Variant: 001
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TID #: PMP41133

PMP41133 REV V3 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB201	1		PMP41133	Any	Printed Circuit Board	
2	5VP, VAUX, VCC, Vin, Vout	5		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
3	BLK, HS, I_opt, ISNS, LG, OVP_OTP, SW	7		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
4	C1, C2	2	22uF	UCY2H220MHD	Nichicon	CAP, AL, 22 uF, 500 V, +/- 20%, TH	12.5x35.5mm
5	C3, C4	2	6800pF	B81123C1682M	TDK	CAP, Film, 6800 pF, 3000 V, +/- 20%, TH	26.5x8.5mm
6	C5, C6	2	100pF	VJ1206A101JXGAT5Z	Vishay-Vitramon	CAP, CERM, 100 pF, 1000 V, +/- 5%, C0G/NP0, 1206	1206
7	C7	1	220pF	C0603C221K5GACTU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 10%, C0G/NP0, 0603	0603
8	C8	1	2.2uF	C2012X7R1V225K085AC	TDK	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X7R, 0805	0805
9	C9	1	3300pF	GRM188R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	0603
10	C10	1	10uF	GRM31CR71E106MA12L	MuRata	CAP, CERM, 10 uF, 25 V,+/- 20%, X7R, AEC-Q200 Grade 1, 1206	1206
11	C11, C115	2	220uF	ECA-1VM221BJ	Panasonic	CAP, AL, 220 uF, 35 V, +/- 20%, TH	D8xL11.5mm
12	C12	1	100pF	C0603C101J5GACTU	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
13	C15, C105	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
14	C17	1	150pF	GRM1885C1H151JA01D	MuRata	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
15	C18, C20	2	180uF	UCZ1J181MNQ1MS	Nichicon	CAP, AL HYBRID, 180 uF, 63 V, +/- 20%, 0.015 ohm, SMD	D12.5xL13.5mm
16	C19	1	470pF	GRM188R72A471KA01D	MuRata	CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0603	0603
17	C21, C22	2	47uF	UPJ1K470MPD1TD	Nichicon	CAP, AL, 47 uF, 80 V, +/- 20%, TH	D8xL15mm
18	C23, C24	2	0.47uF	C2012X7S2A474K125AB	TDK	CAP, CERM, 0.47 uF, 100 V, +/- 10%, X7S, 0805	0805
19	C25, C26, C27, C28	4	0.022uF	VJ1206Y223KXGAT5Z	Vishay-Vitramon	CAP, CERM, 0.022 uF, 1000 V, +/- 10%, X7R, 1206	1206
20	C29	1	0.1uF	C0603C104K5RACAUTO	Kemet	CAP, CERM, 0.1 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
21	C103, C104, C116	3	1uF	CGA3E1X7R1E105K080AC	TDK	CAP, CERM, 1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
22	C106	1	220pF	C0603X221K5RACTU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
23	C107, C114	2	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
24	C108	1	4.7uF	GRM21BR71E475KA73L	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	0805
25	C109	1	1000pF	C0603X102K5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
26	C110	1	2200pF	C0603X222K5RACTU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
27	C111	1	0.1uF	GCM188R71E104KA57D	MuRata	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
28	C112, C113	2	68pF	GRM31A7U3A680JW31D	MuRata	CAP, CERM, 68 pF, 1000 V, +/- 5%, U2J, 1206	1206
29	CY1	1	220pF	DE1B3KX221KA4BN01F	MuRata	CAP, CERM, 220 pF, V,+/- 10%, B, D8xT7mm	D8xT7mm
30	D1	1	75V	1N4148WS-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
31	D2	1	100V	PMEG10020ELRX	Nexperia	Diode, Schottky, 100 V, 2 A, AEC-Q101, SOD-123W	SOD-123W
32	D3, D4	2		MBR30200CTE3/TU	Microsemi	Common Cathode Schottky 150V 30A Through Hole TO-220-3	TO220-3
33	D5, D107	2	18V	SZMM3Z18VST1G	ON Semiconductor	Diode, Zener, 18 V, 300 mW, AEC-Q101, SOD-323	SOD-323
34	D101, D102, D103, D104	4	130V	1SMB5952BT3G	ON Semiconductor	Diode, Zener, 130 V, 550 mW, SMB	SMB
35	D108	1	600V	STTH1R06A	STMicroelectronics	Diode, Ultrafast, 600 V, 1 A, SMA	SMA
36	D109	1	26V	DDZ26Q-7	Diodes Inc.	Diode, Zener, 26 V, 500 mW, AEC-Q101, SOD-123	SOD-123
37	D110, D111	2	600V	ES1JAF	Fairchild Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF	SMAF
38	D112	1	1200V	STTH112A	STMicroelectronics	Diode, Ultrafast, 1200 V, 1 A, SMA	SMA
39	D114	1	12V	MM3Z12VST1G	ON Semiconductor	Diode, Zener, 12 V, 300 mW, SOD-323	SOD-323
40	D115	1	15V	MM3Z15VST1G	ON Semiconductor	Diode, Zener, 15 V, 300 mW, SOD-323	SOD-323
41	H1, H2	2		531202B02500G	Aavid		TH, 2-Leads, Body 34.92x12.7mm, Pin Spacing 25.4mm
42	H201, H204, H207, H210	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
43	H202, H205, H208, H211	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
44	H203, H206, H209, H212	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
45	Inj1, Inj2	2		5013	Keystone Electronics	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
46	J1, J2, J5	3		6.91112E+11			
47	J3, J4	2		961102-6804-AR	3M	Header, 2.54mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
48	L1	1		750345698	Wurth	Customized resonant inductor; L = 186uH	
49	PGND, SGND, SGND2	5		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
50	Q1	1	600V	PBHV8560Z	Nexperia	Bipolar (BJT) Transistor NPN 600V 500mA 650mW Surface Mount SOT-223	SOT-223
51	Q2	1	500 V	PBHV9050Z,115	NXP Semiconductor	Transistor, PNP, 500 V, 0.25 A, AEC-Q101, SOT-223	SOT-223
52	Q3, Q4	2		IMBG120R234M2HXTMA1	Infineon	N-Channel 1200 V 8.1A (Tc) 80W (Tc) Surface Mount PG-TO263-7-12	TO263-7
53	Q6	1	80V	ISOM8110DFSR	Texas Instruments	3.75-kVRMS, Single-Channel Opto-Emulator with Analog Transistor Output	SOIC4
54	Q102	1	600V	BSS126H6327XTSA2	Infineon Technologies	MOSFET, N-CH, 600 V, 0.021 A, AEC-Q101, SOT-23	SOT-23
55	Q104	1	60 V	FZT651TA	Zetex	Transistor, NPN, 60 V, 3 A, SOT-223	SOT-223
56	Q105	1	60V	2N7002W-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.115 A, SOT-323	SOT-323
57	R1, R2, R3, R4	4	1.00Meg	RC1206FR-071ML	Yageo America	RES, 1.00 M, 1%, 0.25 W, 1206	1206
58	R5, R6	2	1	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
59	R7, R8	2	1	RC0603FR-071RL	Yageo	RES, 1.00, 1%, 0.1 W, 0603	0603
60	R9, R10	2	51.0k	RC0603FR-0751KL	Yageo	RES, 51.0 k, 1%, 0.1 W, 0603	0603
61	R11	1	240	RC0603FR-07240RL	Yageo	RES, 240, 1%, 0.1 W, 0603	0603
62	R12	1	0	CRCW120600000ZEA	Vishay-Dale	RES, 0, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
63	R14	1	4.7	CRCW12064R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
64	R15	1	1.24k	RC0603FR-071K24L	Yageo	RES, 1.24 k, 1%, 0.1 W, 0603	0603
65	R16	1	0	MCR03EZPJ000	Rohm	RES, 0, 5%, 0.1 W, 0603	0603
66	R17	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
67	R19	1	5.11k	RC0603FR-075K11L	Yageo	RES, 5.11 k, 1%, 0.1 W, 0603	0603
68	R20	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
69	R21	1	10.0k	RCG060310K0FKEA	Vishay Draloric	RES, 10.0 k, 1%, 0.1 W, 0603	0603
70	R25	1	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
71	R26	1	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
72	R27	1	137k	RC0603FR-07137KL	Yageo	RES, 137 k, 1%, 0.1 W, 0603	0603
73	R28	1	7.50k	RC0603FR-077K5L	Yageo	RES, 7.50 k, 1%, 0.1 W, 0603	0603
74	R29	1	20	CRCW060320R0FKEA	Vishay-Dale	RES, 20.0, 1%, 0.1 W, 0603	0603
75	R101, R125, R127	3	3.24Meg	CRCW12063M24FKEA	Vishay-Dale	RES, 3.24 M, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
76	R104	1	1.00Meg	RC0603FR-071ML	Yageo	RES, 1.00 M, 1%, 0.1 W, 0603	0603
77	R107	1	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
78	R110, R122	2	2.2	ERJ-3RQF2R2V	Panasonic	RES, 2.20, 1%, 0.1 W, 0603	0603
79	R111, R112, R113, R123, R124	5	2.43Meg	CRCW12062M43FKEA	Vishay-Dale	RES, 2.43 M, 1%, 0.25 W, 1206	1206
80	R114	1	36k	CRCW060336K0JNEA	Vishay-Dale	RES, 36 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
81	R115	1	590k	RC0603FR-07590KL	Yageo	RES, 590 k, 1%, 0.1 W, 0603	0603
82	R116	1	71.5k	RC0603FR-0771K5L	Yageo	RES, 71.5 k, 1%, 0.1 W, 0603	0603
83	R117	1	604k	RC0603FR-07604KL	Yageo	RES, 604 k, 1%, 0.1 W, 0603	0603
84	R118	1	165k	RC0603FR-07165KL	Yageo	RES, 165 k, 1%, 0.1 W, 0603	0603
85	R119, R120	2	15.0k	RG1608P-153-B-T5	Susumu Co Ltd	RES, 15.0 k, 0.1%, 0.1 W, 0603	0603
86	R121	1	470k	B57371V2474J060	TDK	NTC Thermistor 470k 0603 (1608 Metric)	0603
87	R128	1	0	ERJ-8GEY0R00V	Panasonic	RES, 0, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
88	R129	1	200k	RC0603FR-07200KL	Yageo	RES, 200 k, 1%, 0.1 W, 0603	0603
89	T1	1		750345697	Wurth	Customized LLC transformer. Lp = 650uH	
90	U1	1		ATL432LIAIDBZR	Texas Instruments	High-bandwidth low-IQ programmable shunt regulator, DBZ0003A (SOT-23-3)	DBZ0003A
91	U101	1		UCC256602DDBR	Texas Instruments	750kHz Wide VIN/VOUT Range LLC Controller Optimized for Light Load Efficiency	SOIC14
92	U102	1		UCC5350SBDR	Texas Instruments	3kVrms, 5A/5A single-channel isolated gate driver with miller clamp or split out & 8V or 12V UVLO	SOIC8
93	C13	0	4700pF	GCM188R72A472KA37D	MuRata	CAP, CERM, 4700 pF, 100 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
94	C14, C16	0	470pF	GRM2165C2A471JA01D	MuRata	CAP, CERM, 470 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
95	C101	0	10pF	VJ1206A100JXGAT5Z	Vishay-Vitramon	CAP, CERM, 10 pF, 1000 V, +/- 5%, C0G/NP0, 1206	1206
96	C102	0	10uF	GRM188R6YA106MA73	Nichicon	CAP, CERM, 10 uF, 35 V, +/- 20%, X5R, 0603	0603
97	D105, D106	0	18V	SZMM3Z18VST1G	ON Semiconductor	Diode, Zener, 18 V, 300 mW, AEC-Q101, SOD-323	SOD-323
98	D113	0	40V	XBS104S13R-G	Torex USA Corporation	Diode, Schottky, 40 V, 1 A, SOD-323	SOD-323
99	Q5	0	40 V	MMDT3904-7-F	Diodes Inc.	Transistor, Dual NPN, 40 V, 0.2 A, SOT-363	SOT-363
100	Q101	0	60V	2N7002Q-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.115 A, AEC-Q101, SOT-23	SOT-23
101	Q103	0	600V	BSS126H6327XTSA2	Infineon Technologies	MOSFET, N-CH, 600 V, 0.021 A, AEC-Q101, SOT-23	SOT-23
102	R13	0	1.24k	RC0603FR-071K24L	Yageo	RES, 1.24 k, 1%, 0.1 W, 0603	0603
103	R18	0	1.21k	CRCW06031K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
104	R22, R24	0	10	RC1206FR-0710RL	Yageo America	RES, 10.0, 1%, 0.25 W, 1206	1206
105	R102	0	1.50Meg	RC0603FR-071M5L	Yageo	RES, 1.50 M, 1%, 0.1 W, 0603	0603
106	R103	0	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
107	R105	0	1.00Meg	RC0603FR-071ML	Yageo	RES, 1.00 M, 1%, 0.1 W, 0603	0603
108	R106	0	220	RC0603FR-07220RL	Yageo	RES, 220, 1%, 0.1 W, 0603	0603
109	R108, R109	0	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
110	R126	0	715k	RC0603FR-07715KL	Yageo	RES, 715 k, 1%, 0.1 W, 0603	0603

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