

PMP20742 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		PMP20742	Any	Printed Circuit Board	
2	C1, C9, C11, C14, C17	5	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0402	0402
3	C2	1	1000pF	STD	STD	CAP, CERM, 1000pF, 3kV, 1808	1808
4	C3, C4	2	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
5	C5, C15	2	100uF	EEHZA1E101XP	Panasonic	CAP, Polymer Hybrid, 100 µF, 25 V, +/- 20%, 30 ohm, 6.3x7.7 SMD	6.3x7.7
6	C6, C7	2	22uF	GRM31CC81E226ME11L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 20%, X6S, 1206_190	1206_190
7	C8	1	0.047uF	GRM31CR72E473KW03L	MuRata	CAP, CERM, 0.047 µF, 250 V, +/- 10%, X7R, 1206	1206
8	C10	1	0.047uF	GRM21BR72A473KA01L	MuRata	CAP, CERM, 0.047 µF, 100 V, +/- 10%, X7R, 0805	0805
9	C12	1	220pF	GRM155C1H221JA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
10	C13	1	0.22uF	GRM155R61A224KE19D	MuRata	CAP, CERM, 0.22uF, 10V, +/-10%, X5R, 0402	0402
11	C16	1	0.047uF	GRM155R71E473KA88D	MuRata	CAP, CERM, 0.047uF, 25V, +/-10%, X7R, 0402	0402
12	C18	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
13	C19	1	0.47uF	GRM155R61C474KE01	MuRata	CAP, CERM, 0.47 µF, 16 V, +/- 10%, X5R, 0402	0402
14	C20	1	0.01uF	GRM155R71E103KA01D	MuRata	CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	0402
15	C21	1	1000pF	GRM155R61H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X5R, 0402	0402
16	C22	1	4.7uF	GRM21BR71E475KA73L	MuRata	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X7R, 0805	0805
17	C100	1	220pF	GRM188R72A221KA01D	MuRata	CAP, CERM, 220 pF, 100 V, +/- 10%, X7R, 0603	0603
18	D1, D4, D9	3	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
19	D2, D10	2	1.25V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200V, 0.2A, SOD-123	SOD-123
20	D3	1	100V	US1B-13-F	Diodes Inc.	Diode, Ultrafast, 100V, 1A, SMA	SMA
21	D5, D6, D8, D11, D12	5	1.4V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
22	D7	1	6.8V	MMSZ4692T1G	ON Semiconductor	Diode, Zener, 6.8 V, 500 mW, SOD-123	SOD-123
23	D100	1	36V	SMAJ36CA	Littelfuse	Diode, TVS, Bi, 36 V, SMA	SMA
24	J1, J2	2		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
25	L1	1		PD0120.113NL	Pulse Engineering	Inductor, Wirewound, 7.6 A, 0.016 ohm, SMD	16.2x15.95mm
26	L2	1	1mH	LPS4414-105MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 1mH, 0.11A, 16.3 ohm, SMD	LPS4414
27	Q1, Q5	2	60V	CSD18537NQ5A	Texas Instruments	MOSFET, N-CH, 60 V, 50 A, DQJ0008A (VSONP-8)	DQJ0008A
28	Q2	1	-150V	IRF6216TRPBF	International Rectifier	MOSFET, P-CH, -150 V, -2.2 A, SOIC-8	SOIC-8
29	Q3	1	0.5V	BCX5616TA	Diodes Inc.	Transistor, NPN, 80V, 1A, SOT-89	SOT-89
30	Q4	1	150V	IRF7815TRPBF	Infineon Technologies	MOSFET, N-CH, 150 V, 5.1 A, SO-8	SO-8
31	R1, R8	2	5.1k	CRCW08055K10JNEA	Vishay-Dale	RES, 5.1k ohm, 5%, 0.125W, 0805	0805
32	R2	1	20.0k	CRCW080520K0FKEA	Vishay-Dale	RES, 20.0k ohm, 1%, 0.125W, 0805	0805
33	R3, R7, R18, R20	4	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
34	R4, R14, R15	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
35	R5	1	0.033	ERJ-8CWFR033V	Panasonic	RES, 0.033, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
36	R6	1	75.0k	CRCW040275K0FKED	Vishay-Dale	RES, 75.0 k, 1%, 0.063 W, 0402	0402
37	R9	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
38	R10	1	2.80k	CRCW04022K80FKED	Vishay-Dale	RES, 2.80 k, 1%, 0.063 W, 0402	0402
39	R11	1	80.6k	CRCW040280K6FKED	Vishay-Dale	RES, 80.6 k, 1%, 0.063 W, 0402	0402
40	R12	1	63.4k	CRCW040263K4FKED	Vishay-Dale	RES, 63.4 k, 1%, 0.063 W, 0402	0402
41	R13	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
42	R16	1	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00k ohm, 1%, 0.063W, 0402	0402
43	R17	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99k ohm, 1%, 0.063W, 0402	0402
44	R21	1	2.61k	CRCW04022K61FKED	Vishay-Dale	RES, 2.61k ohm, 1%, 0.063W, 0402	0402
45	R100	1	14.7	CRCW120614R7FKEA	Vishay-Dale	RES, 14.7, 1%, 0.25 W, 1206	1206
46	T1	1	100uH	PA2398NL	Pulse Engineering	Transformer, 100 uH, SMT	21.84x21.6mm
47	TP1, TP3	2		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
48	TP2, TP4	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
49	U1, U3	2		UCC27511DBVR	Texas Instruments	Single-Channel High-Speed Low-Side Gate Driver (with 4-A Peak Source and 8-A Peak Sink), DBV0006A (SOT-6)	DBV0006A
50	U2	1		UCC2897ARGPR	Texas Instruments	Advanced Active Clamp PWM Controller with Current Control, -40 to +125 degC, 20-pin QFN (RGP), Green (RoHS & no Sb/Br)	RGP0020D
51	U4	1		VOS617A-7X001T	Vishay-Semiconductor	OptoCoupler, Phototransistor, 80-160%, SSOP-4	7x2.12x2.6mm
52	U5	1		TL431AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

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