

Variant: 001
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PMP22951 REV E Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB100	1		PMP22951	Any	Printed Circuit Board	
2	5Vp, 5Vs, 12Vp, 12Vs	4		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
3	C100	1	220uF	450HXG220MEFCSN25X40	Rubycon	CAP, AL, 220 µF, 450 V, +/- 20%, TH	D25xL40mm
4	C101, C102, C103, C104	4	0.022uF	CL31B223KHHNNNE	Samsung Electro-Mechanics	CAP, CERM, 0.022 µF, 630 V, +/- 10%, X7R, 1206	1206
5	C105, C106	2	1µF	B58031U5105M062	TDK	TDK 1µF Multilayer Ceramic Capacitor MLCC 500V dc ±20% SMD	SMD2
6	C110, C111	2	1000uF	70RXA1000M18X25	Rubycon	CAP, AL, 1000 µF, 70 V, +/- 20%, TH	D18xL25mm
7	C112, C113, C117, C118	4	1uF	GCM31CR72A105KA03	MuRata	CAP, CERM, 1 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
8	C114	1	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
9	C115	1	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
10	C116	1	2200pF	DE6E3KJ222MN3A	MuRata	CAP, CERM, 2200 pF, 300 V, +/- 20%, E, TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm	TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm
11	C200, C201, C203	3	0.01uF	GRM155R70J103KA01D	MuRata	CAP, CERM, 0.01uF, 6.3V, +/-10%, X7R, 0402	0402
12	C202	1	1000pF	8.85012E+11	Würth Elektronik	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0402	0402
13	C204	1	2.2pF	GRM1555C1H2R2BA01D	MuRata	CAP, CERM, 2.2 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
14	C205	1	470pF	CGA2B2X7R1H471K050BA	TDK	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
15	C206, C209	2	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
16	C207	1	2200pF	CGA2B2X7R1H222K050BA	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
17	C208, C217, C218, C220	4	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1uF, 6.3V, +/-10%, X7R, 0402	0402
18	C210, C214	2	1000pF	06035A102KAT2A	AVX	CAP, CERM, 1000pF, 50V, +/-10%, C0G/NP0, 0603	0603
19	C211	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
20	C212	1	4.7pF	GRM1555C1E4R7CA01D	MuRata	CAP, CERM, 4.7 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
21	C213	1	100pF	0402YC101KAT2A	AVX	CAP, CERM, 100 pF, 16 V, +/- 10%, X7R, 0402	0402
22	C215	1	1uF	C0805C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
23	C216	1	22uF	CL21A226KQQNNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 6.3 V, +/- 10%, X5R, 0805	0805
24	C219	1	10uF	GCM31CR71C106KA64L	MuRata	CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
25	CT100, CT101	2	3.3mH	PAS6282NL	Pulse Electronics	Inductor PTH 3.3mH 300mOhm	PTH_12MM5_4MM5
26	D200, D201, D202, D203	4	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
27	J102	1		M50-3000645	Harwin	12 Position Receptacle Connector 0.050" (1.27mm) Through Hole Gold	HDR12
28	J200	1		HSEC8-160-01-L-DV-A-BL	Samtec	C2000 controlCARD-120HSEC connector, SMT	C2000 pin numbering
29	L103, L200	2		74438336022	Würth Electronics	2.2µH Shielded Molded Inductor 2.4A 67mOhm Max 2-SMD	SMD2
30	PGND, SGND	5		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
31	PGND, Vin	2		1715721	Phoenix Contact	Terminal Block, 5.08 mm, 2x1, TH	2POS Terminal Block
32	PSON	1		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
33	Q100, Q101, Q102, Q103, Q104, Q105, Q106, Q107	8	80V	CSD19502Q5B	Texas Instruments	MOSFET, N-CH, 80 V, 100 A, DNK0008A (VSON-CLIP-8)	DNK0008A
34	R100, R101, R105, R106	4	0.002	PMR50HZPFV2L00	Rohm	RES, 0.002, 1%, 1 W, 2010	2010

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35	R102, R107	2	243	CRCW0603243RFKEA	Vishay-Dale	RES, 243, 1%, 0.1 W, 0603	0603
36	R103, R104	2	9.76k	RC1206FR-079K76L	Yageo America	RES, 9.76 k, 1%, 0.25 W, 1206	1206
37	R116	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
38	R120, R230	2	681k	CRCW0402681KFKED	Vishay-Dale	RES, 681 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
39	R121, R232	2	130k	CRCW0402130KFKED	Vishay-Dale	RES, 130 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
40	R200, R203	2	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
41	R201, R204, R221, R229	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
42	R202, R207	2	9.31k	CRCW04029K31FKED	Vishay-Dale	RES, 9.31 k, 1%, 0.063 W, 0402	0402
43	R205, R206, R212	3	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
44	R208, R209	2	14.7	CRCW120614R7FKEA	Vishay-Dale	RES, 14.7, 1%, 0.25 W, 1206	1206
45	R210	1	9.76k	RC0603FR-079K76L	Yageo America	RES, 9.76 k, 1%, 0.1 W, 0603	0603
46	R211	1	1.40k	CRCW04021K40FKED	Vishay-Dale	RES, 1.40k ohm, 1%, 0.063W, 0402	0402
47	R214	1	3.65k	CRCW04023K65FKED	Vishay-Dale	RES, 3.65 k, 1%, 0.063 W, 0402	0402
48	R215, R219	2	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
49	R216, R217, R233	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
50	R218	1	56.2	RC0402FR-0756R2L	Yageo	RES SMD 56.2 OHM 1% 1/16W 0402	0402
51	R220, R228	2	37.4k	CRCW120637K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.25 W, 1206	1206
52	R222, R231	2	1.82k	RC0603FR-071K82L	Yageo America	RES, 1.82 k, 1%, 0.1 W, 0603	0603
53	R223, R226	2	4.75	RC0603FR-074R75L	Yageo America	RES, 4.75, 1%, 0.1 W, 0603	0603
54	R224	1	24.0k	RC0603FR-0724KL	Yageo America	RES, 24.0 k, 1%, 0.1 W, 0603	0603
55	R225	1	10.0k	CRCW120610K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.25 W, 1206	1206
56	R227	1	100k	CRCW0603100KFKFA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
57	TP108	1		0312-0-15-15-34-27-10-0	Mill-Max	Pin Receptacle, .032-.046" .075" Dia, Gold, TH	Pin Receptacle
58	U100	1		LM74800QDRRRQ1	Texas Instruments	Ideal Diode Controller with Load Dump Protection, DRR0012E (WSN-12)	DRR0012E
59	U101	1		TPS62160QDSGRQ1	Texas Instruments	3V-17V 1A Automotive Step-Down Converters in 2x2SON, DSG0008A (WSN-8)	DSG0008A
60	U200	1		LMV116MF/NOPB	Texas Instruments	Low Voltage, 45MHz, Rail-to-Rail Output Operational Amplifiers with Shutdown Option, DBV0005A (SOT-23-5)	DBV0005A
61	U202	1		INA293B3IDBVR	Texas Instruments	INA293 High-Voltage, High Bandwidth, Unidirectional, 110-V Common-Mode, Current-Sense Amplifier, DBV0005A (SOT-23-5)	DBV0005A
62	U203, U204	2		TLV71333PQDBVRQ1	Texas Instruments	Capacitor-Free, 150-mA, Low-Dropout Regulator with Foldback Current Limit for Portable Devices, DBV0005A	DBV0005A
63	C107	0	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
64	C123	0	1uF	C0805C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
65	C124	0	22uF	CL21A226KQQNNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 6.3 V, +/- 10%, X5R, 0805	0805
66	C125	0	10uF	GCM31CR71C106KA64L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
67	L100	0	3.9uH	PAL6431.392NL	Pulse	INDUCTOR, POWER, EP33, TH 0.42uH 20% 10kHz 0.06mOhm DCR MAX 300A Isat	PTH_IND_34MM0_9 MM5
68	L102	0	7uH	RLTI-1310	Renco Electronics	Inductor, Toroid, 7 uH, 1.155 ohm, TH	Dia 735mil
69	R213	0	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
70	R234, R235	0	14.7	CRCW120614R7FKEA	Vishay-Dale	RES, 14.7, 1%, 0.25 W, 1206	1206
71	R236	0	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
72	RT200	0		TMP6131DECR	Texas Instruments	Thermistor, DEC0002A (X1SON-2)	DEC0002A
73	SGND, Vout-, Vout+	0		575-4	Keystone	Standard Banana Jack, Uninsulated, 5.5mm	Keystone_575-4
74	T100	0		PAT6289	Pulse	TRANSFORMER	
75	TP100, TP109, TP110	0		0312-0-15-15-34-27-10-0	Mill-Max	Pin Receptacle, .032-.046" .075" Dia, Gold, TH	Pin Receptacle
76	U201	0		TPS62160QDSGRQ1	Texas Instruments	3V-17V 1A Automotive Step-Down Converters in 2x2SON, DSG0008A (WSN-8)	DSG0008A