

PMP5123 REV E Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP5123	Any	Printed Circuit Board	
C1	1	220uF	APXE160ARA221MJ80G	Nippon Chemi-Con	CAP, AL, 220uF, 16V, +/-20%, 0.022 ohm, SMD	J80
C3, C4, C5	3	22uF	GRM32ER61E226KE15L	MuRata	CAP, CERM, 22uF, 25V, +/-10%, X5R, 1210	1210
C6	1	0.047uF	C3216X7R2E473K	TDK	CAP, CERM, 0.047uF, 250V, +/-10%, X7R, 1206	1206
C7, C8, C9, C10, C11	5	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210
C12, C13, C15, C16, C17, C22, C28	7	0.1uF	C1005X7R1H104M	TDK	CAP, CERM, 0.1uF, 50V, +/-20%, C0G/NP0, 0402	0402
C14	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47 uF, 100 V, +/- 10%, X7R, 0805	0805
C18	1	220uF	EEE-FK1C221XP	Panasonic	CAP, AL, 220uF, 16V, +/-20%, 0.34 ohm, SMD	SMT Radial D8
C19	1	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100pF, 50V, +/-10%, X7R, 0402	0402
C20	1	0.22uF	GRM155R61A224KE19D	MuRata	CAP, CERM, 0.22uF, 10V, +/-10%, X5R, 0402	0402
C21	1	1000pF	STD	STD	CAP, CERM, 1000pF, 3kV, 1808	1808
C23	1	0.047uF	GRM155R71E473KA88D	MuRata	CAP, CERM, 0.047uF, 25V, +/-10%, X7R, 0402	0402
C24, C30, C31, R19, R25, R27	6	DNP	N/A	N/A	Do Not Populate	0402
C25	1	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805
C26	1	0.01uF	C1005X7R1E103K	TDK	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0402	0402
C27	1	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047uF, 50V, +/-10%, X7R, 0603	0603
C29	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
C32	1	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0402	0402
C33	1	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0402	0402
C34	1	4.7uF	C3216X7R1E475K	TDK	CAP, CERM, 4.7uF, 25V, +/-10%, X7R, 1206	1206
D1	1	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200V, 1A, SMA	SMA
D2, D4, D10, D400	4	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D3	1	10V	MMSZ4697T1G	ON Semiconductor	Diode, Zener, 10 V, 500 mW, SOD-123	SOD-123
D5, D6, D11	3	1.25V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200V, 0.2A, SOD-123	SOD-123
D7, D14, D15	3	1.4V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D8, D9	2	200V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200 V, 0.2 A, SOD-123	SOD-123
D12, D13	2	60V	SD101AWS-7-F	Diodes Inc.	Diode, Schottky, 60V, 0.015A, SOD-323	SOD-323
J1, J2	2		ED555/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
L1	1	17.1uH	PA2729.173NL	Pulse Engineering	Inductor, Shielded Drum Core, Ferrite, 17.1 uH, 9.9 A, 0.0091 ohm, SMD	Inductor, 22.2x12.2x19mm
L2	1	1mH	LPS4414-105MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 1mH, 0.11A, 16.3 ohm, SMD	LPS4414
Q1	1	0.6V	BF622,115	NXP Semiconductor	Transistor, NPN, 250V, 0.05A, SOT-89	SOT-89
Q2	1	150V	FDMS86200	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 35 A, PQFN08A	PQFN08A
Q3	1	-80V	FDC3535	Fairchild Semiconductor	MOSFET, P-CH, -80V, 2.1A, SSOT-6	SSOT-6
Q4, Q5	2	100V	CSD19533Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 13 A, SON 5x6mm	SON 5x6mm
Q6	1	100V	CSD19534Q5A	Texas Instruments	MOSFET, N-CH, 100V, 10A, SON 5x6mm	SON 5x6mm
Q7	1	1.6V	MMBT2907A	Fairchild Semiconductor	Transistor, PNP, 60V, 0.8A, SOT-23	SOT-23
Q8	1	0.3V	MMBT2222A	Fairchild Semiconductor	Transistor, NPN, 40V, 0.15A, SOT-23	SOT-23
R1	1	10k	CRCW251210K0JNEG	Vishay-Dale	RES, 10 k, 5%, 1 W, 2512	2512
R2	1	6.49k	CRCW08056K49FKEA	Vishay-Dale	RES, 6.49k ohm, 1%, 0.125W, 0805	0805
R3	1	0.1	ERJ-6RSJR10V	Panasonic	RES, 0.1 ohm, 5%, 0.125W, 0805	0805

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R4, R6, R16, R22, R23, R28	6	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R5	1	1.00	CRCW08051R00FKEA	Vishay-Dale	RES, 1.00 ohm, 1%, 0.125W, 0805	0805
R7	1	49.9k	CRCW080549K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.125W, 0805	0805
R8	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
R9, R26	2	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R10, R13, R17, R29	4	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9k ohm, 1%, 0.063W, 0402, RES, 49.9 k, 1%, 0.063 W, 0402, RES, 49.9k ohm, 1%, 0.063W, 0402, RES, 49.9k ohm, 1%, 0.063W, 0402	0402
R11	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
R12	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, 0402	0402
R14	1	9.76k	CRCW04029K76FKED	Vishay-Dale	RES, 9.76k ohm, 1%, 0.063W, 0402	0402
R15	1	121k	CRCW0402121KFKED	Vishay-Dale	RES, 121 k, 1%, 0.063 W, 0402	0402
R18	1	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00k ohm, 1%, 0.063W, 0402	0402
R20	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R21	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99k ohm, 1%, 0.063W, 0402	0402
R24	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
R30	1	2.61k	CRCW04022K61FKED	Vishay-Dale	RES, 2.61k ohm, 1%, 0.063W, 0402	0402
T1	1	18uH	PA4138NL	Pulse Engineering	Transformer, 18uH, TH	1050x550x1050mil
T2	1		PA1005.100NL	Pulse Engineering	SMT Current Sense Tranformer	P82xx
TP1, TP3	2	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP4	2	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1, U2, U3	3		UCC27511DBV	Texas Instruments	Single-Channel High-Speed Low-Side Gate Driver (with 4-A Peak Source and 8-A Peak Sink), DBV0006A	DBV0006A
U4	1		UCC2897ARGPR	Texas Instruments	Advanced Active Clamp PWM Controller with Current Control, -40 to +125 degC, 20-pin QFN (RGP), Green (RoHS & no Sb/Br)	RGP0020D
U5	1		VOS617A-7X001T	Vishay-Semiconductor	OptoCoupler, Phototransitor, 80-160%, SSOP-4	7x2.12x2.6mm
U6	1		TL331DBV	Texas Instruments	SINGLE DIFFERENTIAL COMPARATOR, DBV0005A	DBV0005A
U7	1		TL431AIDBZ	Texas Instruments	PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	DBZ0003A

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