

PMP9386 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP9309 REVC	Any	PMP9309 REVC	N/A
C6, C34	2	22uF	TMK325B7226MM	Taiyo Yuden	CAP, CERM, 22uF, 25V, X7R, 20%, 1210	1210
C15, C45	2	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C16, C46	2	100pF	C1608C0G2A101J	TDK	CAP, CERM, 100pF, 100V, +/-5%, C0G/NP0, 0603	0603
C17, C47	2	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 0805	0805
C19, C21, C49	3	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47uF, 25V, +/-10%, X7R, 0603	0603
C20	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603
C22	1	1uF	GRM219R71E105KA88D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	0805
C23	1	680pF	C0603C681K5RACTU	Kemet	CAP, CERM, 680pF, 50V, +/-10%, X7R, 0603	0603
C24	1	0.027uF	C0805C273K5RACTU	Kemet	CAP, CERM, 0.027uF, 50V, +/-10%, X7R, 0805	0805
C30, Cx2	2	2.2uF	08053C225MAT	AVX	CAP, CERM, 2.2uF, 25V, X7R, 0805	0805
Cx1	1	1,200uF	Used in BOM report	Used in BOM report	CAP, Electrolytic, 1,200uF, 25V, TH	Used in PnP output
Cx3	1	390uF	PCV1E391MCL2GS	Nichicon	CAP, Conductive Polymer Al Electrolytic, 390F, 25V, 4.2Arms, +/-20%, 0.0210hm ESR, SMT	Used in PnP output
D1, D3	2	0.77V	DFLS1100-7	Diodes Inc.	Diode, Schottky, 100V, 1A, PowerDI123	PowerDI123
H1, H2, H3, H4	4	0.11 V	NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1	1		6091	Keystone	Standard Banana Jack, Insulated, Red	6091
J2	1	2x1	1715721	Phoenix Contact	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block
J3	1		6092	Keystone	Standard Banana Jack, Insulated, Black	6092
L1, L2	2	15uH	SER1390-153	Coilcraft	Inductor, 15uH, 7.2A @ 10% drop, 0.015ohm Max., SMT	Used in PnP output
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
Q1, Q3, Q10, Q12	4	60V	CSD18531Q5A	Texas Instruments	MOSFET, N-CH, 60V, 19A, SON 5x6mm	SON 5x6mm
Q7, Q13	2	0.25V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23
R2, R26	2	0.008	PMR100HZPFU8L00	Rohm	RES, 0.008 ohm, 1%, 2W, 2512	2512
R3, R4, R28, R29	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.1W, 0603	0603
R5, R8, R9, R10, R14, R30, R34, R35, R38	9	0	ERJ-3GEY0R00V	Panasonic	RES, 0 ohm, 5%, 0.1W, 0603	0603
R11	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.1W, 0603	0603
R12, R36	•	2.2	CRCW08052R20JNEA	Vishay-Dale Vishay-Dale	RES, 2.2 ohm, 5%, 0.125W, 0805	0805
R13, R37	2	113k	CRCW06032K203NEA	Vishay-Dale Vishay-Dale	RES, 113k ohm, 1%, 0.1W, 0603	0603
R15	1	15.0k	CRCW0603115K0FKEA	Vishay-Dale Vishay-Dale	RES, 15.0k ohm, 1%, 0.1W, 0603	0603
R16	1	78.7k	CRCW060378K7FKEA	Vishay-Dale Vishay-Dale	RES, 78.7k ohm, 1%, 0.1W, 0603	0603
R18, R20	2	10.0k	CRCW060370K7FKEA	Vishay-Dale Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R19	1	523	CRCW0603523RFKEA	Vishay-Dale Vishay-Dale	RES, 523 ohm, 1%, 0.1W, 0603	0603
R21	1	48.7	CRCW080548R7FKEA	Vishay-Dale Vishay-Dale	RES, 48.7 ohm, 1%, 0.125W, 0805	0805
R23, R27	2	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
R24, R33, R51,	6	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R52, R56, R57	_					
TP1, TP3	2	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP7, TP8, TP9	4	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP4, TP5	2	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U1, U2	2		LM5122MH/NOPB	Texas Instruments	Wide Input Synchronous Boost Controller with Multiple Phase Capability, PWP0020A	PWP0020A
C1, C28	0	470pF	GRM2165C2A471JA01D	MuRata	CAP, CERM, 470pF, 100V, +/-5%, C0G/NP0, 0805	0805
C2, C13, C14,	0	330uF	EEV-FK2A331M	Panasonic	CAP, AL, 330uF, 100V, +/-20%, 0.153 ohm, SMD	SMT Radial K16
C40						
C3, C4, C5, C31,	0	3.3uF	GRM32DR71H335KA88L	MuRata	CAP, CERM, 3.3uF, 50V, +/-10%, X7R, 1210	1210
C32, C33						
C7, C35	0	330uF, 35V		SUNCON	CAP, Al Electrolytic, 330uF, 35V, SMT	
C8, C9, C10, C11,	0	1uF	GRM32CR72A105KA35L	MuRata	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1210	1210
C12, C36, C37,						
C38, C39						
C25, C26, C27,	0	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C29, C43, C44						
C41, C42	0	2.2uF	GRM31CR71H225KA88L	MuRata	CAP, CERM, 2.2uF, 50V, +/-10%, X7R, 1206	1206
C50	0	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C51	0	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603	0603
C52	0	0.47uF	C0603C474K4RACTU	Kemet	CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603	0603
D2, D4	0	0.57V	PMEG6010CEH,115	NXP Semiconductor	Diode, Schottky, 60V, 1A, SOD-123F	SOD-123F
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
Q2, Q16	0	150V	SUM40N15-38	Vishay-Siliconix	MOSFET, N-CH, 150V, 40A, DDPAK	DDPAK
Q4, Q6, Q8, Q11,	0	0.2V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23
Q14, Q15						
Q5, Q9, Q17, Q18	0	0.25V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23
R1, R25	0	8.2	CRCW20108R20JNEF	Vishay Dale	RES 8.2 OHM 3/4W 5% 2010 SMD	2010 (5025 Metric)
R6, R7, R17, R32, R40	0	0	ERJ-3GEY0R00V	Panasonic	RES, 0 ohm, 5%, 0.1W, 0603	0603
R22, R31	0	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
R39, R55	0	825	CRCW0805825RFKEA	Vishay-Dale	RES, 825 ohm, 1%, 0.125W, 0805	0805
R41, R48	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R42	0	88.7k	CRCW060388K7FKEA	Vishay-Dale	RES, 88.7k ohm, 1%, 0.1W, 0603	0603
R43	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R44, R49	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R45	0	3.74k	CRCW06033K74FKEA	Vishay-Dale	RES, 3.74k ohm, 1%, 0.1W, 0603	0603
R46	0	40.2	CRCW060340R2FKEA	Vishay-Dale	RES, 40.2 ohm, 1%, 0.1W, 0603	0603
R47	0	7.50k	CRCW06037K50FKEA	Vishay-Dale	RES, 7.50k ohm, 1%, 0.1W, 0603	0603
R50	0	3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01k ohm, 1%, 0.1W, 0603	0603
R53, R54, R58, R59	0	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.25W, 1206	1206
TP14	0	Yellow	5009	Keystone	Test Point, Compact, Yellow, TH	Yellow Compact
				_		Testpoint
U3	0		LP2951CSD	Texas Instruments	Series of Adjustable Micropower Voltage Regulators, 8-pin LLP	SDC08A
U4	0		LM321MF	Texas Instruments	Low Power Single Op Amp, DBV0005A	DBV0005A

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