

**PMP15043 REV A Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C3, C8, C15	4	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
C2, C10	2	220uF	EEE-FC1E221P	Panasonic	CAP, AL, 220 µF, 25 V, +/- 20%, 0.15 ohm, SMD	SMT Radial G
C4	1	100uF	GRM32ER61A107ME20L	MuRata	CAP, CERM, 100 µF, 10 V,+/- 20%, X5R, 1210	1210
C5	1	2.2uF	GRM155R61E225KE11D	MuRata	CAP, CERM, 2.2 µF, 25 V,+/- 10%, X5R, 0402	0402
C6, C16, C31	3	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
C7	1	4.7uF	GRM155R61A475MEAAD	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 20%, X5R, 0402	0402
C9	1	22uF	GRM32ER61E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X5R, 1210	1210
C11, C12	2	0.033uF	GRM155R71A333KA01D	MuRata	CAP, CERM, 0.033 µF, 10 V,+/- 10%, X7R, 0402	0402
C13	1	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, 0402	0402
C14, C19	2	22uF	GRM188R61A226ME15D	MuRata	CAP, CERM, 22 µF, 10 V,+/- 20%, X5R, 0603	0603
C17	1	3300pF	GRM155R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V,+/- 10%, X7R, 0402	0402
C18	1	1uF	GRM188R61A105KA61D	MuRata	CAP, CERM, 1 µF, 10 V,+/- 10%, X5R, 0603	0603
C20, C23, C25, C28, C29, C32, C34	7	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C21, C27, C35, C36, C37, C38	6	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 µF, 10 V,+/- 10%, X5R, 0402	0402
C22, C30	2	0.015uF	GRM155R71C153JA01D	MuRata	CAP, CERM, 0.015 µF, 16 V,+/- 5%, X7R, 0402	0402
C24	1	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C26, C33	2	1uF	GRM155R70J105KA12D	MuRata	CAP, CERM, 1 µF, 6.3 V,+/- 10%, X7R, 0402	0402
C39	1	1uF	GRM188R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V,+/- 10%, X5R, 0603	0603
C40	1	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 µF, 25 V,+/- 20%, X5R, 0603	0603
D1	1	5.1V	BZT52C5V1S-7-F	Diodes Inc.	Diode, Zener, 5.1 V, 200 mW, SOD-323	SOD-323
D2, D3, D5, D7	4	75V	1N4148X-TP	Micro Commercial Component	Diode, Switching, 75 V, 0.3 A, SOD-523	SOD-523
D4, D6	2	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
J1, J2, J3, J4	4	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
J5, J7, J8	3		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J9, J10, J12	3		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J11	1		TSW-104-07-G-S	Samtec	Header, 100mil, 4x1, Gold, TH	4x1 Header
L1	1	10uH	7443321000	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 10 µH, 9 A, 0.0144 ohm, SMD	12.1x9.5x11.4mm
Q1	1	40 V	MMBT3904-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
R1, R2	2	0.01	CSRN2010FK10L0	Stackpole Electronics Inc	RES, 0.01, 1%, 1 W, 2010	2010
R3, R13, R16, R18, R19, R20, R23, R26, R30, R35, R36, R39, R40, R42, R45, R47	16	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R4	1	845k	CRCW0402845KFKED	Vishay-Dale	RES, 845 k, 1%, 0.063 W, 0402	0402
R5, R9	2	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, 0402	0402
R6	1	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, 0402	0402
R7, R8	2	499	CRCW0603499RFKEA	Vishay-Dale	RES, 499, 1%, 0.1 W, 0603	0603
R10	1	511k	CRCW0402511KFKED	Vishay-Dale	RES, 511 k, 1%, 0.063 W, 0402	0402
R11	1	80.6k	CRCW040280K6FKED	Vishay-Dale	RES, 80.6 k, 1%, 0.063 W, 0402	0402
R12	1	3.74k	CRCW04023K74FKED	Vishay-Dale	RES, 3.74 k, 1%, 0.063 W, 0402	0402
R14, R15	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R17	1	73.2k	CRCW040273K2FKED	Vishay-Dale	RES, 73.2 k, 1%, 0.063 W, 0402	0402

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R21	1	240k	CRCW0402240KFKED	Vishay-Dale	RES, 240 k, 1%, 0.063 W, 0402	0402
R22, R27, R31	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
R24	1	499	RC0603FR-07499RL	Yageo America	RES, 499, 1%, 0.1 W, 0603	0603
R25, R34	2	4.02k	CRCW04024K02FKED	Vishay-Dale	RES, 4.02 k, 1%, 0.063 W, 0402	0402
R28, R37	2	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
R29, R32, R33, R38	4	51.1k	CRCW040251K1FKED	Vishay-Dale	RES, 51.1 k, 1%, 0.063 W, 0402	0402
R41	1	69.8k	CRCW040269K8FKED	Vishay-Dale	RES, 69.8 k, 1%, 0.063 W, 0402	0402
R43	1	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, 0402	0402
R44	1	42.2k	CRCW040242K2FKED	Vishay-Dale	RES, 42.2 k, 1%, 0.063 W, 0402	0402
R46	1	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, 0402	0402
U1	1		TPS611781RNWR	Texas Instruments	20-V, 10-A Fully-Integrated Synchronous Boost with Load Disconnect, RNW0013A (VQFN-HR-13)	RNW0013A
U2	1		SN74LV4053ADBR	Texas Instruments	Triple 2-Channel Analog Multiplexer/Demultiplexer, DB0016A, LARGE T&R	DB0016A
U3	1		LM317LIPK	Texas Instruments	3/8 Pin 100mA Adjustable Positive Regulator, PK0003A (SOT-3)	PK0003A
U4	1		TPS54821RHLLR	Texas Instruments	4.5V to 17V Input, 8-A Synchronous Step-Down Converter with Hiccup Current Limit, RHL0014A (VQFN-14)	RHL0014A
U5	1		LM2664M6	Texas Instruments	Switched Capacitor Voltage Converter, 6-pin SOT-23	MF06A
U6	1		INA188IDR	Texas Instruments	36-V, Zero-Drift, Rail-to-Rail-Out Instrumentation Amplifier, D0008A (SOIC-8)	D0008A
U7, U8, U9, U10	4		OP07CD	Texas Instruments	Low-Offset Voltage Operational Amplifier, 6 to 36 V, 0 to 70 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	D0008A
U11	1		UA78L09ACD	Texas Instruments	Fixed Regulator with 11.5 to 24 V Input and 9 V Output, 0 to 125 degC, 8-Pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A

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