

PMP20367 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB1	1		PMP20367	Any	Printed Circuit Board	
C1, C7, C68	3	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C2, C3	2	10uF	GMK316AB7106KL	Taiyo Yuden	CAP, CERM, 10uF, 35V, +/-10%, X7R, 1206	1206
C4, C5, C6	3	470pF	C0603C471K5RACTU	Kemet	CAP, CERM, 470pF, 50V, +/-10%, X7R, 0603	0603
C8	1	2200pF	C0603C222K5RACTU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
C9	1	1000pF	C0603C102K5RACTU	Kemet	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0603	0603
C10, C15	2	100pF	DE6B3KJ101KN3A	MuRata	CAP CER 100PF 300VAC 10% RADIAL	TH, 2- Leads, Body 8x7mm, Pin Spacing 7.5mm
C11, C17	2	220pF	DE6B3KJ221KN3A	MuRata	CAP, CERM, 220 pF, 300 V, +/- 10%, B, TH, 2- Leads, Body 8x7mm, Pin Spacing 7.5mm	TH, 2- Leads, Body 8x7mm, Pin Spacing 7.5mm
C12, C25	2	1uF	C0603C105K8PACTU	Kemet	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603	0603
C13, C14	2	0.47uF	ECQ-U2A474ML	Panasonic	CAP, Film, 0.47uF, 275V, +/-20%, TH	Radial 25x8.5x18.5
C16, C28	2	47pF	GRM1555C1E470JA01D	MuRata	CAP, CERM, 47pF, 25V, +/-5%, C0G/NP0, 0402	0402
C18	1	270uF	380LQ271M450K022	Cornell Dubilier Electronics	CAP, AL, 270 uF, 450 V, +/- 20%, 0.737 ohm, TH	D30xL30mm
C19	1	0.33uF	ECQ-U2A334ML	Panasonic	CAP, Film, 0.33uF, 275V, +/-20%, TH	RCAP, 17.5x17.5x9.5mm
C20	1	47uF	GRM32ER70J476KE20L	MuRata	CAP, CERM, 47uF, 6.3V, +/-10%, X7R, 1210	1210
C21, C48	2	100uF	EEU-EB1E101S	Panasonic	CAP, AL, 100 uF, 25 V, +/- 20%, TH	6.3x11.2mm
C23	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805
C24	1	2200pF	DE6E3KJ222MN3A	MuRata	CAP, CERM, 2200 pF, 300 V, +/- 20%, E, TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm	TH, 2- Leads, Body 9x7mm, Pin Spacing 7.5mm
C26, C43	2	DNP	Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	Used in PnP output
C27	1	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V, +/- 10%, X7R, 0603	0603
C29	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
C30, C37	2	82uF	100ZLJ82M10X16	Rubycon	CAP ALUM 82UF 20% 100V RADIAL	10x25
C32	1	0.1uF	C3216C0G1E104J	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 5%, C0G/NP0, 1206	1206
C35	1	1200uF	EKYB800ELL122ML40S	United Chemi-Con	CAP ALUM 1200UF 20% 80V RADIAL	10x25
C36	1	0.012uF	ECW-H8123HA	Panasonic	CAP, Film, 0.012uF, 800V, +/-3%, TH	Cap, 15.4x11.7x5.8mm
C39	1	0.047uF	121MPE473J	Rubycon	CAP, Film, 0.047 uF, 1250 V, +/- 5%, TH	18.5x11.5x21mm
C40	1	1uF	12063C105KAT2A	AVX	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 1206	1206
C41, C42	2	100pF	06035A101FAT2A	AVX	CAP, CERM, 100pF, 50V, +/-1%, C0G/NP0, 0603	0603
C44	1	0.01uF	C0603C103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C47	1	470pF	GRM188R72A471KA01D	MuRata	CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0603	0603
C49	1	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	0805
C51	1	10uF	CGA5L3X5R1H106K160AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, 1206_190	1206_190
C52	1	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0603	0603
C53	1	0.1uF	C0603C104K4RACTU	Kemet	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	0603
C54, C102, C103	3	470uF	16ZLJ470MTA8X11.5	Rubycon	CAP, AL, 470 uF, 16 V, +/- 20%, 0.075 ohm, TH	CAP, 8x11.5mm
C55	1	22uF	GCM32ER71C226KE19L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 10%, X7R, 1210	1210
C56, C65, C66	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
C57	1	0.047uF	GRM32DR72J473KW01L	MuRata	CAP, CERM, 0.047 uF, 630 V, +/- 10%, X7R, 1210	1210
C58, C59, C60	3	1uF	C0603C105K4PACTU	Kemet	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603
C62	1	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
C63, C101	2	22uF	1206YD226MAT2A	AVX	CAP, CERM, 22 uF, 16 V, +/- 20%, X5R, 1206	1206
C64	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 1206	1206

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C67	1	4.7pF	06035A4R7CAT2A	AVX	CAP, CERM, 4.7 pF, 50 V, +/- 5%, C0G/NPO, 0603	0603
C69	1	27uF	25ZL27MEFC5X7	Rubycon	CAP ALUM 27UF 20% 25V RADIAL	6.3x5.5mm
C104	1	1000pF	06031C102KAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
D1, D2	2	800V	DA2JF8100L	Panasonic	Diode, Fast Rectifier, 800V, 0.2A, TVS, 1.7x.7x1.25mm	TVS, 1.7x.7x1.25mm
D3, D4, D9, D12	4	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D5	1	600V	1N5406	Vishay-Semiconductor	Diode, Switching-Bridge, 600V, 3A, TH	DO-201AD
D6	1	600V	C3D04060A	Cree	Diode, Schottky, 600V, 4A, TH	TO-220-F2
D7	1	420V	GBU8J-BP	Micro Commercial Component	Diode, Switching-Bridge, 420V, 8A, TH	GBU
D8, D10	2	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D11	1	600V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600 V, 1 A, SMA	SMA
D14	1	18V	MMSZ5248B-7-F	Diodes Inc.	Diode, Zener, 18V, 500mW, SOD-123	SOD-123
D17	1	120V	SMAJ120A	Littelfuse	Diode, TVS, Uni, 120 V, 400 W, SMA	SMA
D18	1	1.7V	US1M-13-F	Diodes Inc.	Diode, Ultrafast, 1000V, 1A, SMA	SMA
D19	1	100V	B3100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 3 A, SMC	SMC
D20	1	100V	SS110-TP	Micro Commercial Component	Diode, Schottky, 100 V, 1 A, SMA	SMA
D21	1	100V	1N4148W-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.15 A, SOD-123	SOD-123
D22	1	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D23, D24, D25, D26	4	200V	VS-MUR2020CTPBF	Vishay-Semiconductor	Diode, Ultrafast, 200 V, 10 A, TH	TO-220AB
F1	1		0216008.MXESPP	Littelfuse	Fuse, 8A, 250V, TH	Fuse, 20x5.2mm
H1	1		578622B03200G	Aavid	Twin Channel Style Heat Sink, TO-220, Vertical	Twin Channel Style Heat Sink, TO-220
H3, H9, H10, H16, H21, H22	6		4824	Keystone	HEX STANDOFF 6-32 NYLON 1-1/2"	HEX STANDOFF 6-32 NYLON 1-1/2"
H5, H11, H12, H17, H18, H24	6		1903C	Keystone	Standoff, Hex, 0.5"L #6-32 Nylon	6-32 HEX Nylon standoff 0.500 mil
H26, H27, H28, H29, H30	5		MAX01NG	Aavid Thermalloy	MAX Clip	Clip
HS1, HS2	2		782653B04250G	Aavid	HEATSINK VERT MAX CLIP, BLACK, 4.25 INCHES	4.25 INCH EXTRUDED HEAT SINK
J1	1		923345-06-C	3M	Jumper Wire, 600mil spacing, Blue, pkg of 150, TH	600 mil Jumper Wire
J2	1		1-1318301-3	TE Connectivity	Header, 312mil, 3x1, Tin, TH	19.7x10.7 x8.5 mm
J3	1		ED120/4DS	On-Shore Technology	Terminal Block, 4x1, 5.08mm, TH	TERM_BLK, 4pos, 5.08mm
J4	1	2x1	1715721	Phoenix Contact	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block
L1	1		RLTI-1108	Renco Electronics	Inductor, ?, , A, TH	1800x1740x1750mil
L2	1	2.2mH	7448258022	Wurth Elektronik eiSos	Coupled inductor, 2.2mH, 8A, 0.014 ohm, +/-30%, TH	30x35x21mm
L3	1	10mH	744825510	Wurth Elektronik	Coupled inductor, 10 mH, 5 A, 0.055 ohm, TH	30x35x21mm
L5	1	40uH	RLTI-1154	Renco Electronics	Inductor, 40 uH, 0.02 ohm, TH	925x915mil
Q1	1	600V	BSS126 H6906	Infineon Technologies	MOSFET, N-CH, 600V, 0.021A, SOT-23	SOT-23
Q2, Q6	2	100V	BSS123	Fairchild Semiconductor	MOSFET, N-CH, 100 V, 0.17 A, SOT-23	SOT-23
Q3, Q4, Q7	3	650V	AOW25S65	AOS	MOSFET, N-CH, 650V, 25A, TO-262	TO-262
Q9, Q10	2	40 V	MMBT4403	Fairchild Semiconductor	Transistor, PNP, 40 V, 0.6 A, SOT-23	SOT-23
Q11	1	60V	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
Q12	1	600V	AOD2N60	AOS	MOSFET, N-CH, 600 V, 2 A, DPAK	DPAK
R4, R5, R6, R13, R14, R15	6	3.09Meg	CRCW12063M09FKEA	Vishay-Dale	RES, 3.09Meg ohm, 1%, 0.25W, 1206	1206
R7, R8, R9	3	10.0Meg	CRCW120610M0FKEA	Vishay-Dale	RES, 10.0Meg ohm, 1%, 0.25W, 1206	1206
R10	1	75.0k	CRCW060375K0FKEA	Vishay-Dale	RES, 75.0k ohm, 1%, 0.1W, 0603	0603
R11	1	3.3Meg	CRCW06033M30JNEA	Vishay-Dale	RES, 3.3Meg ohm, 5%, 0.1W, 0603	0603
R12, R20, R81	3	100k	CRCW0603100KFKFA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R16, R17	2	470	RC0603FR-07470RL	Yageo America	RES, 470 ohm, 1%, 0.1W, 0603	0603
R18	1	2.21k	CRCW06032K21FKEA	Vishay-Dale	RES, 2.21 k, 1%, 0.1 W, 0603	0603
R19	1	3.32k	CRCW06033K32FKEA	Vishay-Dale	RES, 3.32k ohm, 1%, 0.1W, 0603	0603

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R21	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
R22	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, 0603	0603
R23, R27, R37, R42	4	10.0	RC0603FR-0710RL	Yageo America	RES, 10.0, 1%, 0.1 W, 0603	0603
R24, R38	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.1W, 0603	0603
R25, R39	2	221k	CRCW0603221KFKEA	Vishay-Dale	RES, 221k ohm, 1%, 0.1W, 0603	0603
R26	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
R28	1	0	CRCW1206000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R29, R43, R50, R58	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R30, R34, R35	3	1.00	CSRN2512FKR680	Stackpole Electronics Inc.	RES SMD 0.68 OHM 1% 2W 2512	2512
R31, R32, R33	3	0.068	CSRN2512FK68L0	Stackpole Electronics Inc.	RES SMD 0.068 OHM 1% 2W 2512	2512
R40, R49	2	3.30	ERJ-8RQF3R3V	Panasonic	RES, 3.30 ohm, 1%, 0.25W, 1206	1206
R41	1	2.2	CRCW08052R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.125 W, 0805	0805
R44	1	1.00	ERJ-6RQF1R0V	Panasonic	RES, 1.00 ohm, 1%, 0.125W, 0805	0805
R46, R48	2	51.1	CRCW060351R1FKEA	Vishay-Dale	RES, 51.1, 1%, 0.1 W, 0603	0603
R52, R80	2	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R53	1	1.21k	CRCW12061K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.25 W, 1206	1206
R55	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R56	1	49.9	ERJ-8ENF49R9V	Panasonic	RES, 49.9 ohm, 1%, 0.25W, 1206	1206
R59	1	53.6k	CRCW060353K6FKEA	Vishay-Dale	RES, 53.6 k, 1%, 0.1 W, 0603	0603
R64	1	4.87k	CRCW06034K87FKEA	Vishay-Dale	RES, 4.87 k, 1%, 0.1 W, 0603	0603
R66	1	2.49k	CRCW06032K49FKEA	Vishay-Dale	RES, 2.49 k, 1%, 0.1 W, 0603	0603
R68	1	20.0k	CRCW080520K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.125 W, 0805	0805
R70	1	20.5	CRCW120620R5FKEA	Vishay-Dale	RES, 20.5, 1%, 0.25 W, 1206	1206
R71	1	0	MCR18EZJH000	Rohm	RES, 0, 5%, 0.25 W, 1206	1206
R72	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, 0603	0603
R73	1	56.2k	CRCW060356K2FKEA	Vishay-Dale	RES, 56.2 k, 1%, 0.1 W, 0603	0603
R74, R77	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R75	1	4.99k	CR0603-FX-4991ELF	Bourns	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R76, R78	2	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R79	1	330	CRCW1206330RJNEA	Vishay-Dale	RES, 330, 5%, 0.25 W, 1206	1206
R82	1	787	CRCW0603787RFKEA	Vishay-Dale	RES, 787, 1%, 0.1 W, 0603	0603
R83	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
R84	1	36.5k	CRCW060336K5FKEA	Vishay-Dale	RES, 36.5 k, 1%, 0.1 W, 0603	0603
R85, R86	2	1.82	CRCW08051R82FKEA	Vishay-Dale	RES, 1.82, 1%, 0.125 W, 0805	0805
R101	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
RT1, RT2	2	10 ohm	CL-60	GE Sensing	Thermistor NTC, 10 ohm, 25%, Disc, 220x770 mil	Disc, 220x770 mil
S1, S2	2		200USP9T1A1M2RE	E-Switch	Switch, Toggle, SPST, 1Pos, TH	Switch, 7.0x9.6x4.5mm
T1	1	200µH	RLTI-1155	Renco Electronics	Transformer, 200 uH, TH	1850x1500mil
T2	1	650 uH	RLTI-1156	Renco Electronics	Transformer, 650 uH, TH	675x760mil
TP1, TP4	2	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP5, TP6	2	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP7, TP9	2	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP8, TP10	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		UCC29950DR	Texas Instruments	CCM PFC and LLC Combo Controller, D0016A	D0016A
U2, U4	2		UCC24610DR	Texas Instruments	GREEN Rectifier Controller Device, D0008A	D0008A
U3	1		UCC27532DBVR	Texas Instruments	2.5-A and 5-A, 35-VMAX VDD FET and IGBT Single-Gate Driver, DBV0006A	DBV0006A
U5	1		UCC27714D	Texas Instruments	High-Speed,4A, 600V High-side Low-side Gate Driver Device, D0014A	D0014A

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U7, U13	2		PC817X4NSZ0F		Opto-Isolator, 1 Channel, TH	DIP-4
U9	1		TL431AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U10	1		UCC24650DBVR	Texas Instruments	200-V Wake-Up Monitor for Fast Transient PSR, DBV0005A	DBV0005A
U11	1		TPS71550DCKR	Texas Instruments	Single Output LDO, 50 mA, Fixed 5 V Output, 3 to 24 V Input, 5-pin SC70 (DCK), -40 to 85 degC, Green (RoHS & no Sb/Br)	DCK0005A
U12	1		UCC28730DR	Texas Instruments	Constant-Voltage Constant-Current Flyback Controller With PSR and Wake-Up Monitoring, D0007A	D0007A
V1	1	300V	B72207S2301K101	EPCOS Inc	Varistor, 300V, 1.75kA, 7MM Radial, TH	Varistor, TH, 7MM
C22, C46	0	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	0805
C31, C33, C34, C38	0	680uF	35ZLH680MEFC10X23	Rubycon	CAP ALUM 680UF 20% 35V RADIAL	10x25
C50	0	10uF	CGA5L3X5R1H106K160AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, 1206_190	1206_190
D13	0	12V	BZX384-C12,115	NXP Semiconductor	Diode, Zener, 12V, 300mW, SOD-323	SOD-323
D15, D16	0	100V	BAV99,215	NXP Semiconductor	Diode, Switching, 100V, 0.215A, SOT-23	SOT-23
Q5, Q8	0	100V	CSD19533KCS	Texas Instruments	MOSFET, N-CH, 100 V, 86 A,	
R1, R2, R3	0	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.25W, 1206	1206
R36, R51	0	DNP	Used in BOM report	Used in BOM report	RES, xxx ohm, x%, xW, [PackageReference]	Used in PnP output
R45, R47	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R54	0	100	CRCW1206100RFKEA	Vishay-Dale	RES, 100, 1%, 0.25 W, 1206	1206
R57	0	10.0Meg	RC0603FR-0710ML	Yageo America	RES, 10.0 M, 1%, 0.1 W, 0603	0603
R61	0	1.21k	CRCW12061K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.25 W, 1206	1206
R62	0	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R63	0	1.10Meg	CRCW06031M10FKEA	Vishay-Dale	RES, 1.10 M, 1%, 0.1 W, 0603	0603
R65	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R67	0	1.20k	RC0603FR-071K2L	Yageo America	RES, 1.20k ohm, 1%, 0.1W, 0603	0603
TP3	0	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
U6	0		TPS7A1601DGNT	Texas Instruments	Single Output LDO, 100 mA, Adjustable 1.2 to 18.5 V Output, 3 to 60 V Input, with Enable and Power Good, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008C
U8	0		PC817X4NSZ0F		Opto-Isolator, 1 Channel, TH	DIP-4

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