

PMP22087 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
PCB100	1		PMP22087	Any	Printed Circuit Board	
C100, C110	2	100pF	DE1B3RA101KN4AN01F	MuRata	CAP, CERM, 100 pF, X1 440 VAC/Y1 250 VAC, +/- 10%, B, D6xT4mm	D6xT4mm
C101, C102, C111, C112	4	220pF	DE1B3RA221KN4AN01F	MuRata	CAP CER 220PF 250V RAD	D6xT4mm
C103	1	150uF	450MXK150MEFCSN25X25	Rubycon	CAP, AL, 150 µF, 450 V, +/- 20%, TH	25.4x25mm
C104	1	0.22uF	890324023028CS	Wurth Elektronik	CAP, Film, 0.22 µF, X2 275 VAC, +/- 10%, TH	13x7mm
C105, C106	2	0.47uF	890324024005	Wurth Elektronik	CAP, Film, 0.47 µF, X2 275 VAC, +/- 10%, TH	15x10mm
C107	1	0.47uF	450MPK474J	Rubycon	CAP, Film, 0.47 uF, 450 V, +/- 5%, TH	18x6.5mm
C108	1	1uF	450MPK105J	Rubycon	CAP, Film, 1 uF, 450 V, +/- 5%, TH	18x9.5mm
C109	1	10pF	VJ1206A100JXGAT5Z	Vishay-Vitramon	CAP, CERM, 10 pF, 1000 V,+/- 5%, C0G/NP0, 1206	1206
C113	1	0.1uF	GRM188R61E104KA01D	MuRata	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X5R, 0603	0603
C114	1	3900pF	GRM188R71E392KA01D	MuRata	CAP, CERM, 3900 pF, 25 V,+/- 10%, X7R, 0603	0603
C115	1	560pF	06035A561JAT2A	AVX	CAP, CERM, 560 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
C117	1	0.47uF	12063C474KAT2A	AVX	CAP, CERM, 0.47 µF, 25 V,+/- 10%, X7R, 1206	1206
C118	1	0.22uF	885012206048	Wurth Elektronik	CAP, CERM, 0.22 µF, 16 V,+/- 10%, X7R, 0603	0603
C119	1	10uF	ECA-1HHG100	Panasonic	CAP, AL, 10 µF, 50 V, +/- 20%, TH	D5xL11mm
C120	1	0.068uF	C1608X5R1H683K080AA	TDK	CAP, CERM, 0.068 µF, 50 V,+/- 10%, X5R, 0603	0603
C121	1	0.47uF	CGA5L2X7R1H474K160AA	TDK	CAP, CERM, 0.47 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C122	1	10pF	0603ZC100KAT2A	AVX	CAP, CERM, 10 pF, 10 V,+/- 10%, X7R, 0603	0603
C123	1	1000pF	06031C102KAT2A	AVX	CAP, CERM, 1000 pF, 100 V,+/- 10%, X7R, 0603	0603
C200	1	2200pF	DE1E3KX222MA5BA01	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Disc 10x8mm	Disc 10x8mm
C201, C204	2	0.022uF	ECW-F6223HL	Panasonic	CAP, Film, 0.022 uF, 630 V, +/- 3%, TH	12.5x6.2mm
C202, C203, C211, C212	4	4.7uF	UMK316AB7475KL-T	Taiyo Yuden	CAP, CERM, 4.7 µF, 50 V,+/- 10%, X7R, 1206	1206
C205	1	150pF	GRM31A5C2J151JW01D	MuRata	CAP, CERM, 150 pF, 630 V, +/- 5%, C0G/NP0, 1206	1206
C206	1	100pF	VJ1210A101JXGAT5Z	Vishay-Vitramon	CAP, CERM, 100 pF, 1000 V,+/- 5%, C0G/NP0, 1210	1210
C207, C208, C209, C210	4	680uF	EEU-FR1V681	Panasonic	CAP, AL, 680 µF, 35 V, +/- 20%, TH	Cap 10x20mm
C213, C216, C218	3	0.1uF	CC1206KRX7R9BB104	Yageo America	CAP, CERM, 0.1 µF, 50 V,+/- 10%, X7R, 1206	1206
C214	1	330uF	EEU-FM1V331L	Panasonic	CAP, AL, 330 µF, 35 V, +/- 20%, 0.03 ohm, TH	8.0x20mm
C215, C217	2	2.2uF	885012106018	Wurth Elektronik	CAP, CERM, 2.2 µF, 16 V,+/- 20%, X5R, 0603	0603
C219	1	2.2uF	C1206C225K4RACTU	Kemet	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X7R, 1206	1206
C220, C226	2	220pF	C0603X221K5RACTU	Kemet	CAP, CERM, 220 pF, 50 V,+/- 10%, X7R, 0603	0603
C221	1	470pF	C0603X471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V,+/- 10%, X7R, 0603	0603
C222	1	470uF	EEU-FR1V471B	Panasonic	CAP ALUM 470UF 20% 35V RADIAL	
C223	1	2.2uF	GRM188R6YA225KA12D	MuRata	CAP, CERM, 2.2 µF, 35 V, +/- 10%, X5R, 0603	0603
C224	1	47pF	GRM1885C1H470FA01J	MuRata	CAP, CERM, 47 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
C225	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CERM, 1 µF, 50 V,+/- 10%, X7R, 1206	1206
C227, C228, C229	3	4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, 0603	0603
C230	1	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 µF, 100 V,+/- 5%, X7R, 0603	0603
C231	1	0.082uF	GRM188R71E823KA01D	MuRata	CAP, CERM, 0.082 µF, 25 V,+/- 10%, X7R, 0603	0603
C232	1	0.01uF	06031C103KAT2A	AVX	CAP, CERM, 0.01 µF, 100 V,+/- 10%, X7R, 0603	0603
C233	1	47pF	GRM1885C1H470FA01J	MuRata	CAP, CERM, 47 pF, 50 V,+/- 1%, C0G/NP0, 0603	0603
C234	1	4700pF	06031C472JAT2A	AVX	CAP, CERM, 4700 pF, 100 V,+/- 5%, X7R, 0603	0603
C235	1	2.2uF	C3216X5R1H225K160AB	TDK	CAP, CERM, 2.2 µF, 50 V,+/- 10%, X5R, 1206	1206

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D100	1	600V	STTH8L06FP	STMicroelectronics	DIODE GEN PURP 600V 8A TO220FP	TO-220AC
D101	1	420V	GBU8J-BP	Micro Commercial Component	Diode, Switching-Bridge, 420 V, 8 A, TH	GBU
D102, D105, D202, D203	4	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D103, D104	2	1.05V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600V, 1A, SMA	SMA
D106	1	100V	1N4148WFL-G3-08	Vishay-Semiconductor	Diode, Switching, 100 V, 0.15 A, SOD-123FL	SOD-123FL
D200	1	20V	MMSZ5250BS-7-F	Diodes Inc.	Diode, Zener, 20 V, 200 mW, SOD-323	SOD-323
D204	1	60V	STPS160UY	STMicroelectronics	Diode, Schottky, 60 V, 1 A, AEC-Q101, SMB	SMB
D208	1	600V	ES1JAF	Fairchild Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF	SMAF
D209	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
F100	1		37215000001	Littelfuse	Fuse, 5 A, 250VAC/VDC, TH	TR5 fuse 8.5mm DIA
J200	1		ED120/4DS	On-Shore Technology	Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block
L100	1	120uH	750317259	Würth Elektronik	Inductor, 120 µH, 4 A, 0.055 ohm, TH	31.75x31.75mm
L101	1	100µH	7447021	Würth Elektronik	100µH Unshielded Toroidal Inductor 2A 80 mOhm Max Radial	IND_TORROID_15.8x7.5mm
L102	1	1mH	744822301	Würth Elektronik	Coupled inductor, 1 mH, 3 A, 0.035 ohm, TH	17.5x22x13 mm
L103	1	10mH	744824310	Würth Elektronik	Coupled inductor, 10 mH, 3 A, 0.105 ohm, TH	18.5x33x27.5 mm
Q100	1	650V	STB26NM60N	STMicroelectronics	MOSFET N-CH 600V 20A D2PAK	DDPAK
Q101	1	600V	IPP60R099C7	Infineon Technologies	MOSFET, N-CH, 600 V, 22 A, TO-220AB	TO-220AB
Q102	1	-60V	SI2309CDS-T1-E3	Vishay-Siliconix	MOSFET, P-CH, -60 V, -1.6 A, SOT-23	SOT-23
Q103	1	40 V	MMBT4401-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.15 A, SOT-23	SOT-23
Q200, Q202	2	650V	IPB65R150CFDATMA1	Infineon Technologies	MOSFET N-CH 650V 22.4A TO-263	DDPAK
Q201, Q203	2	80V	CSD19502Q5B	Texas Instruments	MOSFET, N-CH, 80 V, 100 A, DNK0008A (VSON-CLIP-8)	DNK0008A
Q204	1	60 V	FZT651TA	Zetex	Transistor, NPN, 60 V, 3 A, SOT-223	SOT-223
R100, R106	2	3.09Meg	CRCW12063M09FKEA	Vishay-Dale	RES, 3.09 M, 1%, 0.25 W, 1206	1206
R101, R105, R109, R116	4	3.3Meg	CRCW12063M30JNEA	Vishay-Dale	RES, 3.3 M, 5%, 0.25 W, 1206	1206
R102, R201, R204	3	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R103	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R104	1	82.5k	CRCW060382K5FKEA	Vishay-Dale	RES, 82.5 k, 1%, 0.1 W, 0603	0603
R107	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
R108	1	24.3k	CRCW060324K3FKEA	Vishay-Dale	RES, 24.3 k, 1%, 0.1 W, 0603	0603
R110	1	3.0k	CRCW06033K00JNEA	Vishay-Dale	RES, 3.0 k, 5%, 0.1 W, 0603	0603
R111	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R112, R113	2	0.13	CSR1206FTR130	Stackpole Electronics Inc	RES, 0.13, 1%, 0.5 W, 1206	1206
R114, R115	2	0.15	ERJ-8BSFR15V	Panasonic	RES, 0.15, 1%, 0.5 W, 1206	1206
R117, R124	2	75.0k	CRCW060375K0FKEA	Vishay-Dale	RES, 75.0 k, 1%, 0.1 W, 0603	0603
R118	1	36.5k	CRCW060336K5FKEA	Vishay-Dale	RES, 36.5 k, 1%, 0.1 W, 0603	0603
R119	1	120k	RC0603FR-07120KL	Yageo America	RES, 120 k, 1%, 0.1 W, 0603	0603
R120	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R121, R125	2	390k	RC0603FR-07390KL	Yageo America	RES, 390 k, 1%, 0.1 W, 0603	0603
R122	1	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, 0805	0805
R123, R227	2	140k	CRCW0603140KFKEA	Vishay-Dale	RES, 140 k, 1%, 0.1 W, 0603	0603
R200, R203	2	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
R202	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R205	1	59.0k	CRCW060359K0FKEA	Vishay-Dale	RES, 59.0 k, 1%, 0.1 W, 0603	0603
R206	1	0	CRCW20100000Z0EF	Vishay-Dale	RES, 0, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R207	1	8.45k	RC0603FR-078K45L	Yageo America	RES, 8.45 k, 1%, 0.1 W, 0603	0603
R208	1	7.15k	CRCW06037K15FKEA	Vishay-Dale	RES, 7.15 k, 1%, 0.1 W, 0603	0603
R210, R211	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R214	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
R215	1	20.0	CRCW060320R0FKEA	Vishay-Dale	RES, 20.0, 1%, 0.1 W, 0603	0603
R216, R222, R225	3	4.99Meg	CRCW12064M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.25 W, 1206	1206
R218, R298	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R219, R220, R221	3	1.65k	CRCW12061K65FKEA	Vishay-Dale	RES, 1.65 k, 1%, 0.25 W, 1206	1206
R223	1	20.0k	CRCW120620K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.25 W, 1206	1206
R224	1	324k	RC0603FR-07324KL	Yageo America	RES, 324 k, 1%, 0.1 W, 0603	0603
R226	1	324k	CRCW0603324KFKEA	Vishay-Dale	RES, 324 k, 1%, 0.1 W, 0603	0603
R228	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R229	1	80.6k	CRCW060380K6FKEA	Vishay-Dale	RES, 80.6 k, 1%, 0.1 W, 0603	0603
R230	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R231	1	44.2k	CRCW060344K2FKEA	Vishay-Dale	RES, 44.2 k, 1%, 0.1 W, 0603	0603
R232	1	37.4k	CRCW060337K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.1 W, 0603	0603
R299	1	4.99k	CR0603-FX-4991ELF	Bourns	RES, 4.99 k, 1%, 0.1 W, 0603	0603
RT100	1	10 ohm	B57236S0100M000	TDK	Thermistor NTC, 10 ohm, 20%, Disc_11.5mmx6mm	Disc_11.5mmx6mm
RV100	1		S10K275E2	EPCOS Inc	Varistor 275V RMS 10MM Radial, TH	10mm Radial
T200	1		750317258	Würth Elektronik	Transformer, 490 uH, TH	53.98x41.91mm
TP200	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP201	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP_L100	1		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP_N100	1		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP_PE100	1		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
U100	1		UCC28056DBV	Texas Instruments	6-Pin Single-Phase Transition-Mode PFC Controller, DBV0006A (SOT-23-6)	DBV0006A
U200, U201	2		UCC24612-2DBVR	Texas Instruments	UCC24612-2DBV, DBV0005A (SOT-23-5)	DBV0005A
U202	1		UCC256404DDBR	Texas Instruments	Enhanced LLC Resonant Controller with Driver, DDB0014A	DDB0014A
U203	1		VO618A-3	Vishay-Semiconductor	OPTOISOLATOR 5.3KV TRANS 4-DIP	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U204	1		ATL432LIAQDBZR	Texas Instruments	PWR MGMT SWITCHING REGULATOR	DBZ0003A
C116	0	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V,+/- 10%, X7R, 0603	0603
C300, C301	0	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1uF, 16V, +/-10%, X5R, 0402	0402
C302	0	47pF	GRM1885C2A470JA01D	MuRata	CAP, CERM, 47 pF, 100 V,+/- 5%, C0G/NP0, 0603	0603
C303	0	10pF	GRM1555C1H100RA01D	MuRata	CAP, CERM, 10 pF, 50 V,+/- 4%, C0G/NP0, 0402	0402
C304	0	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C305	0	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X5R, 0402	0402
C306	0	0.01uF	C0603C103J3GECAUTO	Kemet	CAP, CERM, 0.01 uF, 25 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C307	0	0.47uF	08053D474KAT2A	AVX	CAP, CERM, 0.47 uF, 25 V,+/- 10%, X5R, 0805	0805
C308	0	0.022uF	C0603C223K5RACTU	Kemet	CAP, CERM, 0.022 uF, 50 V,+/- 10%, X7R, 0603	0603
D210	0	6.2V	MMSZ5234B-7-F	Diodes Inc.	Diode, Zener, 6.2 V, 500 mW, SOD-123	SOD-123
D300	0	1V	BAT42WS	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
D301	0	70V	BAS70-06-7-F	Diodes Inc.	Diode, Schottky, 70 V, 0.07 A, SOT-23	SOT-23
D302	0	15V	MM5Z15VT1G	ON Semiconductor	DIODE ZENER 15V 200MW SOD523	SOD-523
D303	0	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323

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Q300	0	40 V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q301	0	60V	2N7002ET1G	ON Semiconductor	MOSFET, N-CH, 60V, 0.26A, SOT-23	SOT-23
Q302, Q303	0	40 V	MMBT4401-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.15 A, SOT-23	SOT-23
R217	0	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R300	0	2.21Meg	CRCW06032M21FKEA	Vishay-Dale	RES, 2.21 M, 1%, 0.1 W, 0603	0603
R301	0	619k	CRCW0402619KFKED	Vishay-Dale	RES, 619k ohm, 1%, 0.063W, 0402	0402
R302	0	0	ERJ-2GE0R00X	Panasonic	RES, 0 ohm, 5%, 0.063W, 0402	0402
R303, R304	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R305	0	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R306, R307	0	4.75	CRCW04024R75FKED	Vishay-Dale	RES, 4.75, 1%, 0.063 W, 0402	0402
R308	0	2.00k	CPF0603B2K0E	TE Connectivity	RES, 2.00 k, 0.1%, 0.063 W, 0603	0603
R309	0	3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, 0603	0603
R310	0	42.2k	CRCW120642K2FKEA	Vishay-Dale	RES, 42.2 k, 1%, 0.25 W, 1206	1206
R311	0	7.50k	RC0603FR-077K5L	Yageo America	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R312	0	432k	CRCW0603432KFKFA	Vishay-Dale	RES, 432 k, 1%, 0.1 W, 0603	0603
R313	0	2.0k	RC0603JR-072KL	Yageo America	RES, 2.0 k, 5%, 0.1 W, 0603	0603
R314	0	2.2Meg	CRCW06032M20JNEA	Vishay-Dale	RES, 2.2 M, 5%, 0.1 W, 0603	0603
R315	0	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, 0603	0603
R316, R317	0	41.2k	CRCW060341K2FKEA	Vishay-Dale	RES, 41.2 k, 1%, 0.1 W, 0603	0603
R318	0	100k	CRCW0603100KFKFA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R319	0	40.2k	CRCW060340K2FKEA	Vishay-Dale	RES, 40.2 k, 1%, 0.1 W, 0603	0603
U300	0		TMP300BIDCKR	Texas Instruments	Resistor-Programmable, up to 18V-Capable Temp Switch and Analog Out Sensor, DCK0006A (SOT-SC70-6)	DCK0006A
U301	0		TL331IDBVR	Texas Instruments	SINGLE DIFFERENTIAL COMPARATOR, DBV0005A (SOT-23-5)	DBV0005A
U302	0		INA180A4IDBV	Texas Instruments	Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0005A (SOT-23-5)	DBV0005A
U303	0		FOD817D	Fairchild Semiconductor	OPTOISOLATOR 5KV TRANSISTOR 4DIP	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U304	0		LM4040DIM3-5.0/NOPB	Texas Instruments	Precision Micropower Shunt Voltage Reference, DBZ0003A (SOT-23-3)	DBZ0003A

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