

PMP4451 REV 1.0 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	0.047uF	C1005X7R1C473K	TDK	CAP, CERM, 0.047 uF, 16 V, +/- 10%, X7R, 0402	0402
2	C2, C3, C4, C19, C20, C21, C23, C28, C38, C39	10	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X5R, 0402	0402
3	C5	1	22uF	C2012X5R1C226K125AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 10%, X5R, 0805	0805
4	C6, C9, C11, C14	4	10uF	C0603C106M9PACTU	Kemet	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
5	C7, C8, C12, C13	4	47uF	JMK212BJ476MG-T	Taiyo Yuden	CAP, CERM, 47 uF, 6.3 V, +/- 20%, X5R, 0805	0805
6	C10, C25	2	4.7uF	C1005X5R1A475K050BC	TDK	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0402	0402
7	C15	1	4.7uF	C1005X5R0J475M050BC	TDK	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0402	0402
8	C16, C34	2	22uF	GRM188R60J226MEAOJ	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0603	0603
9	C17	1	1uF	C1005X5R1C105K050BC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0402	0402
10	C18	1	0.01uF	GRM155R60J103KA01D	MuRata	CAP, CERM, 0.01 uF, 6.3 V, +/- 10%, X5R, 0402	0402
11	C22	1	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
12	C24, C33, C37	3	22uF	GRM21BR61E226ME44	MuRata	CAP, CERM, 22 uF, 25 V, +/- 20%, X5R, 0805	0805
13	C26, C27	2	22uF	GRM188R61A226ME15D	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X5R, 0603	0603
14	C29	1	100pF	C0D402KRX7R98B101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
15	C30	1	4700pF	GRM155R61A472KA01D	MuRata	CAP, CERM, 4700 pF, 10 V, +/- 10%, X5R, 0402	0402
16	C32	1	10uF	GRM188R61E106MA73	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
17	C35	1	0.22uF	C1005X7R1C224K050BC	TDK	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	0402
18	C36	1	0.047uF	C1005X5R1A473K050BA	TDK	CAP, CERM, 0.047 uF, 10 V, +/- 10%, X5R, 0402	0402
19	D1	1	30V	BAT54C-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
20	D2, D3, D4, D5	4	Green	LTST-C190KGKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
21	D8, D9, D10, D11, D12, D13	6	3.3V	CDSOD323-T03SC	Bourns	Diode, TVS, Bi, 3.3 V, 400 W, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
22	J1	1		47346-1001	Molex	Receptacle, Micro-USB Type B, 0.65 mm, 5x1, R/A, Bottom Mount SMT	Receptacle, 0.65mm, 5x1, R/A, SMT
23	J2	1		UT12113-11602-7H	Foxconn	Connector, Receptacle, USB TYPE C, R/A, SMT	Connector, Receptacle, USB TYPE C, R/A, SMT
24	J3	1		A02-C4DXX2000	Any	Connector, Receptacle, USB Type A, R/A, SMT	Connector, Receptacle, USB Type A, R/A, SMT
25	L1	1	1uH	XAL7030-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 uH, 21.8 A, 0.00455 ohm, SMD	XAL7030
26	L2	1	2.2uH	XAL7030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 12.9 A, 0.0137 ohm, SMD	XAL7030
27	L3	1	1.8uH	XAL7070-182MEB	Coilcraft	Inductor, Shielded, Composite, 1.8 uH, 21 A, 0.00405 ohm, SMD	7.2x7x7.5mm
28	P1	1		M22-5330405	Harwin	Header, 2mm, 4x1, Gold, Black, R/A, SMT	Header, 2mm, 4x1, R/A, SMT
29	Q1	1	30V	CSD17483F4T	Texas Instruments	MOSFET, N-P-CH, 30 V, 1.5 A,	
30	Q7, Q8	2	30V	CSD17575Q3	Texas Instruments	MOSFET, N-CH, 30 V, 60 A, DQG0008A	DQG0008A
31	Q11	1	25V	CSD16301Q2	Texas Instruments	MOSFET, N-CH, 25 V, 5 A, SON 2x2mm	SON 2x2mm
32	R1, R13, R18, R19, R20, R23, R24	7	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
33	R2, R9, R12	3	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
34	R3	1	240	CRCW0402240RJNED	Vishay-Dale	RES, 240, 5%, 0.063 W, 0402	0402
35	R4	1	220	CRCW0402220RJNED	Vishay-Dale	RES, 220, 5%, 0.063 W, 0402	0402
36	R5	1	0.05	ERJ-8CVFR050V	Panasonic	RES, 0.05, 1%, 1 W, 1206	1206
37	R6	1	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, 0402	0402
38	R8	1	5.23k	CRCW04025K23FKED	Vishay-Dale	RES, 5.23 k, 1%, 0.063 W, 0402	0402
39	R10	1	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, 0402	0402
40	R11	1	10k ohm	ERT-J0EG103HA	Panasonic	Thermistor NTC, 10k ohm, 3%, 0402	0402
41	R14	1	200k	CRCW0402200KJNED	Vishay-Dale	RES, 200 k, 5%, 0.063 W, 0402	0402
42	R15	1	41.2k	CRCW040241K2FKED	Vishay-Dale	RES, 41.2 k, 1%, 0.063 W, 0402	0402
43	R21, R39	2	100k	RC1005F104CS	Samsung Electro-Mechanics	RES, 100 k, 1%, 0.063 W, 0402	0402
44	R22	1	330	CRCW0402330RJNED	Vishay-Dale	RES, 330, 5%, 0.063 W, 0402	0402
45	R25	1	51k	CRCW040251K0JNED	Vishay-Dale	RES, 51 k, 5%, 0.063 W, 0402	0402
46	R26	1	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, 0402	0402
47	R27, R29, R33, R35	4	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
48	R30, R31	2	5.1Meg	CRCW04025M10JNED	Vishay-Dale	RES, 5.1 M, 5%, 0.063 W, 0402	0402
49	R36	1	240k	CRCW0402240KFKED	Vishay-Dale	RES, 240 k, 1%, 0.063 W, 0402	0402
50	R37	1	17.4k	CRCW040217K4FKED	Vishay-Dale	RES, 17.4 k, 1%, 0.063 W, 0402	0402
51	R38	1	4.3k	CRCW04024K30JNED	Vishay-Dale	RES, 4.3 k, 5%, 0.063 W, 0402	0402
52	R40	1	360k	CRCW0402360KJNED	Vishay-Dale	RES, 360 k, 5%, 0.063 W, 0402	0402
53	R41	1	113k	CRCW0402113KFKED	Vishay-Dale	RES, 113 k, 1%, 0.063 W, 0402	0402
54	R42	1	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, 0402	0402
55	R43	1	110k	CRCW0402110KFKED	Vishay-Dale	RES, 110 k, 1%, 0.063 W, 0402	0402
56	R44	1	127k	CRCW0402127KFKED	Vishay-Dale	RES, 127 k, 1%, 0.063 W, 0402	0402
57	S1	1		EVP-ANDA1A	Panasonic	Switch, Slide, SPST-NO, Off-Mom, 0.05 A, 12V, SMD	3.5x2.9mm
58	U1	1		BQ25895RTWR	Texas Instruments	I2C Controlled 5A Single Cell Charger with NVDC Power Path Management and MaxChargeTM High Voltage Adapter Support, RTW0024H	RTW0024H
59	U2	1		TPS61235RWLR	Texas Instruments	7-A Synchronous Boost Converter with Programmable Output Current Limit, RWL0009A	RWL0009A
60	U3	1		TPS25810RVC	Texas Instruments	USB Type-C DFP Controller and Power Switch with Load Detection, RVC0020A	RVC0020A
61	U4	1		TLV70430DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3 V Output, 2.5 to 24 V Input, with Ultra Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
62	U5	1		TPS2514ADB	Texas Instruments	USB Dedicated Charging Port Controller, DBV0006A	DBV0006A
63	U6	1		MSP430G232IPW20R	Texas Instruments	16 MHz Mixed Signal Microcontroller with 4 KB Flash, 256 B SRAM and 16 GPIOs, 20-pin SOP (PW), Green (RoHS & no Sb/Br)	PW0020A
64	U7	1		BQ29700DSE	Texas Instruments	Cost-Effective Voltage and Current Protection Integrated Circuit for Single-Cell Li-Ion/Li-Polymer Batteries, DSE0006A	DSE0006A
65	U8	1		TPS61088RHLR	Texas Instruments	13.2-V Output, Synchronous Boost Converter with 10-A Switch, RHL0020A	RHL0020A
66	U9	1		CHY100D	Power Integrations	Charger Interface Physical Layer IC, SOIC-8	SOIC-8
67	U10	1		SN74LVC1G3157DRY	Texas Instruments	SINGLE-POLE DOUBLE-THROW ANALOG SWITCH, DRY0006A	DRY0006A
68	R7	0	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402

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