Variant: 003
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TID #: PMP12004-HE

PMP12004-HE REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		PMP12004-HE	Any	Printed Circuit Board	
2	C1	1	47uF	T495X476K035ATE300	Kemet	CAP, TA, 47 µF, 35 V, +/- 10%, 0.3 ohm, SMD	7343-43
3	C2, C3	2	2.2uF	CL05A225KQ5NNNC	Samsung	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X5R, 0402	0402
4	C4, C5, C6, C7	4	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0402	0402
5	C8, C88, C89, C90	4	4.7uF	GRM155R60J475ME47D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 20%, X5R, 0402	0402
6	C9, C10, C15	3	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
7	C11	1	1uF	GRM155R6YA105KE11D	MuRata	CAP, CERM, 1 µF, 35 V, +/- 10%, X5R, 0402	0402
8	C12, C18, C24, C25, C31, C44, C45, C60, C69, C70, C71, C80, C91, C92, C93, C136, C151	17	0.1uF	GRM155R61A104KA01D	MuRata	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	0402
9	C13, C14	2	4.7uF	GRM188R61A475ME15	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 20%, X5R, 0603	0603
10	C16, C17, C32, C33, C72, C73	6	22uF	GRM21BR61E226ME44	MuRata	CAP, CERM, 22 µF, 25 V, +/- 20%, X5R, 0805	0805
11	C19, C20, C21, C22, C23, C38, C39, C40, C41, C42, C43, C59, C67, C68, C74, C75, C76, C77, C133, C134, C135	21	22uF	GRM188R60J226MEA0J	MuRata	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0603	0603
12	C29, C49, C55, C84, C85, C130, C142, C147	8	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402
13	C34, C36, C51, C53, C65, C98, C102	7	100uF	GRM21BR60G107ME15L	MuRata	CAP, CERM, 100 µF, 4 V, +/- 20%, X5R, 0805	0805
14	C35, C37, C52, C54, C66, C99, C103	7	4.7uF	GRM188R60J475ME19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 20%, X5R, 0603	0603
15	C56, C57, C58, C148, C149, C150	6	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0603	0603
16	C61, C62, C63, C137, C138, C139, C140, C152, C153, C154, C155, C804, C905, C906	14	47uF	GRM21BR61A476ME15	MuRata	CAP, CERM, 47 µF, 10 V, +/- 20%, X5R, 0805	0805
17	C78, C79	2	47uF	ZRB18AR60G476ME01	MuRata	CAP, CERM, 47 µF, 4 V, +/- 20%, X5R, 0603	0603
18	C94	1	100pF	GRM1555C1H101JA02D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
19	C95	1	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
20	C96	1	1000pF	GRM155R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
21	C97, C101	2	680uF	45VPB68M	Panasonic	CAP, Aluminum Polymer, 680 µF, 4 V, +/- 20%, 0.025 ohm, 10x10.3 SMD	10x10.3
22	C100	1	330pF	GRM155R71H331KA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0402	0402
23	C104	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
24	C105	1	47uF	GRM188R60J476M	MuRata	CAP, CERM, 47 µF, 6.3 V, +/- 20%, X5R, 0603	0603
25	C106	1	4.7uF	GRM188R60J475KE19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X5R, 0603	0603
26	C107	1	4.7uF	GRM185C81A475ME11D	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 20%, X6S, 0603	0603
27	C108	1	2.2uF	GRM155C80J225KE09D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X6S, 0402	0402
28	C109	1	0.1uF	C1005X7R1H104M	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 20%, X7R, 0402	0402
29	C110	1	1000pF	06031C102JAT2A	AVX	CAP, CERM, 1000pF, 100V, +/-5%, X7R, 0603	0603
30	C111	1	470uF	EEFSX0E471XE	Panasonic	CAP, Aluminum Polymer, 470 µF, 2.5 V, +/- 20%, 9 ohm, 7.3x1.8x4.3mm SMD	7.3x1.8x4.3mm
31	C112, C113, C114, C115	4	22uF	GRM32EC81E226KE15L	MuRata	CAP, CERM, 22uF, 25V, +/-10%, X6S, 1210	1210
32	C116, C117	2	6800pF	GRM155R71E682KA01D	MuRata	CAP, CERM, 6800pF, 25V, +/-10%, X7R, 0402	0402
33	C118, C119, C120, C121, C122, C123, C124	7	100uF	GRM32EC8DJ107ME20L	MuRata	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X6S, 1210	1210
34	C125, C126	2	22uF	GRM21BC80G226ME36L	MuRata	CAP, CERM, 22 µF, 4 V, +/- 20%, X6S, 0805	0805
35	H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
36	J1, J3, J4, J6, J7, J8, J10, J12, J14, J15, J16, J17, J18, J19, J20, J23, J24, J25, J28, J30	20		1935776	Phoenix Contact	Terminal Block, 2x1, 5mm, Green, TH	Terminal Block, 2x1, 5mm, TH
37	J2, J5, J9, J11, J13, J26, J27, J29	8		U.FL-R-SMT-1	Hirose Electric Co. Ltd.	Connector, Ultra-Mini Coaxial, SMD	Ultra small CO-AX SMD
38	J21	1		N2510-6002-RB	3M	Header (shrouded), 100mil, 5x2, High-Temperature, Gold, TH	5x2 Shrouded header
39	J22	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
40	L1, L3	2	2.2uH	74437368022	Wurth Elektronik	Inductor, Shielded Drum Core, Powdered Iron, 2.2 µH, 10 A, 0.0065 ohm, SMD	10x3.8x10mm
41	L2, L4	2	1.8uH	744325180	Wurth Elektronik	Inductor, Shielded Drum Core, Superflux, 1.8 µH, 16 A, 0.0035 ohm, SMD	WE-HC6
42	L5	1	470nH	744309047	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 470 nH, 40.5 A, 0.000765 ohm, SMD	12.5x13mm
43	L6, L7	2	1uH	744777001	Wurth Elektronik	Inductor, Shielded Drum Core, Metal Composite, 1 µH, 8 A, 0.0084 ohm, SMD	WE-PD-M
44	Q1, Q2, Q3	3	30V	CSD87331Q3D	Texas Instruments	MOSFET, N-CH, 30 V, 15 A, 3.4x1.4x3.4mm	3.4x1.4x3.4mm
45	R1, R2, R3, R4, R5, R6, R7, R18, R21, R29, R42	11	0.002	KRL2012E-M-R002-G-T5	Susumu Co Ltd	RES, 0.002, 2%, 1 W, 0508	0508
46	R8, R9, R12, R15, R20, R23, R26, R28, R31, R34, R35, R39, R40, R41, R44, R47, R60, R82, R71, R72, R80, R85	22	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
47	R10, R13, R14, R16, R17	5	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
48	R22, R30, R43	3	2.00	CRCW04022R00FKED	Vishay-Dale	RES, 2.00, 1%, 0.063 W, 0402	0402
49	R24, R33, R37, R38, R45, R74, R78, R82	8	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
50	R27	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, 0402	0402
51	R36	1	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, 0402	0402
52	R49	1	4.3k	CRCW04024K30JNED	Vishay-Dale	RES, 4.3 k, 5%, 0.063 W, 0402	0402
53	R51, R52, R53, R54, R55, R58	6	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
54	R59	1	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, 0402	0402
55	R61, R63, R88	3	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
56	R64	1	49.0	ERJ-2RKF49R0X	Panasonic	RES, 49.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
57	R65	1	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, 0402	0402
58	R66	1	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
59	R67	1	34.8k	CRCW040234K8FKED	Vishay-Dale	RES, 34.8 k, 1%, 0.063 W, 0402	0402
60	R69	1	8.66k	CRCW04028K66FKED	Vishay-Dale	RES, 8.66 k, 1%, 0.063 W, 0402	0402
61	R70, R73	2	51	CRCW040251R0JNED	Vishay-Dale	RES, 51, 5%, 0.063 W, 0402	0402
62	R75	1	1	CRW1206R100JNEA	Vishay-Dale	RES, 1.0 ohm, 5%, 0.25W, 1206	1206
63	S1	1		SDA06H1SBD	C&K Components	Switch, SPST-BPos, SMT	10.4x3.9x9.3mm
64	TP1, TP17, TP19, TP21, TP23, TP25, TP27, TP28, TP29, TP33, TP34, TP35, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP49, TP51	23	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
65	TP2, TP18, TP20, TP22, TP24, TP26, TP30, TP31, TP32, TP36, TP37, TP38, TP48, TP50, TP52	15	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
66	TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16	14	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
67	U1	1		TPS650640A0RSKR	Texas Instruments	Wide VIN, Flexible, Simple, Small, and Low-Cost PMU	RSK0064C
68	U2	1		TPS544C25RVF	Texas Instruments	18V, 30A PMBUS SYNCHRONOUS BUCK CONVERTERS, RVF0040A	RVF0040A
69	C26, C27, C28, C46, C47, C48, C81, C82, C83, C127, C128, C129, C901, C902, C903	0	47uF	GRM21BR61A476ME15	MuRata	CAP, CERM, 47 µF, 10 V, +/- 20%, X5R, 0805	0805
70	C30, C50, C87	0	DNP	GRM155R71E682KA01D	MuRata	CAP, CERM, 6800 pF, 25 V, +/- 10%, X7R, 0402	0402
71	C84	0	100uF	GRM21BR60G107ME15L	MuRata	CAP, CERM, 100 µF, 4 V, +/- 20%, X5R, 0805	0805
72	C85, C141, C158	0	4.7uF	GRM188R60J475ME19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 20%, X5R, 0603	0603
73	C131, C132, C143, C145, C146, C157	0	3.3uF	GRM188R61A335KE15D	MuRata	CAP, CERM, 3.3 µF, 10 V, +/- 10%, X5R, 0603	0603
74	C144, C158	0	1000pF	GRM155R60J102KA01D	MuRata	CAP, CERM, 1000 pF, 6.3 V, +/- 10%, X5R, 0402	0402
75	R11	0	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
76	R19	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
77	R25, R32, R46	0	DNP	CRCW0402R00JNED	Vishay-Dale	RES, 2.2, 5%, 0.063 W, 0402	0402
78	R50	0	0.002	KRL2012E-M-R002-G-T5	Susumu Co Ltd	RES, 0.002, 2%, 1 W, 0508	0508
79	R56, R57	0	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
80	R76, R81	0	10.0k	RT0603DRE0710KL	Yageo America	RES, 10.0 k, 0.5%, 0.1 W, 0603	0603
81	R77	0	2.49k	RT0603DRE072K49L	Yageo America	RES, 2.49 k, 0.5%, 0.1 W, 0603	0603
82	R79, R84	0	4.99k	RT0603DRE074K99L	Yageo America	RES, 4.99 k, 0.5%, 0.1 W, 0603	0603
83	R83	0	619	RT0603DRE07619RL	Yageo America	RES, 619, 0.5%, 0.1 W, 0603	0603
84	U3, U4	0		TPS74901RGWT	Texas Instruments	Single Output LDO, 3 A, Adjustable 0.8 to 3.6 V Output, 0.8 to 5.5 V Input, with Programmable Soft Start, 20-pin VQFN (RGW), -40 to 125 degC, Green (RoHS & no Sb/Br)	RGW0020A

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