

Variant: EPR - up to 48Vout
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PMP23618 REV B Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		PMP23618	Any	Printed Circuit Board	
2	C0, C3, C119, C206, C219	5	1000pF	CGA3E2X7R2A102K080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C1, C6, C10, C11, C141, C241	6	0.1uF	GCJ188R72A104KA01D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C2, C7, C8, C107, C108, C109, C207, C208, C209	9	4.7uF	GCM32DC72A475KE02L	MuRata	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
5	C4, C130, C230	3	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
6	C5, C9	2	33uF	EEE-TG2A330P	Panasonic	CAP, AL, 33 uF, 100 V, +/- 20%, 1 ohm, AEC-Q200 Grade 1, SMD	Dia 10 mm
7	C12	1	10uF	GCJ21BR71A106KE01L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
8	C13, C14	2	0.01uF	CGA3E2X7R2A103K080AA	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
9	C15, C16, C17, C18	4	220pF	GRM188R72A221KA01D	MuRata	CAP, CERM, 220 pF, 100 V, +/- 10%, X7R, 0603	0603
10	C19	1	4.7uF	GRM188Z71A475ME15D	MuRata	CAP, CERM, 4.7 uF, 10 V, +/- 20%, X7R, 0603	0603
11	C20	1	0.47uF	GCM188R71E474KA64D	MuRata	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	C21, C140, C240	3	1uF	CGA3E1X7R1V105K080AE	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
13	C22, C23, C24, C25	4	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
14	C100, C200	2	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
15	C101, C201	2	3300pF	GRM155R72A332KA01D	MuRata	CAP, CERM, 3300 pF, 100 V, +/- 10%, X7R, 0402	0402
16	C102, C202	2	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
17	C103, C203	2	4.7uF	GRM155R61E475ME15	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 20%, X5R, 0402	0402
18	C104, C204	2	22uF	GRM188C80J226ME15D	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X6S, 0603	0603
19	C105, C118, C205, C218	4	0.047uF	CGA3E3X7S2A473K080AB	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0603	0603
20	C106	1	1000pF	GRM155R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0402	0402
21	C110, C210	2	0.047uF	GRM155R61H473ME14D	MuRata	CAP, CERM, 0.047 uF, 50 V, +/- 20%, X5R, 0402	0402
22	C111, C211	2	33pF	GRM1555C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
23	C113, C114, C115, C116, C213, C214, C215, C216	8	10uF	CNA6P1X7R1H106K250AE	TDK	10uF @ ±10% 50V Ceramic Capacitor X7R 1210 (3225 Metric)	1210
24	C117, C217	2	22uF	EEH2C1J220XP	Panasonic	CAP, Polymer Hybrid, 22 uF, 63 V, +/- 20%, 80 ohm, 6.3x7.7 SMD	6.3x7.7
25	C131, C231	2	1uF	GCM31MR71H105KA55L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
26	D1	1	70V	SMBJ70CA-13-F	Diodes Inc.	Diode, TVS, Bi, 70 V, SMB	SMB
27	J1	1		6.91254E+11	Würth Electronics	2 Position Wire to Board Terminal Block Horizontal with Board 0.200" (5.08mm) Through Hole	CONN_TERM_BLOC K2
28	J10	1		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
29	J130, J230	2		6.29722E+11	Würth Electronics	Conenctor USB 2.0 Type C Horizontal SMT	CONN_USB
30	L1	1		CM7060P701R-10	Laird	Common Mode Choke Power 700Q 4A -40 to 125°C Wire Wound Surface Mount T/R	SMT_CMC_7MM0_6 MM0
31	L2	1	1uH	74438356010	Würth Elektronik	Inductor, Shielded, 1 uH, 7.2 A, 0.012 ohm, SMD	4.1x4.1mm
32	L100, L200	2			Würth Elektronik	WE-XHMI SMT Power Inductor, size 1510, 22uH, 8A, 12.5mOhm	
33	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
34	Q1	1		NVMFS6H852NLT1G	onsemi	N-Channel 80 V 11A (Ta), 42A (Tc) 3.6W (Ta), 54W (Tc) Surface Mount 5-DFN (5x6) (8-SOFL)	DFN5
35	R1	1		RCWE1020R118FKEA	Vishay	118 mOhms ±1% 2W Chip Resistor Wide 2010 (5025 Metric), 1020 Automotive AEC-Q200, Current Sense, Moisture Resistant Thick Film	1020
36	R12, R103, R106, R108, R109, R112, R114, R203, R206, R208, R209, R214	12	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
37	R16, R21	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R19	1	681k	CRCW0603681KFKEA	Vishay-Dale	RES, 681 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
39	R22	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R27, R28	2	2.00k	ERJ3EKF2001V	Panasonic	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	R100, R200	2	5.23k	CRCW04025K23FKED	Vishay-Dale	RES, 5.23 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
42	R101, R201	2	13.3k	CRCW040213K3FKED	Vishay-Dale	RES, 13.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
43	R102, R202	2	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
44	R104, R204	2	41.2k	CRCW040241K2FKED	Vishay-Dale	RES, 41.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
45	R105, R205	2	10kΩ	TMP6131QDYARQ1	Texas Instruments	Automotive ±1% tolerance 10kΩ linear thermistor available in an 0402 package option 2-SOT-5X3 -40 to 150	SOT-523
46	R107, R207	2	51	CRCW040251R0JNED	Vishay-Dale	RES, 51, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
47	R111, R211	2	0.008	KRL2012M-R008-F-T1	Susumu Co Ltd	RES, 0.008, 1%, 1 W, AEC-Q200 Grade 0, 0508	0508
48	R113, R213	2	5.1Meg	CRCW04025M10JNED	Vishay-Dale	RES, 5.1 M, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
49	TP1, TP3, TP100, TP200	4		5000	Keystone Electronics	Test Point, Miniature, Red, TH	Red Miniature Testpoint
50	TP2, TP4, TP101, TP201	4		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
51	U1	1		LM74500QDDFQ1	Texas Instruments	Low IQ Reverse Battery Protection Controller	SOT23-8
52	U10	1		TPS26742EAATRHBQR1	Texas Instruments	Automotive Dual-Port USB Type-C PD Controller with 100W SPR	VQFN32
53	U100, U200	2		LM72880-Q1	Texas Instruments	LM72880-Q1	VQFN29
54	U140, U240	2		TPD4S480TRGRRQ1	Texas Instruments	USB Type-C 48V EPR Port Protector: Short-to-VBUS Overvoltage and IEC ESD Protection	VQFN20

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