

## PMP30183 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	0.01uF	C3216X7R2J103K	TDK	CAP, CERM, 0.01 $\mu$ F, 630 V, +/- 10%, X7R, 1206	1206
C2, C3, C46	3	0.1uF	C3225X7T2J104K160AC	TDK	CAP, CERM, 0.1 $\mu$ F, 630 V, +/- 10%, X7T 1210	1210
C4	1	1000pF	C0805C102JBRACU	Kemet	CAP, CERM, 1000 pF, 630 V, +/- 5%, X7R, 0805	0805
C5, C8, C26, C45, C54	5	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C6	1	330pF	GRM188R72E331KW07D	MuRata	CAP, CERM, 330 pF, 250 V, +/- 10%, X7R, 0603	0603
C7, C20, C25	3	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C9	1	220pF	C3216C0G2J221J	TDK	CAP, CERM, 220 pF, 630 V, +/- 5%, C0G/NP0, 1206	1206
C10, C11, C12	3	1000uF	EKZM500ELL102ML25S	Nippon Chemi-Con	CAP, AL, 1000 $\mu$ F, 50 V, +/- 20%, TH	RCAP, 16x25mm
C13	1	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 $\mu$ F, 50 V, +/- 20%, X7R, 1210	1210
C14	1	1uF	GRM55DR72E105KW01L	MuRata	CAP, CERM, 1 $\mu$ F, 250 V, +/- 10%, X7R, 2220	2220
C15, C16, C34, C60	4	4700pF	VY2472M49Y5US63V7	Vishay-Bccomponents	CAP, CERM, 4700 pF, 440 V, +/- 20%, Y5U, TH, 12.5x5mm	TH, 12.5x5mm
C17	1	0.1uF	C1812C104KARACTU	Kemet	CAP, CERM, 0.1 $\mu$ F, 250 V, +/- 10%, X7R, 1812	1812
C18, C22, C24	3	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C19, C32	2	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C21, C28	2	1uF	885012207103	Würth Elektronik	CAP, CERM, 1 $\mu$ F, 50 V, +/- 10%, X7R, 0805	0805
C23, C55	2	0.33uF	C0603C334K4RACTU	Kemet	CAP, CERM, 0.33 $\mu$ F, 16 V, +/- 10%, X7R, 0603	0603
C27	1	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C29	1	1000pF	C1608X8R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X8R, 0603	0603
C30	1	0.33uF	GRM219R71H334KA88D	MuRata	CAP, CERM, 0.33 $\mu$ F, 50 V, +/- 10%, X7R, 0805	0805
C31	1	4.7uF	C2012X7R1E474K125AA	TDK	CAP, CERM, 4.7 $\mu$ F, 25 V, +/- 10%, X7R, 0805	0805
C33	1	1000pF	GRM31BR72J102KW01L	MuRata	CAP, CERM, 1000 pF, 630 V, +/- 10%, X7R, 1206	1206
C35, C36	2	150uF	450MXK150MEFCSN22X30	Rubycon	CAP, AL, 150 $\mu$ F, 450 V, +/- 20%, TH	Cap 22x32mm
C37	1	0.47uF	ECQ-U2A474ML	Panasonic	CAP, Film, 0.47 $\mu$ F, 275 V, +/- 20%, TH	Radial 25x8.5x18.5
C38	1	1uF	R46KN410000P1M	Kemet	CAP, Film, 1 $\mu$ F, 275 V, +/- 20%, TH	Radial 26.5x8.5x17mm
C39, C57	2	1000pF	C1608X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C40, C51	2	4.7uF	C2012X5R1E475K125AB	TDK	CAP, CERM, 4.7 $\mu$ F, 25 V, +/- 10%, X5R, 0805	0805
C41	1	2.2uF	C2012X7R1C225K	TDK	CAP, CERM, 2.2 $\mu$ F, 16 V, +/- 10%, X7R, 0805	0805
C42	1	0.22uF	C1608X7R1C224K	TDK	CAP, CERM, 0.22 $\mu$ F, 16 V, +/- 10%, X7R, 0603	0603
C43	1	820pF	C1608C0G1H821J	TDK	CAP, CERM, 820pF, 50V, +/-5%, C0G/NP0, 0603	0603
C44	1	2200pF	C1608X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
C47	1	470uF	EKZM160ELL471MHB5D	Nippon Chemi-Con	CAP, AL, 470uF, 16V, +/-20%, TH	8mm x 11.5mm
C48	1	100uF	EKZM160ELL101ME11D	Nippon Chemi-Con	CAP, AL, 100 $\mu$ F, 16 V, +/- 20%, TH	RCAP, 5x11mm
C49, C56	2	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603
C50	1	47uF	UPW1V470MED1TD	Nichicon	CAP, AL, 47 $\mu$ F, 35 V, +/- 20%, 0.25 ohm, TH	6.3x12.5mm, TH
C52	1	22uF	C2012X5R0J226M	TDK	CAP, CERM, 22 $\mu$ F, 6.3 V, +/- 20%, X5R, 0805	0805
C53	1	10uF	UPW1H100MDD	Nichicon	CAP, AL, 10 $\mu$ F, 50 V, +/- 20%, 1.4 ohm, TH	D5xL11mm
C58	1	56pF	C1608C0G1H560J	TDK	CAP, CERM, 56pF, 50V, +/-5%, C0G/NP0, 0603	0603
C59	1	0.047uF	C1608X8R1H473K	TDK	CAP, CERM, 0.047 $\mu$ F, 50 V, +/- 10%, X8R, 0603	0603
D1, D6	2	600V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMA	SMA
D2, D11	2	150V	SMBJ150A-13-F	Diodes Inc.	Diode, TVS, Uni, 150 V, 600 W, SMB	SMB
D3, D9	2	200V	MBRS3200T3G	ON Semiconductor	Diode, Schottky, 200 V, 3 A, SMB	SMB
D4, D8	2	600V	MURS160T3G	ON Semiconductor	Diode, Ultrafast, 600 V, 2 A, SMB	SMB
D5, D7	2	MBR20200CTG	MBR20200CTG	Microsemi	Diode, Schottky, 200 V, 20 A, TH	TO-220AB
D10, D19, D20, D27, D28, D34	6	BAS21	BAS21-7-F	Diodes Inc.	Diode, Switching, 200 V, 0.2 A, SOT-23	SOT-23
D12	1	5.1V	BZT52C5V1T-7	Diodes Inc.	Diode, Zener, 5.1 V, 300 mW, SOD-523	SOD-523
D13, D17	2	58V	SMAJ58A	Diodes Inc.	Diode, TVS, Uni, 58 V, 400 W, SMA	SMA
D14	1	BAT42WS	BAT42WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323

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D15	1	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
D16, D29	2	13V	MMSZ5243BS-7-F	Diodes Inc.	Diode, Zener, 13 V, 200 mW, SOD-323	SOD-323
D18	1	6.8V	BZT52C6V8T-7	Diodes Inc.	Diode, Zener, 6.8 V, 300 mW, SOD-523	SOD-523
D21	1	Yellow	LTST-C170KSKT	Lite-On	LED, Yellow , SMD	0805 LED
D22, D23	2	Green	LTST-C170KGKT	Lite-On	LED, Green, SMD	LED_0805
D24	1	S3JB-13-F	S3JB-13-F	Diodes Inc.	Diode, Standard, 600 V, 3 A, SMB	SMB
D25	1	LXA06T600	LXA06T600	Power Integrations	Diode, X-Series PFC, 600 V, 6 A, TH	TO-220-F2
D26	1	GBU806	GBU806	Diodes Inc.	Diode, Switching-Bridge, 600 V, 8 A, TH	GBU
D30	1	STPS1150A	STPS1150A	ST Microelectronics	Diode, Schottky, 150 V, 1 A, SMA	SMA
D31	1	120V	SMAJ120A	Littelfuse	Diode, TVS, Uni, 120 V, 400 W, SMA	SMA
D32	1	US1K-13-F	US1K-13-F	Diodes Inc.	Diode, Fast Rectifier, 800 V, 1 A, SMA	SMA
D33	1	RF071M2S	RF071M2STR	Rohm	Diode, Ultrafast, 200 V, 1 A, SOD-123	SOD-123
D35	1	27V	MMSZ4711-T1G	Vishay-Semiconductor	Diode, Zener, 27 V, 500 mW, SOD-123	SOD-123
F1	1	10A	0216010.MXP	Littlefuse Inc	Fuse, 10 A, Fast Acting, 250 V, TH	
H1	1		SK 573 37.5 SA	Fischer Elektronik	Heat Sink, 25x30x37.5mm, for THFU 1-3+6+7, profile threads	Heat Sink, 25x30x37.5 mm
H2	1		SK 573 84 SA	Fischer Elektronik	Heat Sink, 25x30x84mm, for THFU 1-3+6+7, profile threads	Heat Sink, 25x30x84 mm
J1	1		923345-01-C	3M	Jumper Wire, 100mil spacing, pkg of 200, TH	Wire Jumper
J2	1		1732720	Phoenix Contact	Terminal Block, 2x1, 7.62mm, TH	15.21x18x12.8mm
J3, J4	2		39357-0003	Molex	Terminal Block, 3.5 mm, 3x1, Tin, TH	Terminal Block, 3.5 mm, 3x1, TH
J5	1		0022284023	Molex	Header, 2.54mm, 2x1, Tin, TH	Header, 2.54mm, 2x1, TH
L1	1	52uH	750315814r01	Würth Elektronik	Inductor, Toroid, 52 µH, 0.052 ohm, TH	13.65mm x 30.75mm, height 32.75mm
L2	1	1mH	74477030	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 1 mH, 0.6 A, 1.82 ohm, SMD	SMD
L3, L8	2	29uH	7447016	Würth Elektronik	Inductor, Toroid, Ferrite, 29 µH, 7.8 A, 0.015 ohm, TH	19x10.5mm
L4	1	500uH	750316373	Würth Elektronik	Inductor, 500 µH, 0.03 ohm, TH	35x35mm
L5	1	3.3mH	744824433	Würth Elektronik eiSos	Coupled inductor, 3.3 mH, 4 A, 0.035 ohm, +/- 30%, TH	18.5x33x27.5 mm
L10	1	4.7uH	744773047	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 4.7 µH, 1.82 A, 0.11 ohm, SMD	4.5x3.2x4.0mm
L11	1	22uH	74408943220	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 22 µH, 1.1 A, 0.185 ohm, SMD	4.8x3.8x4.8mm
Q1, Q2	2	550V	IPP50R199CP	Infineon Technologies	MOSFET, N-CH, 550 V, 17 A, TO-220AB	TO-220AB
Q3	1	STN1NK60Z	STN1NK60Z	ST	MOSFET, N-CH, 600 V, 300 mA, SOT-223	SOT-223
Q4	1	2N7002	2N7002E-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 0.24 A, SOT-23	SOT-23
Q5	1	-240V	ZVP4424GTA	Diodes Inc.	MOSFET, P-CH, -240 V, -0.48 A, SOT-223	SOT-223
Q6, Q8	2	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q7, Q11	2	0.25V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23
Q9, Q10, Q13, Q14, Q16	5	50V	BSS138	Fairchild Semiconductor	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23
Q12	1	60 V	MMBT2907A	Fairchild Semiconductor	Transistor, PNP, 60 V, 0.8 A, SOT-23	SOT-23
Q15	1	IPP50R140CP	IPP50R140CP	Infineon Technologies	MOSFET, N-CH, 550 V, 23 A, TO-220AB	TO-220AB
Q17	1	PZT2222A	PZT2222A	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.5 A, SOT-223	SOT-223
Q18	1	SPD02N80C3	SPD02N80C3ATMA1	Infineon Technologies	MOSFET, N-CH, 800 V, 2 A, DPAK	DPAK
R1, R57	2	2.21	CRCW08052R21FKEA	Vishay-Dale	RES, 2.21, 1%, 0.125 W, 0805, RES, 2.21 ohm, 1%, 0.125W, 0805	0805
R2	1	2.20	RC1206FR-072R2L	Yageo America	RES, 2.20 ohm, 1%, 0.25W, 1206	1206
R3, R45, R46, R54	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R4	1	29.4k	CRCW060329K4FKEA	Vishay-Dale	RES, 29.4 k, 1%, 0.1 W, 0603	0603
R5, R6, R9, R12	4	68.1	CRCW251268R1FKEG	Vishay-Dale	RES, 68.1, 1%, 1 W, 2512	2512
R7, R10	2	4.75	RC0805FR-074R75L	Yageo America	RES, 4.75, 1%, 0.125 W, 0805	0805
R8, R13, R36, R41, R43, R51, R58, R67, R70, R86	10	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603

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R11, R17, R18, R19, R53	5	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R14	1	0.068	2-2176057-1	TE Connectivity	RES, 0.068, 1%, 2 W, 2512	2512
R15	1	4.75k	CRCW06034K75FKEA	Vishay-Dale	RES, 4.75 k, 1%, 0.1 W, 0603	0603
R16	1	4.75k	CRCW12064K75FKEA	Vishay-Dale	RES, 4.75 k, 1%, 0.25 W, 1206	1206
R20	1	698k	CRCW1206698KFKEA	Vishay-Dale	RES, 698k ohm, 1%, 0.25W, 1206	1206
R21	1	23.7k	CRCW060323K7FKEA	Vishay-Dale	RES, 23.7 k, 1%, 0.1 W, 0603	0603
R22	1	3.32k	CRCW06033K32FKEA	Vishay-Dale	RES, 3.32 k, 1%, 0.1 W, 0603	0603
R23, R84	2	2.21k	CRCW06032K21FKEA	Vishay-Dale	RES, 2.21k ohm, 1%, 0.1W, 0603	0603
R24	1	68.1k	CRCW201068K1FKEF	Vishay-Dale	RES, 68.1 k, 1%, 0.75 W, 2010	2010
R25, R29	2	715k	CRCW1206715KFKEA	Vishay-Dale	RES, 715k ohm, 1%, 0.25W, 1206	1206
R26	1	16.5k	CRCW060316K5FKEA	Vishay-Dale	RES, 16.5 k, 1%, 0.1 W, 0603	0603
R27, R33	2	68.1k	CRCW060368K1FKEA	Vishay-Dale	RES, 68.1 k, 1%, 0.1 W, 0603	0603
R28	1	33.2	CRCW251233R2FKEG	Vishay-Dale	RES, 33.2, 1%, 1 W, 2512	2512
R30	1	1.21Meg	CRCW06031M21FKEA	Vishay-Dale	RES, 1.21 M, 1%, 0.1 W, 0603	0603
R31, R39	2	47.5k	CRCW060347K5FKEA	Vishay-Dale	RES, 47.5 k, 1%, 0.1 W, 0603	0603
R32, R77	2	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9 ohm, 1%, 0.1W, 0603	0603
R34, R78	2	61.9k	CRCW060361K9FKEA	Vishay-Dale	RES, 61.9 k, 1%, 0.1 W, 0603	0603
R35	1	221k	CRCW0603221KFKEA	Vishay-Dale	RES, 221 k, 1%, 0.1 W, 0603	0603
R37	1	15.0k	RC0603FR-0715KL	Yageo America	RES, 15.0 k, 1%, 0.1 W, 0603	0603
R38	1	6.81k	CRCW06036K81FKEA	Vishay-Dale	RES, 6.81k ohm, 1%, 0.1W, 0603	0603
R40, R42, R47, R50, R85	5	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R44	1	47.5k	RC0603FR-0747K5L	Yageo America	RES, 47.5 k, 1%, 0.1 W, 0603	0603
R48	1	13.0k	RC0603FR-0713KL	Yageo America	RES, 13.0 k, 1%, 0.1 W, 0603	0603
R49	1	475k	RC0603FR-07475KL	Yageo America	RES, 475 k, 1%, 0.1 W, 0603	0603
R52, R65	2	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.1 W, 0603	0603
R55, R60	2	475k	RC1206FR-07475KL	Yageo America	RES, 475 k, 1%, 0.25 W, 1206	1206
R56, R59, R62	3	1.00Meg	CRCW12061M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.25 W, 1206	1206
R61, R63	2	0.075	CSRN2512FK75L0	Stackpole Electronics Inc	RES, 0.075, 1%, 2 W, 2512	2512
R64	1	221	CRCW0603221RFKEA	Vishay-Dale	RES, 221 ohm, 1%, 0.1W, 0603	0603
R66	1	38.3k	CRCW060338K3FKEA	Vishay-Dale	RES, 38.3 k, 1%, 0.1 W, 0603	0603
R68	1	0 Ohm	0 Ohm	Vishay-Dale	RES, 0 Ohm, 1%, 0.1 W, 0603	0603
R69	1	17.8k	CRCW060317K8FKEA	Vishay-Dale	RES, 17.8 k, 1%, 0.1 W, 0603	0603
R71, R73, R75	3	332k	CRCW1206332KFKEA	Vishay-Dale	RES, 332k ohm, 1%, 0.25W, 1206	1206
R72	1	51	CRCW080551R0JNEA	Vishay-Dale	RES, 51 ohm, 5%, 0.125W, 0805	0805
R74	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R76	1	22.1	CRCW060322R1FKEA	Vishay-Dale	RES, 22.1, 1%, 0.1 W, 0603	0603
R79	1	392	CRCW0603392RFKEA	Vishay-Dale	RES, 392, 1%, 0.1 W, 0603	0603
R80	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R81	1	1.82	CRCW12061R82FKEA	Vishay-Dale	RES, 1.82, 1%, 0.25 W, 1206	1206
R82	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
R83	1	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, 0603	0603
RT1	1	4.70 ohm	B57237S0479M000	TDK	Thermistor NTC, 4.70 ohm, 20%, 15x7mm	15x7mm
RV1	1	275VAC	B72220S0271K101	TDK	Varistor 275 VAC, 100 A, TH	Disc_21.5mm
S1	1		200USP1T1A1M2RE	E-Switch	Switch, SPDT, On-On, 2 Pos, TH	Switch, 7x4.5mm
T1	1	2mH	750315800	Würth Elektronik	Transformer, 2 mH, TH	37.34x35.56mm
T2	1	1.5mH	7508110338	Würth Elektronik	Transformer, 1.5 mH, TH	24.38x20.32mm
TP3, TP23, TP26	3	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP4, TP24	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP9, TP28	2	Orange	5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
U1	1	TMP709	TMP709AIDBVR	Texas Instruments	Resistor-Programmable Temperature Switch, 5 pin SOT-23	MF05A
U2	1	UCC27714DR	UCC27714DR	Texas Instruments	High-Speed,4A, 600V High-side Low-side Gate Driver Device, D0014A	D0014A

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U3	1	SN74LVC1G17DCKR	SN74LVC1G17DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A	DCK0005A
U4, U11	2	LM5021MM-2	LM5021MM-2/NOPB	Texas Instruments	AC-DC Current Mode PWM Controller, 8-pin MSOP	MUA08A
U5, U8, U12	3	TCMT1107	TCMT1107	Vishay-Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMD-4	SOP-4
U6	1	TL431A	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
U7, U13	2	LMV431A	LMV431AIMFX/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 3-pin SOT-23, Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 3-pin SOT-23	MF03A
U9	1	UCC28180D	UCC28180D	Texas Instruments	8-PIN CONTINUOUS CONDUCTION MODE (CCM) PFC CONTROLLER, D0008A	D0008A
U10	1	TPS560200D	TPS560200DBVR	Texas Instruments	4.5V to 18V Input, 500mA Synchronous Step Down SWIFT Converter with Advanced Eco-mode, DBV0005A	DBV0005A
XF1, XF2	2	10A	01000056Z	Littelfuse	Fuse Holder, 10A, TH	Fuse Holder, 4.5x10.6x5.94mm

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