

## PMP31253 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	0.1uF	08055C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0805	0805
C2	1	0.1uF	C0805C104J5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 0805	0805
C3	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 1206	1206
C4	1	2200pF	GRM188R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
C5	1	0.022uF	C0603X223K5RACTU	Kemet	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0603	0603
C6	1	33uF	EMVY250ADA330MF55G	Chemi-Con	CAP, AL, 33 uF, 25 V, +/- 20%, 1 ohm, SMD	F55
C7	1	0.47uF	C1608X7R1H474K080AC	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, 0603	0603
C8	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C9	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
C10, C17, C18	3	220nF	890334025027RP	Würth Electronics	0.22 uF Film Capacitor 630V Polypropylene (PP), Metallized Radial	RADIAL
C11, C16	2	220uF	EKMQR401VSN221MP45S	United Chemi-Con	Cap Aluminum Lytic 220uF 400V 20% (22 X 45mm) Snap-In 10mm 1100mA 2000h 105°C	RADIAL
C12	1	DNP	GCM31MR71E105KA37L	MuRata	DNP	1206
C13	1	1uF	GRM21BR71E105KA99L	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
C14	1	220uF	A768KE227M1DLAE029	KEMET	220 uF 20 V Aluminum - Polymer Capacitors Radial, Can - SMD 29mOhm 2000 Hrs @ 125°C	SMT_CAP_8MM3_8MM3
C15	1	0.1uF	B32913C5104K000	TDK	CAP, Film, 0.1 uF, 1000 V, +/- 10%, TH	26.5x7mm
D1	1	800V	US1K-13-F	Diodes Inc.	Diode, Fast Rectifier, 800 V, 1 A, SMA	SMA
D2	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D3	1	DNP	DNP	Micro Commercial Component	DNP	SOD-323
D4	1	18V	MMSZ5248B-7-F	Diodes Inc.	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
D5	1	6.2V	MMSZ5234B-7-F	Diodes Inc.	Diode, Zener, 6.2 V, 500 mW, SOD-123	SOD-123
D6	1	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D7	1		APT30DQ100KG	Wolfspeed	Diode 1kV Through Hole TO-220-2	TO-220-2
D8, D9	2	800V	DF08S-E3	Vishay-Semiconductor	Diode, Switching-Bridge, 800 V, 1 A, DF-S	DF-S
D101	1	18V	DFLZ18-7	Diodes Inc.	Diode, Zener, 18 V, 1 W, PowerDI123	PowerDI123
F1, F2, F3	3		04611.25ER	Littelfuse Inc	Fuse Chip Slow Blow Acting 1.25A 600V SMD Solder Pad 10.1 X 3.12 X 3.12mm Ceramic T/R	SMT_FUSE_10MM10_3MM12
H101	1		Heatsink TO220		HEATSINK, ALUM, TO-220	
L1, L5, L7, L8	4	SHORT	SHORT	Würth Electronics	2.2 mH Shielded Drum Core, Wirewound Inductor 400 mA 2.7Ohm Max Radial, Vertical Cylinder	RADIAL
L2, L6	2	100uH	7447480101	Würth Elektronik	Inductor, Wirewound, Ferrite, 100 uH, 2.4 A, 0.1 ohm, TH	10.5x14.5mm
L3, L4	2	220uH	7687709221	Würth Elektronik	Inductor, Wirewound, 220 uH, 1.3 A, 0.3 ohm, SMD	12x12mm
Q1	1	DNP	DNP	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q2	1	1000V	IXTY1R6N100D2	IXYS	MOSFET, N-CH, 1000V, DPAK	DPAK
Q3	1	DNP	DNP	Fairchild Semiconductor	Transistor, PNP, 60 V, 0.8 A, SOT-23	SOT-23
Q4	1	1000V	STP8NK100Z	STMicroelectronics	MOSFET, N-CH, 1000 V, 6.5 A, TO-220AB	TO-220AB
R1	1	30.9k	CRCW060330K9FKEA	Vishay-Dale	RES, 30.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R2	1	10	RC0805JR-0710RL	Yageo America	RES, 10, 5%, 0.125 W, 0805	0805
R3	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4, R5, R6	3	15k	PR03000201502JAC00	Vishay-Bccomponents	RES, 15 k, 5%, 3 W, D5.20xL16.70mm	D5.20xL16.70mm
R7	1	301k	CRCW1206301KFKEA	Vishay-Dale	RES, 301 k, 1%, 0.25 W, 1206	1206
R8, R9, R10, R11	4	200k	CRCW1206200KJNEA	Vishay-Dale	RES, 200 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R12, R17	2	2.49k	CRCW06032K49FKEA	Vishay-Dale	RES, 2.49 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R13	1	665	CRCW0603665RFKEA	Vishay-Dale	RES, 665, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R14	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R15	1	DNP	CRCW06031M50JNEA	Vishay-Dale	DNP	0603
R16	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R18	1	10	CRCW080510R0JNEA	Vishay-Dale	RES, 10, 5%, 0.125 W, 0805	0805

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R19	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R20, R31, R39, R44	4		SHORT	TE Connectivity	RESISTOR, 5W, 0R	RADIAL
R21, R32, R40, R45	4	DNP	CRCW120610K0FKEAHP	Vishay-Dale	RES, 10.0 k, 1%, 0.5 W, AEC-Q200 Grade 0, 1206	1206
R22, R25, R33, R36, R41, R43	6	DNP	DNP	Vishay-Dale	RES, 5%, 1206	1206
R23, R35, R42	3		B72210S0461K101	TDK	750 V 2.5 kA Varistor 1 Circuit Through Hole Disc 10mm	RADIAL
R24, R26	2	0.91	ERJ-14BQ	Panasonic	RES, 0.91, 1%, 0.5 W, 1210	1210
R27, R30, R34, R38	4	750k	750k	Vishay-Dale	RES, 5%, 1206	1206
R28, R29	2	5.1k	CRCW12065K10JNEA	Vishay-Dale	RES, 5.1 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R37	1	SHORT	CRM2512-FX-15R0	Bourns	RES, 15, 1%, 2 W, 2512	2512
R101	1	2	ERJ-14BQF2R0U	Panasonic	RES, 2.00, 1%, 0.5 W, AEC-Q200 Grade 0, 1210	1210
TP1, TP2, TP4, TP5, TP6, TP7	6		5000	Keystone Electronics	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP3	1		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		UCC28C55DR	Texas Instruments	Low-Power Current-Mode High-Performance PWM Controller for Si and SiC MOSFETs	SOIC8

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