

Filename: BOM-PMP10749 REV1_2.xls

Variant: None

Generated: 12/16/2015 6:32:04 PM

PMP10749 REV1_2

Designator	Description	Manufacturer	PartNumber	Quantity
IPC B1	Printed Circuit Board	Any	PMP10749 REV1_2	1
C1, C2, C3, C4, C5, C6	CAP, CERM, 10 μ F, 50 V, +/- 10%, X5R, 1206_190	TDK	CGA5L3X5R1H106K160AB	6
C7, C8	CAP CER 2.2UF 100V 10% X7R 1206	Samsung Electro-Mechanics America, Inc	CL31B225KCHSNE	2
C9	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	MuRata	GRM188R71H104KA93D	1
C10, C11	CAP, CERM, 2.2 μ F, 10 V, +/- 20%, X5R, 0603	Kemet	C0603C225M8PACTU	2
C12	CAP, CERM, 0.47 μ F, 100V, +/-10%, X7R, 0805	MuRata	GRM21BR72A474KA73L	1
C13, C14	CAP, CERM, 0.33 μ F, 100 V, +/- 10%, X7R, 0805	MuRata	GRM21AR72A334KAC5L	2
C15, C16	CAP, CERM, 470 pF, 100 V, +/- 5%, C0G/NP0, 0805	AVX	08051A471JAT2A	2
C17, C22, C23, C24, C25, C28, C29, C30	CAP, CERM, 47 μ F, 6.3 V, +/- 20%, X5R, 1206	TDK	C3216X5R0J476M	8
C18, C20, C21	CAP, AL, 220 μ F, 6.3 V, +/- 20%, 0.025 ohm, SMD	Chemi-Con	APXA6R3ARA221MH70G	3
C19	CAP, AL, 100 μ F, 6.3 V, +/- 20%, 0.024 ohm, SMD	Chemi-Con	APXE6R3ARA101ME61G	1
C26, C27, C31, C32	CAP, CERM, 0.1 μ F, 100V, +/-10%, X7R, 0603	MuRata	GRM188R72A104KA35D	4
C33, C34	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	AVX	06031A330JAT2A	2
C35, C40	CAP, CERM, 470pF, 50V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C1H471JA01D	2
C36, C39	CAP, CERM, 0.22 μ F, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H224K080AB	2
C37, C38	CAP, CERM, 0.01 μ F, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H103KA01D	2
C41	CAP, CERM, 0.022 μ F, 50 V, +/- 10%, X7R, 0603	Kemet	C0603X223K5RACTU	1
C42	CAP, CERM, 0.022 μ F, 50 V, +/- 10%, X7R, 0603	Kemet	C0603C223K5RACTU	1
C43	CAP, AL, 47 μ F, 50 V, +/- 20%, 0.3 ohm, SMD	Panasonic	EEE-FC1H470P	1
C44, C45	CAP, CERM, 1 μ F, 100V, +/-20%, X7R, 1206	TDK	C3216X7R2A105M160AA	2
C46	CAP, CERM, 1000 pF, 100 V, +/- 5%, X7R, 0603	AVX	06031C102JAT2A	1
C47, C51	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, 1210	MuRata	GRM32NR72A104KA01L	2
C48, C49, C52, C53	CAP, CERM, 4.7 μ F, 100 V, +/- 10%, X7S, 1210	TDK	C3225X7S2A475K200AB	4
C50, C54	CAP, CERM, 10 μ F, 50 V, +/- 20%, X7R, 1210	TDK	C3225X7R1H106M250AC	2
C55, C56	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0805	TDK	C2012X7R2A472K	2
C57	CAP, CERM, 2.2 μ F, 50 V, +/- 10%, X5R, 0805	TDK	C2012X5R1H225K125AB	1
C58	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0805	MuRata	GRM2165C2A102JA01D	1
C59, C60, C66	CAP, CERM, 3.3 μ F, 50V, +/-10%, X7R, 1210	MuRata	GRM32DR71H335KA88L	3
C61, C62, C63, C64, C65	CAP, AL, 330 μ F, 35 V, +/- 20%, 0.06 ohm, SMD	Panasonic	EEE-FP1V331AP	5
C67, C69, C70	CAP, CERM, 10 μ F, 35 V, +/- 20%, X7R, 1210	Taiyo Yuden	GMK325AB7106MM-T	3
C68	CAP, CERM, 1 μ F, 100V, +/-10%, X7R, 1210	MuRata	GRM32CR72A105KA35L	1
C71	CAP, CERM, 0.1 μ F, 25V, +/-10%, X7R, 0805	AVX	08053C104KAT2A	1
C72, C74	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C1H101JA01D	2
C73	CAP, CERM, 4.7 μ F, 16V, +/-10%, X7R, 0805	MuRata	GRM21BR71C475KA73L	1
C75, C76	CAP, CERM, 0.47 μ F, 25V, +/-10%, X7R, 0603	MuRata	GRM188R71E474KA12D	2
C77	CAP, CERM, 0.33 μ F, 16 V, +/- 10%, X7R, 0603	Kemet	C0603C334K4RACTU	1
C78	CAP, CERM, 0.01 μ F, 50 V, +/- 10%, X7R, 0603	Kemet	C0603X103K5RACTU	1
C79	CAP, CERM, 100 pF, 100 V, +/- 1%, C0G/NP0, 0805	AVX	08051A101FAT2A	1

Designator	Description	Manufacturer	PartNumber	Quantity
C80	CAP, CERM, 2200 pF, 100 V, +/- 5%, X7R, 0603	AVX	06031C222JAT2A	1
D1, D2	Diode, Schottky, 70V, 1A, SMA	Diodes Inc.	B170-13-F	2
D3, D4	Diode, Schottky, 60 V, 1 A, SOD-323F	NXP Semiconductor	PMEG6010CEJ,115	2
D5	Diode, TVS, Uni, 28 V, 600 W, SMB	Diodes Inc.	SMBJ28A-13-F	1
D6	Diode, TVS, Uni, 14 V, 600 W, SMB	Diodes Inc.	SMBJ14A-13-F	1
D7	Diode, Schottky, 100V, 1A, PowerDI123	Diodes Inc.	DFLS1100-7	1
FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	6
H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	4
H5, H6, H7, H8	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	4
J1, J2, J3, J4, J5, J6, J7, J8	Standard Banana Jack, Uninsulated, 5.5mm	Keystone	575-4	8
L1	Inductor, Shielded, Composite, 1.5 µH, 36.6 A, 0.0016 ohm, SMD	Coilcraft	XAL1010-152MEB	1
L2	Inductor, Shielded, Composite, 2.2 µH, 32 A, 0.00255 ohm, SMD	Coilcraft	XAL1010-222MEB	1
L3	Inductor, Shielded Drum Core, WE-Superflux200, 1.9 µH, 32.5 A, 0.0012 ohm, SMD	Würth Elektronik	7443556190	1
L4	Inductor, Shielded Drum Core, Mn-Zn, 2.2 µH, 28 A, 0.0015 ohm, SMD	Würth Elektronik	7443630220	1
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	1
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	MOSFET, N-CH, 40 V, 33 A, AEC-Q101, SOT669	NXP Semiconductor	BUK9Y21-40E,115	8
Q9, Q10, Q11	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	Vishay-Siliconix	SQJ422EP-T1-GE3	3
R1, R2, R5, R6, R8, R9	RES, 4.99, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06034R99FKEA	6
R3, R4, R13, R16, R32, R46	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	6
R7	RES, 2.2, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06032R20JNEA	1
R10, R11	RES, 0.004 ohm, 1%, 1W, 2010, AEC-Q200 Qualified	Rohm Semiconductor	PMR50HZPFV4L00	2
R12, R17	RES, 100 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW0805100KFKEA	2
R14, R15	RES, 49.9, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060349R9FKEA	2
R18, R19	RES, 10, 5%, 0.75 W, 2010	Vishay-Dale	CRCW201010R0JNEF	2
R20, R21	RES, 267, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603267RFKEA	2
R22, R23	RES, 10 k, 5%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0JNEA	2
R24	RES, 31.6 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060331K6FKEA	1
R25	RES, 56.2 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060356K2FKEA	1
R26	RES, 6.49 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06036K49FKEA	1
R27	RES, 12.1 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060312K1FKEA	1
R28, R31, R33, R34	RES, 100 k, 5%, 0.1 W, 0603	Vishay-Dale	CRCW0603100KJNEA	4
R29, R30	RES, 17.8 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060317K8FKEA	2
R35, R50	RES, 10.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0FKEA	2
R36	RES, 1.0 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12061R00JNEA	1
R37	RES, 4.7, 5%, 0.75 W, 2010	Vishay-Dale	CRCW20104R70JNEF	1
R38	RES, 0.0022, 1%, 2 W, 2512	Vishay-Dale	WSLP25122L200FEA	1
R39, R40	RES, 100 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100RFKEA	2
R41, R43	RES, 0 ohm, 5%, 0.1W, 0603	Panasonic	ERJ-3GEY0R00V	2
R44	RES, 49.9 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249K9FKED	1
R45	RES, 2.2 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08052R20JNEA	1

Designator	Description	Manufacturer	PartNumber	Quantity
R47	RES, 75.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040275K0FKED	1
R48	RES, 40.2 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040240K2FKED	1
R49	RES, 40.2 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060340K2FKEA	1
R51	RES, 198 k, 0.1%, 0.1 W, 0603	Yageo America	RT0603BRD07198KL	1
R52	RES, 20.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040220K5FKED	1
R53	RES, 150 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402150KFKED	1
R54	RES, 48.7 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080548R7FKEA	1
T1	Coupled inductor, 470 μ H, 14 A, 0.008 ohm, +/- 35%, SMD	Pulse Engineering	P0502NLT	1
TP1, TP6, TP7, TP23, TP25	Test Point, Multipurpose, Red, TH	Keystone	5010	5
TP2, TP3, TP8, TP9, TP19, TP20, TP22, TP26, TP27	Test Point, Multipurpose, Black, TH	Keystone	5011	9
TP4, TP5, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP21, TP24, TP29, TP30	Test Point, Multipurpose, White, TH	Keystone	5012	15
TP28	Test Point, Compact, Yellow, TH	Keystone	5009	1
U1	Wide Input Range Dual Synchronous Buck Controller, RHA0040C	Texas Instruments	LM5140RHA	1
U2		Texas Instruments	LM74610	1
U3		TI	LM5122MH	1
U4	High-Speed CMOS Logic Decade Counter/Divider with 10 Decoded Outputs, PW0016A	Texas Instruments	CD74HC4017PWR	1

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