

PMP10861 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
PCB1	1		PMP10861	Any	Printed Circuit Board	
C1, C13	2	0.01uF	2225HC103KAZ1A	AVX Corporation	CAP CER 10000PF 3KV 10% X7R 2225	1825
C2	1	220uF	EEHZA1E221P	Panasonic	CAP, AL, 220 μF, 25 V, +/- 20%, 27 ohm, SMD	8x10
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	1	0.47uF	C2012X7R1E474K	TDK	CAP, CERM, 0.47 μF, 25 V, +/- 10%, X7R, 0805	0805
C8, C36, C41, C42	4	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210
C9, C11, C16	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 μF, 25 V, +/- 5%, X7R, 0603	0603
C10, C14, C24, C28	4	0.1uF	C1005X7R1H104M	TDK	CAP, CERM, 0.1uF, 50V, +/-20%, C0G/NP0, 0402	0402
C12	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47 μF, 100 V, +/- 10%, X7R, 0805	0805
C19	1	220uF	EEE-FK1C221XP	Panasonic	CAP, AL, 220uF, 16V, +/-20%, 0.34 ohm, SMD	SMT Radial D8
C20	1	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100pF, 50V, +/-10%, X7R, 0402	0402
C21	1	0.22uF	GRM155R61A224KE19D	MuRata	CAP, CERM, 0.22uF, 10V, +/-10%, X5R, 0402	0402
C25	1	0.047uF	GRM155R71E473KA88D	MuRata	CAP, CERM, 0.047uF, 25V, +/-10%, X7R, 0402	0402
C26	1	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805
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
C30	1	0.01uF	C1005X7R1C103K	TDK	CAP, CERM, 0.01 μF, 16 V, +/- 10%, X7R, 0402	0402
C31	1	4.7uF	C3216X7R1E475K	TDK	CAP, CERM, 4.7uF, 25V, +/-10%, X7R, 1206	1206
C32, C33, C34	3	1200 uF	EKYB500ELL122ML25S	United Chemi-Con	CAP 1200UF 50V RADIAL	16x25
C35, C43	2	2200pF	VJ1210Y222KXGAT5Z	Vishay-Vitramon	CAP, CERM, 2200 pF, 1000 V, +/- 10%, X7R, 1210	1210
C37, C38, C39, C40	4	0.1uF	UMK212B7104KG-T	Taiyo Yuden	CAP, CERM, 0.1 μF, 50 V, +/- 10%, X7R, 0805	0805
C44	1	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 μF, 50 V, +/- 10%, X7R, 1210	1210
C45, R41	2	DNP	N/A	N/A	Do Not Populate	0402
C46	1	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0402	0402
C47	1	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0402	0402
C100	1	560uF	EEE-FPE561UAP	Panasonic	CAP ALUM 560UF 25V 20% SMD	10 x 10
C101	1	47uF	GRM32ER61C476ME15L	MuRata	CAP, CERM, 47 μF, 16 V, +/- 20%, X5R, 1210	1210
D1	1	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200V, 1A, SMA	SMA
D2, D4, D10	3	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D3	1	6.8V	MMSZ4692-V	Vishay-Semiconductor	Diode, Zener, 6.8V, 500mW, 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, D9	2	200V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200 V, 0.2 A, SOD-123	SOD-123
D8, D14, D15	3	1.4V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D12	1	13V	MMSZ4700T1G	ON Semiconductor	Diode, Zener, 13 V, 500 mW, SOD-123	SOD-123
D16, D17	2	100V	VB20100S-E3/8W	VISHAY	DIODE SCHOTTKY 100V 20A TO263AB	DDPAK
D18	1	14V	MMBZ5244BLT1G	ON Semiconductor	Diode, Zener, 14 V, 225 mW, SOT-23	SOT-23
D19, D20	2	60V	SD101AWS-7-F	Diodes Inc.	Diode, Schottky, 60V, 0.015A, SOD-323	SOD-323
D100	1	100V	MURA110T3G	ARI International Corporation	DIODE GEN PURP 100V 2A SMA	SMA
D101	1	70V	SMAJ70A	Omron Electronics Inc-EMC D	TVS DIODE 70VWM 113VC SMA	SMA
D102	1	200V	MURA120T3G	ON Semiconductor	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
D103	1	120V	SMAJ120A	Littelfuse	Diode, TVS, Uni, 120 V, 400 W, SMA	SMA
F1	1		CB61F6-3A-TR1	Eaton Bussmann	FUSE BRD MNT 6.3A 125VAC/VDC SMD	6125FA
J1	1		691214310002	Würth Elektronik eiSos	Terminal Block, 2x1, 3.81mm, 24-16 AWG, 10A, 300VAC, TH	2x1 Terminal Block

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J2	1		1777086	Phoenix Contact	Header (Shrouded), 5.08mm, 3x1, TH	Header (Shrouded), 5.08mm, 3x1, Vertical, TH
L1	1	17.1uH	PA2729.173NL	Pulse Engineering	Inductor, Shielded Drum Core, Ferrite, 17.1 µH, 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
L3	1	2.4uH	74477002	Würth Elektronik eiSos	Inductor, Shielded Drum Core, Ferrite, 2.4 µH, 10.1 A, 0.009 ohm, SMD	WE-PD-XL
L4	1	1mH	744823601	Würth Elektronik eiSos	CHOKe TOROID 1.0MH 6A VERTICAL	13x22x17.5mm
Q1	1	250 V	BF622,115	NXP Semiconductors	TRANS NPN 250V 0.05A SOT89	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	60V	CSD18534Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 50 A, SON 5x6mm	SON 5x6mm
Q8	1	0.3V	MMBT2222A	Fairchild Semiconductor	Transistor, NPN, 40V, 0.15A, SOT-23	SOT-23
Q9	1	1.6V	MMBT2907A	Fairchild Semiconductor	Transistor, PNP, 60V, 0.8A, SOT-23	SOT-23
R1, R5, R13, R15	4	39k	CRCW251239K0JNEG	Vishay-Dale	RES, 39 k, 5%, 1 W, 2512	2512
R2, R31, R32	3	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R3	1	40.2k	CRCW060340K2FKEA	Vishay-Dale	RES, 40.2 k, 1%, 0.1 W, 0603	0603
R4	1	6.49k	CRCW08056K49FKEA	Vishay-Dale	RES, 6.49k ohm, 1%, 0.125W, 0805	0805
R6, R14, R19	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R7	1	1.00	CRCW08051R00FKEA	Vishay-Dale	RES, 1.00 ohm, 1%, 0.125W, 0805	0805
R8, R10, R24, R29, R36, R39	6	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R9	1	0.1	ERJ-6RSJR10V	Panasonic	RES, 0.1 ohm, 5%, 0.125W, 0805	0805
R11	1	49.9k	CRCW080549K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.125W, 0805	0805
R12	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
R16	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R17, R42	2	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R18	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R20, R37, R43	3	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9k ohm, 1%, 0.063W, 0402	0402
R21	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R23	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99k ohm, 1%, 0.063W, 0402	0402
R25	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, 0402	0402
R26	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
R27	1	9.76k	CRCW04029K76FKED	Vishay-Dale	RES, 9.76k ohm, 1%, 0.063W, 0402	0402
R28	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R30	1	2.61k	CRCW04022K61FKED	Vishay-Dale	RES, 2.61k ohm, 1%, 0.063W, 0402	0402
R33	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R34	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R35	1	121k	CRCW0402121KFKED	Vishay-Dale	RES, 121 k, 1%, 0.063 W, 0402	0402
R38	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R40	1	100k	CRCW0402100KFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
R100	1	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
RT1	1	4.70 ohm	B57153S0479M000	EPCOS Inc	Thermistor NTC, 4.70 ohm, 20%, 8.5mm Disc	8.5mm Disc
RV1, RV2	2	56 V	ERZVA7V560	Panasonic	Transient/Surge Absorber, 56 V, TH	D8.5xT5mm
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	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP2, TP4	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		TPS2590RSA	Texas Instruments	3-V to 20-V High-Current Load Switch, RSA0016B	RSA0016B
U2, U3, U4	3		UCC27511DBVR	Texas Instruments	Single-Channel High-Speed Low-Side Gate Driver (with 4-A Peak Source and 8-A Peak Sink), DBV0006A	DBV0006A
U5, U7	2		VOS617A-7X001T	Vishay-Semiconductor	OptoCoupler, Phototransistor, 80-160%, SSOP-4	7x2.12x2.6mm
U6	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
U8	1		TL431AIDBZ	Texas Instruments	PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	DBZ0003A
U9	1		TL331DBV	Texas Instruments	SINGLE DIFFERENTIAL COMPARATOR, DBV0005A	DBV0005A
C15, C17, C18	0	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210
C22, R22	0	DNP	N/A	N/A	Do Not Populate	0402
C23	0	0.01uF	C1005X7R1E103K	TDK	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0402	0402
D13	0	0.45V	MBR0560-TP	Micro Commercial Component	Diode, Schottky, 60V, 3A, SOD-123	SOD-123
D21	0	4.7V	MMSZ5230BS-7-F	Diodes Inc.	Diode, Zener, 4.7 V, 200 mW, SOD-323	SOD-323
Q10	0	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
R44, R45, R46, R48	0	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R47	0	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402

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