

PMP20080 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C20, C27, C29, C56, C57	6	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1uF, 25V, +/-10%, X5R, 0402	0402
2	C2, C3, C4, C5, C6, C7	6	22uF	C3216X5R0J226K	TDK	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 1206	1206
3	C8, C10, C22, C51	4	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
4	C9	1	4700pF	C3216C0G1H472J	TDK	CAP, CERM, 4700 pF, 50 V, +/- 5%, C0G/NP0, 1206	1206
5	C12	1	560uF	20SVPPF560M	Panasonic	CAP, Aluminum Polymer, 560 uF, 20 V, +/- 20%, 0.012 ohm, F12, SMD, 2-Leads, Body 10.5x10.5mm, Height 12.7mm SMD	F12, SMD, 2-Leads, Body 10.5x10.5mm, Height 12.7mm
6	C13, C14, C15, C16, C17, C59, C60, C61, C62	9	100uF	GRM32ER60J107ME20L	MuRata	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	1210
7	C18	1	4.7uF	885012105008	Würth Elektronik	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0402	0402
8	C19, C28, C43	3	0.01uF	885012205031	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
9	C21, C39, C58, C66	4	330pF	C1005C0G1H331J	TDK	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
10	C23, C44, C52	3	10uF	885012208069	Würth Elektronik	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 1206	1206
11	C24, C25, C26, C68	4	22uF	CL32A226KAJNNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 10%, X5R, 1210	1210
12	C30	1	33pF	GRM1555C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
13	C31	1	680pF	GRM1555C1H681JA01D	MuRata	CAP, CERM, 680 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
14	C32, C33, C34, C35, C36, C37	6	100uF	C3216X5R1A107M160AC	TDK	CAP, CERM, 100 uF, 10 V, +/- 20%, X5R, 1206_190	1206_190
15	C38	1	1000pF	GRM1555C1H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
16	C40, C41, C65, C67	4	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
17	C42	1		885012205029	Würth Elektronik	DNP, 0402	0402
18	C45, C46, C47	3	10uF	GRM21BR70J106KE76L	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 10%, X7R, 0805	0805
19	C48	1	22pF	C1005C0G1H220J050BA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
20	C49	1	4.7uF	GRM319R61E475KA12D	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X5R, 1206	1206
21	C50	1	4.7uF	C1608X5R0J475M	TDK	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0603	0603
22	C54	1	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
23	C55, C63	2	1500pF	GRM155R71H152KA01D	MuRata	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0402	0402
24	C64	1	220pF	GRM155R71H221KA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402	0402
25	C100	1	680uF	UUD0J681MNL1GS	Nichicon	CAP, AL, 680 uF, 6.3 V, +/- 20%, 0.17 ohm, SMD	8x10
26	J1, J5, J6, J7	4		ED555/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
27	J2, J4	2		OSTTA024163	On-Shore Technology	Terminal Block, 2x1, 5.08mm, TH	2x1 Terminal Block
28	J3	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
29	L1, L2	2	470nH	IHLP2525CZEBR47M01	Vishay-Dale	Inductor, Shielded, Ferrite, 470 nH, 17.5 A, 0.0042 ohm, SMD	6.47x3x6.86
30	L3	1	2.2uH	BRC2012T2R2MD	Taiyo Yuden	Inductor, Wirewound, 2.2 uH, 1 A, 0.143 ohm, SMD	0805_140
31	L4	1	22uH	LQH3NPN220MG0	MuRata	Inductor, Wirewound, Ferrite, 22 uH, 0.34 A, 1.1 ohm, SMD	3.0x0.9x3.0mm
32	L5	1	3.3uH	IHLP2020CZER3R3M11	Vishay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 3.3 uH, 5.5 A, 0.0404 ohm, SMD	5.18x3x5.5mm
33	Q1	1	0.2V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23
34	Q2	1		CSD87588N	Texas Instruments	Synchronous Buck NexFET Power Block II, MPA0005A	MPA0005A
35	Q3	1	20V	CSD85301Q2	Texas Instruments	MOSFET, N-CH, 20 V, 6.7 A,	
36	R1, R12, R13, R14, R38, R47, R51	7	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
37	R2, R3	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
38	R4, R11, R20, R26, R46, R48, R49	7	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9 ohm, 1%, 0.063W, 0402	0402
39	R5	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
40	R6	1	2.94k	CRCW06032K94FKEA	Vishay-Dale	RES, 2.94 k, 1%, 0.1 W, 0603	0603
41	R7	1	38.3k	CRCW040238K3FKED	Vishay-Dale	RES, 38.3 k, 1%, 0.063 W, 0402	0402
42	R8, R9	2	54.9k	CRCW040254K9FKED	Vishay-Dale	RES, 54.9 k, 1%, 0.063 W, 0402	0402
43	R10	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
44	R15, R19, R23, R25, R35, R39, R44, R50	8	10.0k	CRCW040210K0DHEDP	Vishay-Dale	RES, 10.0 k, 0.5%, 0.063 W, 0402	0402
45	R16	1	1.13k	CRCW04021K13FKED	Vishay-Dale	RES, 1.13 k, 1%, 0.063 W, 0402	0402
46	R17	1	17.8k	CRCW040217K8FKED	Vishay-Dale	RES, 17.8 k, 1%, 0.063 W, 0402	0402
47	R21, R22	2	84.5k	CRCW040284K5FKED	Vishay-Dale	RES, 84.5 k, 1%, 0.063 W, 0402	0402
48	R24	1	499	CRCW0402499R9FKED	Vishay-Dale	RES, 499, 1%, 0.063 W, 0402	0402
49	R27, R52	2	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
50	R28	1	392k	CRCW0402392KFKED	Vishay-Dale	RES, 392 k, 1%, 0.063 W, 0402	0402
51	R29	1	178k	CRCW0402178KFKED	Vishay-Dale	RES, 178 k, 1%, 0.063 W, 0402	0402
52	R30	1	205k	CRCW0402205KFKED	Vishay-Dale	RES, 205 k, 1%, 0.063 W, 0402	0402
53	R31	1	232k	CRCW0402232KFKED	Vishay-Dale	RES, 232 k, 1%, 0.063 W, 0402	0402
54	R33	1	1.50k	CRCW04021K50FKED	Vishay-Dale	RES, 1.50 k, 1%, 0.063 W, 0402	0402
55	R34, R36	2	36.5k	CRCW040236K5FKED	Vishay-Dale	RES, 36.5k ohm, 1%, 0.063W, 0402	0402
56	R37	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
57	R40	1	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, 0402	0402
58	R41	1	6.8	CRCW04026R80JNED	Vishay-Dale	RES, 6.8, 5%, 0.063 W, 0402	0402
59	R42	1	249	CRCW0402249R9FKED	Vishay-Dale	RES, 249, 1%, 0.063 W, 0402	0402
60	R43, R45	2	100	CRCW0402100R9FKED	Vishay-Dale	RES, 100 ohm, 1%, 0.063W, 0402	0402
61	U1	1		TPS544B20RVFR	Texas Instruments	TPS544B20 18V, 20A PMBUS SYNCHRONOUS BUCK CONVERTERS, RVF0040A	RVF0040A
62	U2, U5	2		TPS4040RHLR	Texas Instruments	3.0-V TO 20-V PMBus SYNCHRONOUS BUCK CONTROLLER, RHL0024A	RHL0024A
63	U3	1		TPS62170DSGR	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 0.9 to 6 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/Br)	DSG0008A
64	U4	1		TPS62120DCNR	Texas Instruments	15-V, 75-mA Highly Efficient Buck Converter, DCN0008A	DCN0008A
65	C11	0	560uF	20SVPPF560M	Panasonic	CAP, Aluminum Polymer, 560 uF, 20 V, +/- 20%, 0.012 ohm, F12, SMD, 2-Leads, Body 10.5x10.5mm, Height 12.7mm SMD	F12, SMD, 2-Leads, Body 10.5x10.5mm, Height 12.7mm
66	R18	0	0.33	ERJ-2BQFR33X	Panasonic	DNP, 0402	0402

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