

**PMP41013 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC	1		PMP41013	Any	Printed Circuit Board	
2	C1, C2	2	33uF	T521D336M035ATE065	Kemet	CAP, TA, 33 uF, 35 V, +/- 20%, 0.065 ohm, SMD	7343-31
3	C3, C4	2	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CER, 0.01 uF, 25 V, +/- 10%, X7R, 0603	0603
4	C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C61	17	10uF	GRM188R61E106MA73D	MuRata	CAP, CER, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
5	C21	1	1000pF	C0402C102J3RACTU	Kemet	CAP, CER, 1000 pF, 25 V, +/- 5%, X7R, 0402	0402
6	C22, C23	2	0.047uF	GRM188R71E473KA01D	MuRata	CAP, CER, 0.047 uF, 25 V, +/- 10%, X7R, 0603	0603
7	C24, C33	2	1uF	GRM188R71E105KA12D	MuRata	CAP, CER, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
8	C25	1	150pF	885012005062	Würth Elektronik	CAP, CER, 150 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
9	C26	1	150pF	C0603C151J5GACTU	Kemet	CAP, CER, 150 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
10	C27	1	0.47uF	C1608X5R1H474K080AB	TDK	CAP, CER, 0.47 uF, 50 V, +/- 10%, X5R, 0603	0603
11	C28, C29	2	0.033uF	GRM188R71E333KA01D	MuRata	CAP, CER, 0.033 uF, 25 V, +/- 10%, X7R, 0603	0603
12	C30, C34	2	0.018uF	GRM188R71H183KA01D	MuRata	CAP, CER, 0.018 uF, 50 V, +/- 10%, X7R, 0603	0603
13	C31	1	0.068uF	GRM155R61A683KA01D	MuRata	CAP, CER, 0.068 uF, 10 V, +/- 10%, X5R, 0402	0402
14	C32	1	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CER, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
15	C35	1	33pF	GRM1555C1H30JA01D	MuRata	CAP, CER, 33 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
16	C36	1	2.2uF	GRM188R6YA225KA12D	MuRata	CAP, CER, 2.2 uF, 35 V, +/- 10%, X5R, 0603	0603
17	C37	1	4700pF	885012205029	Würth Elektronik	CAP, CER, 4700 pF, 16 V, +/- 10%, X7R, 0402	0402
18	C38	1	680pF	GRM1555C1H681JA01D	MuRata	CAP, CER, 680 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
19	C39	1	15pF	GRM1555C1H150JA01D	MuRata	CAP, CER, 15 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
20	C40, C41, C42	3	100pF	C0603C101J5GAC	Kemet	CAP, CER, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
21	C43, C58	2	0.1uF	0603YC104JAT2A	AVX	CAP, CER, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
22	C44, C49, C50	3	10uF	CL05A106MPSNUNC	Samsung Electro-Mechanics	CAP, CER, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
23	C45, C46, C47, C48	4	0.01uF	C0402C103J5RACTU	Kemet	CAP, CER, 0.01 uF, 50 V, +/- 5%, X7R, 0402	0402
24	C51	1	4.7uF	C2012X7R1V475M125AC	TDK	CAP, CER, 4.7 uF, 35 V, +/- 20%, X7R, 0805	0805
25	C52, C53	2	220pF	CGA1A2X7R1H221K030BA	TDK	CAP, CER, 220 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0201	0201
26	C54, C55	2	22uF	C2012X5R1V226M125AC	TDK	CAP, CER, 22 uF, 35 V, +/- 20%, X5R, 0805	0805
27	C56, C57	2	0.1uF	GMK105B1J04KV-F	Taiyo Yuden	CAP, CER, 0.1 uF, 35 V, +/- 10%, X5R, 0402	0402
28	C59	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CER, 1 uF, 50 V, +/- 10%, X7R, 1206	1206
29	C60	1	2.2uF	CGA3E3X5R1A225K080AB	TDK	CAP, CER, 2.2 uF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
30	C62	1	0.22uF	C1608X5R1H224K080AB	TDK	CAP, CER, 0.22 uF, 50 V, +/- 10%, X5R, 0603	0603
31	C63	1	0.1uF	GRM155R61H104ME14D	MuRata	CAP, CER, 0.1 uF, 50 V, +/- 20%, X5R, 0402	0402
32	C64, C65, C66, C67, C68	5	22uF	GRM219R61C226ME15L	MuRata	CAP, CER, 22 uF, 16 V, +/- 20%, X5R, 0805	0805
33	CN1	1		ED120/4DS	On-Shore Technology	Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block
34	D1	1	White	LW QH8G-Q2S2-3K5L-1	OSRAM	LED, White, SMD	0402, White
35	J1, J4	2		TSW-104-07-G-S	Samtec	Header, 100mil, 4x1, Gold, TH	4x1 Header
36	J2	1		DX07S024J2R1300	JAE Electronics	Receptacle, USB 3.1 Type C, R/A, Gold, SMT	Receptacle, USB 3.1 Type C, R/A, SMT
37	L1	1		BMQADY1010404R7MA1	Chilisin Electronics	4700nH Shielded Molded Inductor Nonstandard	SMD2
38	L2	1	21 ohm	FBMJ2125HM210NT	Taiyo Yuden	Ferrite Bead, 21 ohm @ 100 MHz, 6 A, 0805	0805
39	L3	1	5.6uH	SRP6540-5R6M	Bourns	Inductor, Shielded, Ferrite, 5.6 uH, 5.5 A, 0.038 ohm, SMD	Inductor, 7.2x4x6.5mm
40	Q1, Q2, Q3, Q4	4	30V	CSD17577Q3A	Texas Instruments	MOSFET, N-CH, 30 V, 19 A, DN-H0008A (VSONP-8)	DN-H0008A
41	R1, R2	2	0.01	WSLP1206R0100FEA	Vishay-Dale	RES, 0.01, 1%, 1 W, 1206	1206
42	R3	1	3.9	CRCW12063R90JNEA	Vishay-Dale	RES, 3.9, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
43	R4	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
44	R5	1	1.00	RC0603FR-071RL	Yageo	RES, 1.00, 1%, 0.1 W, 0603	0603
45	R6, R7	2	4.99	CRCW06034R99FKEA	Vishay-Dale	RES, 4.99, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
46	R8, R10	2	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
47	R9	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
48	R11	1	383k	CRCW0603383KFKEA	Vishay-Dale	RES, 383 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
49	R12	1	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
50	R13	1	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, 0402	0402
51	R14	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
52	R15, R17	2	0	RMCF0603ZTOR00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
53	R16	1	220k	RC0603FR-07220KL	Yageo	RES, 220 k, 1%, 0.1 W, 0603	0603
54	R18	1	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
55	R19, R50	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
56	R20	1	191k	CRCW0603191KFKEA	Vishay-Dale	RES, 191 k, 1%, 0.1 W, 0603	0603
57	R21	1	120k	RC0603FR-07120KL	Yageo	RES, 120 k, 1%, 0.1 W, 0603	0603
58	R22	1	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
59	R23, R25, R27, R32, R33, R39, R41, R46, R48	9	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
60	R24	1	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
61	R28, R29, R30, R31	4	2.20k	CRCW04022K20FKED	Vishay-Dale	RES, 2.20 k, 1%, 0.063 W, 0402	0402
62	R34, R35, R36, R42, R43, R44, R45	7	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
63	R47	1	30	CRCW040230R0JNED	Vishay-Dale	RES, 30, 5%, 0.063 W, 0402	0402
64	R49	1	52.3k	CRCW060352K3FKEA	Vishay-Dale	RES, 52.3 k, 1%, 0.1 W, 0603	0603
65	S1	1		CHS-011B	Copal Electronics	Switch, Slide, SPST, Top Slide, SMT	Switch, Single Top Slide, 2.5x8x2.5mm
66	U1	1		BQ25731RSN	Texas Instruments	No Description	WQFN32
67	U2	1		TPS25750DRJK	Texas Instruments	USB Type-C and USB PD Controller with Integrated Power Switches Optimized for Power Applications	VQFN32
68	U3	1		TVS2200DRVR	Texas Instruments	22-V Precision Surge Protection Clamp, DRV0006A (WSON-6)	DRV0006A
69	U4	1		CAT24C256W1-G	ON Semiconductor	256 kb I2C CMOS Serial EEPROM, SOIC-8	SOIC-8
70	U5	1		TPS76333DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.7 to 10 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
71	U6	1		TPS56339DDCR	Texas Instruments	4.5-V to 24-V Input, 3-A Output Synchronous Step-Down Converter, DDC0006A (SOT-23-THIN-6)	DDC0006A

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