21,					
6	C22, C23	10uF	Capacitor, Ceramic, 25V, X7R, 20%	1206	1206YC106MAT2A	AVX
2	C50, C69	1uF	Capacitor, Ceramic, 16V, X7R, 10%	603	0603YC105KAT2A	AVX
2	C51, C67	3300pF	Capacitor, Ceramic, 25V, X7R, 20%	402	04023C332MAT2A	AVX

1 C70	22uF	Capacitor, Ceramic, 16V, X7R, 15%	1210	1210YD226MAT2A	AVX
1 C71	0.1uF	Capacitor, Ceramic, 16V, X7R, 15%	402	0402YD104KAT2A	AVX
1 C74	1uF	Capacitor, Ceramic, 16V, X7R, 15%	603	0603YC105KAT2A	AVX
1 C75	0.1uF	Capacitor, Ceramic, 16V, X7R, 15%	402	0402YD104KAT2A	AVX
1 C76	0.1uF	Capacitor, Ceramic, 16V, X7R, 15%	402	0402YD104KAT2A	AVX
1 C77	22uF	Capacitor, Ceramic, 6.3V, X5R, 10%	1206	12066D226MAT2A	AVX
1 C79	330 pF	Capacitor, Ceramic, 25V, X7R, 10%	402	04025C331KAT2A	AVX
2 C8, C26	100uF	Capacitor, Ceramic, 6.3V, X5R, 20%	1210	12106D108MAT2A	AVX
1 C82	1nF	Capacitor, Ceramic, 1uF, 16V, X7R, 10%	603	0603YC102KAT2A	AVX
1 C84	Short	See note 5	402	Std	Std
1 C85	82pF	Capacitor, Ceramic, 82pF, 25V, NPO, [tol]	402	04023A820JAT2A	AVX
0 C9, C10, C24, C25	Open	Capacitor, Ceramic, 6.3V, X5R, 20%	1210	12106D476MAT2A	AVX
2 D1, D2	BAS16	Diode, Switching, 150-mA, 75-V, 350mW	SOT23		Vishay-Lite
1 J1	HPM-10-05-T-S	Header, High Temp, 8pin, 200mil spacing	0.200x8		Samtec
1 J2	HPM-8-05-T-S	Header, High Temp, 10pin, 200mil spacing	0.200 inchx10		Samtec
1 J3	FW-05-05-F-D-361-085	Header, 2x5 pin 50 mil spacing	0.230 x 0.330 inch		Samtec
1 JP1	PEC03SAAN	Header, Male 3-pin, 100mil spacing,	0.100 inch x 3	PEC03SAAN	Sullins
2 L1, L2	2.7uH	Inductor, 2.7uH, 11A, 4.5milliohm	0.325 x 0.318 inch	RLF12560T-2R7N110	TDK
2 L3, L5	1uH	Inductor, SMT, 1uH, 9.4A, 11milliohm	8.8 sq	VLP8040T-1R0N	TDK
1 L4	2.2uH	Inductor, SMT, 2.2uH, 6.7A, 15milliohm	8.8 sq	VLP8040T-2R2N	TDK
1 L6	1.5uH	Inductor, SMT Power Line	6x6 mm	VLC6045T-1R5N	TDK
1 L7	1.5uH	Inductor, SMT, 1.5uH, 6.7A, 10milliohm	8.8 sq	VLP8040T-1R5N	TDK
1 L8	3.3uH	Inductor, SMT, 3.3uH, 3.3A, 24milliohm	0.276 sq inch	SLF7055T-3R3N3R3-3PF	TDK
2 R1, R10	1.18k	Resistor, Chip, 1.18kohm, 1/16W, 1%	402	Std	Std
1 R14	15.8k	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R17	499	Resistor, Chip, 1/16W, 1%	402	Std	Std
3 R18, R26, R34	6.34k	Resistor, Chip, 6.34kOhm, 1/16W, 1%	402	Std	Std
2 R19, R30	100	Resistor, Chip, 100 Ohm, 1/16W, 1%	402	Std	Std
2 R21, R32	2.52k	Resistor, Chip, 2.52kOhm, 1/16W, 1%	402	Std	Std
2 R22, R38	22.1k	Resistor, Chip, 1/16W, 1%	603	STD	STD
3 R23, R33, R47	100K	Resistor, Chip, 100kOhm, 1/16W, 1%	402	Std	Std
1 R24	27.4k	Resistor, Chip, 1/16W, 1%	603	STD	STD
2 R25, R37	100k	Resistor, Chip, 1/16W, 1%	603	Std	Std
1 R27	21k	Resistor, Chip, 1/16W, 1%	603	Std	Std

3 R28, R36, R49	10K	Resistor, Chip, 1/16W, 1%	402	Std	Std
3 R29, R31, R39	1k	Resistor, Chip, 1kOhm, 1/16W, x%	402	Std	Std
2 R3, R12	5.1	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R35	12.7k	Resistor, Chip, 12.7kOhm, 1/16W, 1%	603	Std	Std
1 R40	140k	Resistor, Chip, 49.9kOhm, 1/16W, 1%	603	Std	Std
1 R41	100	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R42	22.1K	Resistor, Chip, 22.1kOhm, 1/16W, x%	402	Std	Std
1 R43	35.7K	Resistor, Chip, 35.7kOhm, 1/16W, x%	402	Std	Std
1 R44	100k	Resistor, Chip, 33.2kOhm, 1/16W, 1%	603	Std	Std
1 R45	100K	Resistor, Chip, 1/16W, x%	402	Std	Std
1 R46	12.7K	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R48	4.42K	Resistor, Chip, 4.42kOhm, 1/16W, 1%	402	Std	Std
1 R5	16.9k	Resistor, Chip, 1/16W, 1%	402	Std	Std
2 R50, R51	100	Resistor, Chip 1/4 watt, ± 5%	1206	STD	STD
1 R52	100	Resistor, Chip, 100 Ohm, 1/16W, x%	402	Std	Std
1 R53	100	Resistor, Chip, 100Ohm, 1/16W, 1%	603	Std	Std
1 R54	100	Resistor, Chip, 1/16W, 1%	603	Std	Std
2 R6, R15	20.5k	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R8	464	Resistor, Chip, 1/16W, 1%	402	Std	Std
1 R9	4.53k	Resistor, Chip, 1/16W, 1%	402	Std	Std
TP1, TP2, TP6, TP7,					
7 TP12, TP13, TP33	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
3 TP17, TP26, TP32	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5000	Keystone
3 TP19, TP27, TP35	5011	Test Point, Black, Thru Hole	0.125 x 0.125 inch	5000	Keystone
TP3, TP5, TP9,					
6 TP15, TP23, TP31	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5010	Keystone
TP4, TP10, TP22,					
5 TP29, TP36	5011	Test Point, Black, Thru Hole	0.125 x 0.125 inch	5011	Keystone
2 U1, U2	TPS56121DQP	IC, 4.5-14V Input High Current Synchronous BUCK Converter	QFN-22 6X5 mm	TPS56121DQP	TI
3 U3, U5, U7	TPS54620RHL	IC, 1.62V-17V Synchronous Buck PWM Converter with Integrated MOSFET	QFN14	TPS54620RHL	TI
2 U4, U6	TPS54425PWP	IC, 4-A Output Single Sync. Step-Down Switcher with Integrated FET	HTSSOP-14	TPS54425PWP	Texas Instr
1 U8	TPS54225PWP	IC, 2-A Output Single Sync. Step-Down Switcher W/ Integrated FET	HTSSOP-14	TPS54225PWP	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. Place a short across C84.

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