

PMP31349 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	47µF	EEHZA1K470P	Panasonic	Conductive Polymer Hybrid Aluminum Electrolytic Capacitors 47uF ±20% 80V RADIAL SMT 10x10.2mm	RADIAL_SMT
2	C2, C3, C7, C8, C9	5	0.01uF	GCM188R72A103KA37J	MuRata	CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C4	1	2.2uF	CGA5L3X7S2A225K160AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1206	1206
4	C5	1	4.7uF	C3225X7S2A475K200AB	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
5	C6	1	4.7uF	CGA6M3X7S2A475K200AB	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
6	C10, C11	2	1uF	08051C105K4Z2A	AVX	CAP, CERM, 1 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
7	C12, C13, C14, C15, C16	5	0.1uF	G CJ188R72A104KA01D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C17, C18, C19, C20, C21, C22, C23	7	4.7µF	G CJ32DC72A475KE01L	Murata	4.7uF ±10% 100V Ceramic Capacitor X7S 1210 (3225 Metric)	1210
9	C24, C25, C26, C27, C28, C29, C30, C31, C32, C33	10	0.01uF	CGA2B3X7S2A103K050BB	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
10	C34, C35	2	2.2uF	C1005X7S1A225K050BC	TDK	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7S, 0402	0402
11	C36, C37, C39	3	0.1uF	GCM155R71C104JA55D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0402	0402
12	C38	1	0.47uF	08051C474KAT2A	AVX	CAP, CERM, 0.47 µF, 100 V, +/- 10%, X7R, 0805	0805
13	C40	1	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402
14	C41, C52	2	10pF	GRM1555C1H100FA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 1%, COG/NP0, 0402	0402
15	C42	1	0.1uF	C0402C104K8RCAUTO	Kemet	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
16	C43	1	4.7uF	C1608X7S1A475K080AC	TDK	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X7S, 0603	0603
17	C44, C45	2	150uF	T598D157M016ATE065	Kemet	CAP, Tantalum Polymer, 150 uF, 16 V, +/- 20%, 0.065 ohm, AEC-Q200 Grade 1, 7343-31 SMD	7343-31
18	C48, C63, C64	3	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
19	C49, C50, C51, C62	4	22uF	TMK325B7226KMHP	Taiyo Yuden	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
20	C54	1	820pF	GRM1555C1H821JA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
21	C56	1	220pF	CGA2B2COG1H221J050BA	TDK	CAP, CERM, 220 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0402	0402
22	C57	1	6800pF	GRM155R71H682KA88D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0402	0402
23	J1	1		6.91237E+11	Würth Elektronik	Terminal Block, 5.08mm, 2x1, R/A, TH	Terminal Block, 5.08mm, 2x1, R/A, TH
24	L1	1	5.6uH	XGL6060-562MEC	Coilcraft	5.6 µH Shielded Inductor 12.6 A 11.7mOhm Max Nonstandard	SMT2_6MMV51_6MMV7_1
25	L2	1		ACM12V-701-2PL-TL00	TDK	Coupled inductor, ohm, AEC-Q200 Grade 1, SMD	12x11mm
26	L3	1	4.7uH	74439370047	Würth Elektronik	Inductor, Shielded, Metal Composite, 4.7 µH, 17 A, 0.00385 ohm, SMD	16.4x15.4mm
27	R1	1	0.5	CSRN2010FKR500	Stackpole Electronics Inc	RES, 0.5, 1%, 1 W, 2010	2010
28	R2, R8, R14	3	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
29	R3	1	2.2	CRCW04022R20JNED	Vishay-Dale	RES, 2.2, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	R4	1	499k	CRCW0402499KFKED	Vishay-Dale	RES, 499 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R5, R9	2	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
32	R7	1	3m	KRL2012E-M-R003-F-T5	Susumu	3 mOhms ±1% 1W Chip Resistor Wide 0805 (2012 Metric), 0508 Automotive AEC-Q200, Current Sense Metal Foil	0805
33	R10	1	4m	KRL2012E-M-R004-F-T5	Susumu	4 mOhms ±1% 1W Chip Resistor Wide 0805 (2012 Metric), 0508 Automotive AEC-Q200, Current Sense Metal Foil	2012
34	R11	1	19.1k	CRCW040219K1FKED	Vishay-Dale	RES, 19.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R13	1	470	RC0402FR-07470RL	Yageo America	RES, 470, 1%, 0.063 W, 0402	0402
36	R17	1	49.9	CRCW0603499FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R18	1	61.9k	CRCW040261K9FKED	Vishay-Dale	RES, 61.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	R20	1	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
39	R22	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
40	R23	1	6.80k	RC0402FR-076K8L	Yageo America	RES, 6.80 k, 1%, 0.0625 W, 0402	0402
41	R24	1	41.2k	CRCW040241K2FKED	Vishay-Dale	RES, 41.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
42	T1, T2	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
43	TP1, TP3	2		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
44	TP2, TP6, TP7	3		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
45	TP4, TP5	2		5002	Keystone Electronics	Test Point, Miniature, White, TH	White Miniature Testpoint
46	U1	1		LMG32100R044	Texas Instruments	LMG32100R044	VQFN-FCRL16
47	U2	1		LM5148QRG9YRQ1	Texas Instruments	Automotive, 80-V synchronous buck DC/DC controller with ultra-low IQ 24-VQFN -40 to 125	VQFN24
48	C46, C47	0	330pF	C1005C0G2A331J050BE	TDK	CAP, CERM, 330 pF, 100 V, +/- 5%, COG/NP0, 0402	0402
49	C53	0	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
50	C55	0	10pF	GRM1555C1H100FA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 1%, COG/NP0, 0402	0402
51	C58	0	270pF	GRM155R72A271KA01D	MuRata	CAP, CERM, 270 pF, 100 V, +/- 10%, X7R, 0402	0402
52	C59, C60	0	150uF	T598D157M016ATE065	Kemet	CAP, Tantalum Polymer, 150 uF, 16 V, +/- 20%, 0.065 ohm, AEC-Q200 Grade 1, 7343-31 SMD	7343-31
53	C61	0	22uF	TMK325B7226KMHP	Taiyo Yuden	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
54	D1	0		PMEG100T20ELXD-Q		Diode Schottky 100 V 2A Surface Mount	
55	R6, R21	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
56	R12, R19	0	100k	RMCF0402F100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
57	R15	0	47	CRCW120647R0JNEA	Vishay-Dale	RES, 47, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
58	R16	0	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
59	R25	0	7.15k	CRCW04027K15FKED	Vishay-Dale	RES, 7.15 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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