

Variant: 001  
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PMP41079 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		PMP41079	Any	Printed Circuit Board	
2	C1, C7, C10, C12, C14, C44	6	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
3	C2, C8	2	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
4	C3, C37	2	0.01uF	06031C103KAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
5	C4, C5, C16, C34, C35, C45	6	100pF	C0603C101J5GACTU	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
6	C6	1	1uF	C2012X7S2A105K125AB	TDK	CAP, CERM, 1 uF, 100 V, +/- 10%, X7S, 0805	0805
7	C9, C46	2	470pF	C0603X471F5GACTU	KEMET	Cap Ceramic 470pF 50V COG 1% SMD 0603 125°C Paper T/R	0603
8	C11, C38	2	1000pF	C0603C102J5RACAUTO	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0603	0603
9	C13, C47	2	6800pF	CGA3EANP02A682J080AC	TDK	CAP, CERM, 6800 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
10	C15, C17	2	1500pF	C0603C152J3RACTU	Kemet	CAP, CERM, 1500 pF, 25 V, +/- 5%, X7R, 0603	0603
11	C18, C49, C50, C52, C54, C55	6	100uF	EMVH101GDA101MLH0S	Chem-Con	CAP, AL, 100 uF, 100 V, +/- 20%, 0.24 ohm, SMD	LH0
12	C19, C33	2	100pF	08051A101KAT2A	AVX	CAP, CERM, 100 pF, 100 V, +/- 10%, C0G/NP0, 0805	0805
13	C22, C23, C24, C25, C26, C27, C28, C29, C31, C56, C57, C58, C59, C60, C61, C62, C63, C64	18	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
14	C30, C36	2	4.7nF	C0603C472F3GAC7867	KEMET	4700 pF +/-1% 25V Ceramic Capacitor C0G, NP0 0603 (1608 Metric)	0603
15	C39	1	10pF	C0603C100F5GAC7867	Kemet	CAP, CERM, 10 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
16	C40	1	4.7uF	CGA4J1X8L1E475K125AC	TDK Corporation	Cap Ceramic 4.7uF 25V X8L 10% Pad SMD 0805 +150°C Automotive T/R	0805
17	C41, C43	2	2.2uF	C2012X7R1C225K125AB	TDK	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0805	0805
18	C81, C106	2		C0603C101J5GACTU	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
19	C83	1	24pF	GRM1885C1H240JA01D	MuRata	CAP, CERM, 24 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
20	C86	1	0.012uF	C0603C123K1RACTU	Kemet	CAP, CERM, 0.012 uF, 100 V, +/- 10%, X7R, 0603	0603
21	D1, D4	2		B0530WS-7-F	Diodes Inc.	DIODE SCHOTTKY 30V 500MA SOD323, (replaced with ZHCS400TA)	SOD323
22	D2	1	4.7V	MMSZ4688T1G	ON Semiconductor	Diode, Zener, 4.7 V, 500 mW, SOD-123, (replaced with MMSZ5230B)	SOD-123
23	D3	1	30V	B230A-13-F	Diodes Inc.	Diode, Schottky, 30 V, 2 A, SMA (replaced with SR24F)	SMA
24	D9	1		1N4448W11-TP	Micro Commercial Component	Diode, Switching, 75 V, 0.25 A, SOD-323, (replaced with BAS316)	SOD-323
25	J1, J2, J3, J4	4		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
26	L1, L2	2	1.8uH	XAL1580-182MEB	Coilcraft	Inductor, Shielded, Composite, 1.8 uH, 43.8 A, 0.00161 ohm, SMD	15.2x8x16.2mm
27	L3	1	4.7uH	PFL1609-472MEU	Coilcraft	Inductor, Shielded, Composite, 4.7 uH, 0.37 A, 0.6999999 ohm, SMD	1.8x0.95x1.07mm
28	MP1, MP2, MP3, MP4	4			Würth Elektronik	WP-THRSH REDCUBE THR with external thread, M3 x 5mm, 50A	
29	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q10	8	80V	BSC037N08NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 80 V, 100 A, PG-TDSON-8	PG-TDSON-8
30	R1, R3, R11, R46, R49, R50, R51	7	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
31	R2, R14	2	2	CRCW08052R00JNEA	Vishay-Dale	RES, 2.0, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
32	R4	1	100k	CRCW0603100KDHEAP	Vishay-Dale	RES, 100 k, 0.5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R5, R8	2				WSP27262L000FEA Unchecked Res Metal Strip 2726 0.002 Ohm 1% 5W +/-75ppm/C Pad SMD Automotive T/R Chip SMD Resistors 2.2214	
34	R6	1	12k	CRCW060312K0JNEA	Vishay-Dale	RES, 12 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
35	R7, R52, R64, R65, R66	5	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
36	R9, R16	2	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R10, R15, R31	3	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R12	1	7.50k	CRCW06037K50FKEA	Vishay-Dale	RES, 7.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
39	R13, R17, R21	3	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R18, R19	2	3.0k	CRCW06033K00JNEA	Vishay-Dale	RES, 3.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	R20	1	1.20k	RC0603FR-071K2L	Yageo	RES, 1.20 k, 1%, 0.1 W, 0603	0603
42	R22, R27, R28, R30, R37, R38, R39, R41	8	1	CRCW08051R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
43	R23, R34	2	10	HRG3216Q-10R0-D-T1	Susumu Co Ltd	RES, 10.0, 0.5%, 1 W, AEC-Q200 Grade 0, 1206	1206
44	R24, R25, R26, R29, R33, R35, R36, R40	8	49.9k	CRCW080549K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
45	R32	1	6.8k	CRCW06036K80JNEA	Vishay-Dale	RES, 6.8 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
46	R42, R63	2	2.2k	CRCW06032K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
47	R43, R45	2	61.9k	CRCW060361K9FKEA	Vishay-Dale	RES, 61.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
48	R44, R62	2	20.0k	RT0603BRD0720KL	Yageo America	RES, 20.0 k, 0.1%, 0.1 W, 0603	0603
49	R47	1	1.60Meg	CRCW06031M60FKEA	Vishay-Dale	RES, 1.60 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
50	R48, R83	2	220k	CRCW0603220KJNEA	Vishay-Dale	RES, 220 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
51	R53	1	23.2k	CRCW060323K2FKEA	Vishay-Dale	RES, 23.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
52	R54	1	62k	CRCW060362K0JNEA	Vishay-Dale	RES, 62 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
53	R55	1	2.7k	CRCW06032K70JNEA	Vishay-Dale	RES, 2.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
54	R56, R57, R58, R59	4	1	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
55	R61	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
56	R73	1		CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
57	R75	1	43k	CRCW080543K0JNEA	Vishay-Dale	RES, 43 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
58	R77	1	50	CRCW060350R0FKEA	Vishay-Dale	RES, 50, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
59	R79	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
60	R81	1		CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
61	R86	1		CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
62	TP1, TP2	2		S2761-46R	Harwin	Natural PC Test Point Brass, SMT	Natural PC Test Point Brass, SMT
63	U1	1		LM5171PHP	Texas Instruments	Dual Channel 48V-12V Bidirectional PWM Controller	HTQFP48
64	U2	1		TL331BQDBVRQ1	Texas Instruments	Automotive Catalog Single Differential Comparator 5-SOT-23 -40 to 125	SOT-23
65	U3	1		LM2735XQMF/NOPB	Texas Instruments	520kHz/1.6MHz - Space-Efficient Boost and SEPIC DC-DC Regulator, DBV0005A (SOT-23-5)	DBV0005A

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