

**PMP20440 REV A Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		PMP20440	Any	Printed Circuit Board	
C1, C5, C33	3	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C2	1	1000uF	EEU-FR1V102B	Panasonic	CAP, AL, 1000 µF, 35 V, +/- 20%, 0.018 ohm, TH	D12.5xL20mm
C3, C4, C6, C7, C10, C11, C19, C20, C21, C22, C23, C24	12	10uF	C3225X7R1E106M250AC	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X7R, 1210	1210
C8, C9	2	2.2uF	C0603C225M8PACTU	Kemet	CAP, CERM, 2.2 µF, 10 V, +/- 20%, X5R, 0603	0603
C12	1	680uF	APSG200ELL681MJB5S	Chemi-Con	CAP, Aluminum Polymer, 680 µF, 20 V, +/- 20%, 0.012 ohm, TH	10x11.5mm
C13	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47uF, 100V, +/-10%, X7R, 0805	0805
C14, C15, C17, C25	4	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C26, C27	2	33pF	06031A330JAT2A	AVX	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C28	1	1000pF	GRM1885C1H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C29, C32	2	0.068uF	GRM188R71E683KA01D	MuRata	CAP, CERM, 0.068 µF, 25 V, +/- 10%, X7R, 0603	0603
C31	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603
C34	1	0.047uF	GRM188R71E473KA01D	MuRata	CAP, CERM, 0.047 µF, 25 V, +/- 10%, X7R, 0603	0603
D1, D2	2	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1, J2, J3, J4	4		575-8	Keystone	Standard Banana Jack, Uninsulated, 8.9mm	Keystone575-8
J5	1		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J6	1		1040	Keystone	TEST POINT SLOTTED .118", TH	Test point, TH Slot Test point
J7	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
L1	1	1uH	PA4342.102NLT	Pulse Engineering	Inductor, Shielded, 1 uH, 18 A, 0.0033 ohm, AEC-Q200 Grade 1, SMD	11.5x10.3mm
L2, L3	2	10uH	XAL8080-103MEB	Coilcraft	Inductor, Shielded, Composite, 10 µH, 8.7 A, 0.021 ohm, SMD	8.1 x 8 x 8.6mm
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
Q1, Q2, Q3, Q4	4	60V	NVMFS5C646NLT1G	ON Semiconductor	MOSFET, N-CH, 60 V, 20 A, AEC-Q101, DFN5 5x6mm	DFN5 5x6mm
R1, R31, R33	3	0	RC0603JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.1W, 0603	0603
R2	1	0.47	CSRN2512FKR470	Stackpole Electronics Inc	RES, 0.47, 1%, 2 W, 2512	2512
R3, R6, R7, R13, R16	5	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R4, R5, R10, R11, R18, R19	6	10.0	RC0603FR-0710RL	Yageo America	RES, 10.0, 1%, 0.1 W, 0603	0603
R8, R9	2	0.005	PRL1632-R005-F-T1	Susumu Co Ltd	RES, 0.005, 1%, 1 W, 0612	0612
R12, R17	2	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
R14, R15	2	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
R22, R23	2	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R24	1	301	CRCW0603301RFKEA	Vishay-Dale	RES, 301, 1%, 0.1 W, 0603	0603
R25	1	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R26	1	88.7k	CRCW060388K7FKEA	Vishay-Dale	RES, 88.7 k, 1%, 0.1 W, 0603	0603
R27	1	15k	CRCW060315K0JNEA	Vishay-Dale	RES, 15 k, 5%, 0.1 W, 0603	0603
R28	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R29	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603

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TP1, TP4	2	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13	9		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP3, TP5, TP14, TP15	4	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1	1		LM5140QRWGRQ1	Texas Instruments	Wide Input Range Dual Synchronous Buck Controller, RWG0040A	RWG0040A
U2	1		LMC7101QM5	Texas Instruments	Automotive CMOS Low Power with Rail-to-Rail Input and Output, DBV0005A	DBV0005A
C16, C18	0	1000pF	C2012C0G2A102J	TDK	CAP, CERM, 1000pF, 100V, +/-5%, C0G/NP0, 0805	0805
D3, D4	0	70V	B170-13-F	Diodes Inc.	Diode, Schottky, 70V, 1A, SMA	SMA
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R20, R21	0	1.00	CSR1206FK1R00	Stackpole Electronics Inc	RES, 1.00, 1%, 0.5 W, 1206	1206
R30, R32	0	0	RC0603JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.1W, 0603	0603

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