

**PMP23123 REV E Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C25	1	10pF	C0603C100J5GACTU	Kemet	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C26	1	100pF	885012006057	Wurth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C102	1	180pF	C0603C181J5GACTU	Kemet	CAP, CERM, 180 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C23, C24, C28	3	1000pF	885012206083	Wurth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	603
C30, C34, C35, C36, C37	5	0.01uF	C0603C103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	603
C2	1	0.047uF	GRM188R71E473KA01D	MuRata	CAP, CERM, 0.047 uF, 25 V, +/- 10%, X7R, 0603	603
C27	1	0.068uF	885012206070	Wurth Elektronik	CAP, CERM, 0.068 uF, 25 V, +/- 10%, X7R, 0603	603
C10	1	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	603
C22, C33	2	0.1uF	885012206071	Wurth Elektronik	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
C1, C4, C29	3	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
C3, C9	2	1uF	C0805C105K5RACTU	Kemet	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	805
C41	1	0.01uF	VJ1206Y103KXEAT5Z	Vishay-Vitramon	CAP, CERM, 0.01 uF, 500 V, +/- 10%, X7R, 1206	1206
C20	1	0.15uF	GRM31MR72A154KA01L	MuRata	CAP, CERM, 0.15 uF, 100 V, +/- 10%, X7R, 1206	1206
C32, C38	2	10uF	885012208041	Wurth Elektronik	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 1206	1206
C39, C40	2	220pF	VJ1206Y221KXEAT5Z	Vishay-Vitramon	CAP, CERM, 220 pF, 500 V, +/- 10%, X7R, 1206	1206
C11, C12, C13, C14, C15	5	10uF	UMK325AB7106KM-T	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C16, C17, C18, C19	4	2.2uF	C1210C225K1RACTU	Kemet	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
C21	1	2200pF	C4532X7R3D222K130KA	TDK	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1812	1812
C7, C8, C100, C101	4	82uF	HHXD630ARA820MJA0G	United Chem-Con	CAP, Polymer Hybrid, 82 uF, 63 V, +/- 20%, 30 ohm, 10x10 SMD	10x10
C5, C6	2	330uF	EEV-FK1H331Q	Panasonic	CAP, AL, 330 uF, 50 V, +/- 20%, 0.12 ohm, AEC-Q200 Grade 2, SMD	SMT Radial H13
D1	1	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOD-123	SOD-123
D2	1	400V	MURS340T3G	ON Semiconductor	Diode, Ultrafast, 400 V, 3 A, SMC	SMC
D3	1	13V	MMSZ5243BS-7-F	Diodes Inc.	Diode, Zener, 13 V, 200 mW, SOD-323	SOD-323
D4, D10	2	300V	VS-30CTH03-M3	Vishay	Diode, Hyperfast, 300 V, 2x 15 A, TH	TO-220AB
D5	1	200V	RF081M2STR	Rohm	Diode, Fast Rectifier, 200 V, 0.8 A, SOD-123	SOD-123
D6, D8, D9, D100	4	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D13	1	100V	B1100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMA	SMA
D14	1	100V	ES1B-13-F	Diodes Inc.	Diode, Superfast Rectifier, 100 V, 1 A, SMA	SMA
H1, H2	2			Wakefield-Vette	Heat Sink TO-220, TO-218 Aluminum Board Level, Vertical	PTH_16MM26_16MM26
J1, J2	2		6.91237E+11	Wurth Elektronik	Terminal Block, 5.08mm, 2x1, R/A, TH	Terminal Block, 5.08mm, 2x1, R/A, TH
J3, J4	2		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
L1	1	4.7uH	PA4342.472NLT	Pulse Engineering	Inductor, Shielded, 4.7 uH, 10 A, 0.0155 ohm, AEC-Q200 Grade 1, SMD	11.5x10.3mm
L2	1	33uH	SER3018H-333KE	Coilcraft	Shielded Power Inductors 33uH 10% 2.82mOhm 28A	SMT3_27MM94_27MM94
Q1	1	50 V	NJD2873T4G	ON Semiconductor	Transistor, NPN, 50 V, 2 A, AEC-Q101, DPAK	DPAK
Q3	1	-150V	FDMC2523P	Fairchild Semiconductor	MOSFET, P-CH, -150 V, -3 A, QFN-8	QFN-8
Q4, Q6	2	100V	CSD19532Q5B	Texas Instruments	MOSFET, N-CH, 100 V, 17 A, DNK0008A (VSON-CLIP-8)	DNK0008A
Q5, Q8	2	60V	2N7002W-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.115 A, SOT-323	SOT-323
R4, R26	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R11	1	1.5	CRCW06031R50FKEA	Vishay-Dale	RES, 1.50, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603

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R24	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R30	1	604	CRCW0603604RFKEA	Vishay-Dale	RES, 604, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R34	1	732	CRCW0603732RFKEA	Vishay-Dale	RES, 732, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R32	1	1.13k	CRCW06031K13FKEA	Vishay-Dale	RES, 1.13 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R2, R27, R28	3	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R10, R22	2	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R8	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R14	1	5.23k	CRCW06035K23FKEA	Vishay-Dale	RES, 5.23 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R12	1	7.15k	CRCW06037K15FKEA	Vishay-Dale	RES, 7.15 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R9, R15, R18, R31, R33	5	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R16	1	10.7k	CRCW060310K7FKEA	Vishay-Dale	RES, 10.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R13	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R36	1	18.7k	CRCW060318K7FKEA	Vishay-Dale	RES, 18.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R7	1	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R5, R6	2	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23, R25	2	64.9k	CRCW060364K9FKEA	Vishay-Dale	RES, 64.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R19, R29	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R20, R35	2	110k	CRCW0603110KFKEA	Vishay-Dale	RES, 110 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R17	1	130k	CRCW0603130KFKEA	Vishay-Dale	RES, 130 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R1	1	5.1k	CRCW08055K10JNEA	Vishay-Dale	RES, 5.1 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R3	1	0.005	WSL20105L000FEA	Vishay-Dale	RES, 0.005, 1%, 0.5 W, 2010	2010
R37, R38, R39, R40	4	150	CRCW2512150RJNEG	Vishay-Dale	RES, 150, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R41, R42	2	39k	CRCW251239K0JNEG	Vishay-Dale	RES, 39 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
T1	1		PAT6586NL	Pulse	Flyback Transformer, 5.5mOhm PRI, 1:0.25:1.25, 250kHz, 1500VAC, 27.1x26.42x14.5mm	SMT_XFRMR_27MM126MM42
T2	1		PA1005.100NL	Pulse Engineering	SMT Current Sense Tranformer	P82xx
U1	1		UCC2897APWR	Texas Instruments	Advanced Active Clamp PWM Controller with Current-Mode Control, -40 to +125 degC, 20-pin TSSOP (PW), Green (RoHS & no Sb/Br)	PW0020A
U2	1		OPA2170AIDSGR	Texas Instruments	General Purpose Amplifier 2 Circuit Rail-to-Rail 8-WSON (2x2)	WSON8
U3	1		UCC27519DBVR	Texas Instruments	4A/4A Single Channel High-Speed Low-side Gate Driver, DBV0005A (SOT-23-5)	DBV0005A
U4	1		LM4040D50IDCKR	Texas Instruments	Precision Micropower Shunt Voltage Reference, 1% accuracy, 5 V, 15 ppm / degC, 15 mA, -40 to 85 degC, 5-pin SC70 (DCK), Green (RoHS & no Sb/Br)	DCK0005A
U5	1		TCMT1107	Vishay-Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	SOP-4
U6	1		TPS7A1601DGNR	Texas Instruments	60V, 5uA Iq, 100mA Low-Dropout (LDO) Voltage Regulator With Enable and Power Good, DGN0008C (VSSOP-8)	DGN0008C
C31	0	47pF	C0603C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
D7	0	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D11, D12	0	300V	STTH30R03CG	STMicroelectronics	Diode, Ultrafast, 300 V, 30 A, DDPK	DDPAK
R21	0	402k	CRCW0603402KFKEA	Vishay-Dale	RES, 402 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603

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