

Variant: 001  
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PMP41031 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		PMP41031	Any	Printed Circuit Board	
2	C1, C8, C11, C14	4	68uF	450BXW68MEFC12.5X45	Rubycon	CAP, AL, 68 uF, 450 V, +/- 20%, TH	D12.5xL45mm
3	C2, C9, C15	3	0.1uF	GRM55DR73A104KW01L	MuRata	CAP, CERM, 0.1 uF, 1000 V, +/- 10%, X7R, 2220	2220
4	C3, C4, C5, C18, C19, C20, C28, C29, C30, C39, C40	11	470uF	35ZLG470MEFC10X20	Rubycon	CAP, AL, 470 uF, 35 V, +/- 20%, TH	D10xL20mm
5	C6, C21, C31, C35, C36, C43, C44, C45	8	10uF	GMK325AB7106MM-T	Taiyo Yuden	CAP, CERM, 10 uF, 35 V, +/- 20%, X7R, 1210	1210
6	C7, C22, C32, C37, C38, C42	6	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	603
7	C10, C13, C33	3	100pF	GRM1885C2A101JA01D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, C0G/NP0, 0603	603
8	C12, C16, C34	3	10uF	GRM32ER71H106MA12	MuRata	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
9	C17	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	603
10	C23	1	0.047uF	C1608X7S2A473K080AB	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7S, 0603	603
11	C24	1	2200pF	DE1E3KX222MA4BL01	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Cap, 7x12x9 mm	Cap, 7x12x9 mm
12	C25	1	100pF	06035A101FAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0603	603
13	C26	1	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	603
14	C27	1	100pF	GRM21A5C2E101JW01D	MuRata	CAP, CERM, 100 pF, 250 V, +/- 5%, C0G/NP0, 0805	805
15	C41	1	22pF	GRM1885C2A220JA01D	MuRata	CAP, CERM, 22 pF, 100 V, +/- 5%, C0G/NP0, 0603	603
16	D1, D20	2		US2MA-TP	Micro Commercial Component	DIODE ULTRA FAST 2A 1000V SMA	SMA
17	D2, D8, D16, D17	4		US1MFL-TP	Micro Commercial Component	DIODE GEN PURP 1KV 1A DO221AC	SMA-FL
18	D3, D14	2	30V	BAT54-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
19	D4, D6	2	16V	MMSZ5246BS-7-F	Diodes Inc.	Diode, Zener, 16 V, 200 mW, SOD-323	SOD-323
20	D5	1	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
21	D7	1	5.1V	MMSZ5231B-7-F	Diodes Inc.	Diode, Zener, 5.1 V, 500 mW, SOD-123	SOD-123
22	D9	1	300V	LQA32T300C	Power Integrations	Diode, Schottky, 300 V, 16 A, TH	TO-220AB
23	D10, D18	2	150V	STPS1150A	STMicroelectronics	Diode, Schottky, 150 V, 1 A, SMA	SMA
24	D11	1	200V	MBR20200CT-LJ	Diodes Inc.	Diode, Super Barrier Rectifier, 200 V, 10 A, AEC-Q101, TH	TO-220AB
25	D12, D19	2	27V	MMSZ5254B-7-F	Diodes Inc.	Diode, Zener, 27 V, 500 mW, SOD-123	SOD-123
26	D13	1	100V	MBRB20100CT-TP	Micro Commercial Component	Diode, Schottky, 100 V, 20 A, DDPACK	DDPAK
27	D15	1	200V	STPS20200CG-TR	STMicroelectronics	Diode, Schottky, 200 V, 10 A, DDPACK	DDPAK
28	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
29	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5" L #4-40 Nylon	Standoff
30	HS1, HS2, HS3, HS4	4		513102B02500G	Aavid	Heatsink TH	
31	J1	1		282841-3	TE Connectivity	Terminal Block, 5.08mm, 3x1, Tin, TH	Terminal Block, 5.08mm, 3x1, TH
32	J2, J3, J4, J5	4		6.91314E+11	Würth Electronics	TERM BLK HDR 5.08MM HORZ PCB 2P	TRM_BLK HDR2
33	L1, L2, L3	3	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 9.2 A, 0.01 ohm, AEC-Q200 Grade 1, SMD	5.3x31.x5.5mm
34	LOG05, LOG06, LOG07	3		DANGER HIGH VOLTAGE		IEC 61010-1 High Voltage Warning	
35	Q1, Q5	2	1700V	STW12N170K5	ON Semiconductor	N-channel 1700 V, 2.3R Ohm typ 5 A, Power MOSFET in TO-247 package	TO-3PF-3L
36	Q3	1	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
37	Q4	1	40 V	MMBT2222A	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.15 A, SOT-23	SOT-23
38	Q6	1	60 V	MMBT2907A	Fairchild Semiconductor	Transistor, PNP, 60 V, 0.8 A, SOT-23	SOT-23
39	R1, R2, R8, R10, R11, R15, R18, R20	8	470k	CRCW1206470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.25 W, 1206	1206
40	R3, R4, R13, R39	4	10	ERJ-8ENF10R0V	Panasonic	RES, 10.0, 1%, 0.25 W, 1206	1206
41	R5, R12, R14, R33	4	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
42	R7, R19	2	2.2	ERJ-3RQF2R2V	Panasonic	RES, 2.20, 1%, 0.1 W, 0603	603
43	R17, R41	2	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
44	R21	1	25.5k	RG2012P-2552-B-T5	Susumu Co Ltd	RES, 25.5 k, 0.1%, 0.125 W, 0805	805
45	R22	1	47	CRCW120647R0JNEA	Vishay-Dale	RES, 47, 5%, 0.25 W, 1206	1206
46	R23	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	603
47	R25	1	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	603
48	R26	1	1.20k	RC0603FR-071K2L	Yageo	RES, 1.20 k, 1%, 0.1 W, 0603	603
49	R27	1	22k	CRCW060322K0JNEA	Vishay-Dale	RES, 22 k, 5%, 0.1 W, 0603	603
50	R28, R29	2	0.62	ERJ-1TRQFR62U	Panasonic	RES, 0.62, 1%, 1 W, 2512	2512
51	R30	1	18.0k	RT0603BRD0718KL	Yageo America	RES, 18.0 k, 0.1%, 0.1 W, 0603	603
52	R31	1	22.0k	RC0603FR-0722KL	Yageo	RES, 22.0 k, 1%, 0.1 W, 0603	603
53	R32	1	1.50k	ERJ-3EKF1501V	Panasonic	RES, 1.50 k, 1%, 0.1 W, 0603	603
54	R34	1	0	RCC12060000Z0EA	Vishay Dale	Res Jumper Thick Film 1206 0 Ohm Molded Paper T/R	1206
55	R35	1	390	CRCW0603390RfKEA	Vishay-Dale	RES, 390, 1%, 0.1 W, 0603	603
56	R36	1	59.0k	RC0603FR-0759KL	Yageo	RES, 59.0 k, 1%, 0.1 W, 0603	603
57	R37	1	39.0k	RC0603FR-0739KL	Yageo	RES, 39.0 k, 1%, 0.1 W, 0603	603
58	R38	1	6.80k	RG1608P-682-B-T5	Susumu Co Ltd	RES, 6.80 k, 0.1%, 0.1 W, 0603	603
59	R40	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	603
60	R48	1	32.8k	RT0805BRD0732K8L	Yageo America	RES, 32.8 k, 0.1%, 0.125 W, 0805	805
61	R, HV	1	68.1k	RG1608P-6812-B-T5	Susumu Co Ltd	RES, 0 k, 0.1%, 0.1 W, 0603	603
62	T1	1	750uH	760301302	Würth Elektronik	Transformer, 750 uH, TH	10.5x10.5mm
63	T2	1	800uH	750345142	Würth	ERL35 Core and Bobbin, TH	ERL35
64	U1	1		TL431LBCDBZR	Texas Instruments	Programmable Shunt Regulator with Optimized Reference Current, DBZ0003A (SOT-23-3)	DBZ0003A
65	U2	1		UCC28740DR	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A (SOIC-7)	D0007A
66	U4	1		PC817SC	Lite-On	Optocoupler, 5 kV, 50-600% CTR, SMT	DIP-4 SMT

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