

## PMP31144 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C14, C38	3	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C2	1	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
C3, C4, C5, C6, C8, C9, C10, C11, C16, C17, C18, C19, C24	13	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
C7	1	180uF	PCR1H181MCL1GS	Nichicon	CAP, Aluminum Polymer, 180 uF, 50 V, +/- 20%, 0.019 ohm, SMD, 2-Leads, Dia 10.5mm, Pin Spacing 8mm SMD	SMD, 2-Leads, Dia 10.5mm, Pin Spacing 8mm
C12, C21	2	0.47uF	CGA3E3X7R1H474K080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C13, C28	2	1000pF	885012206083	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C15	1	330uF	EEE-FK1V331P	Panasonic	CAP, AL, 330 uF, 35 V, +/- 20%, 0.08 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
C20, C26, C27, C35, C36	5	0.1uF	C0603C104K5RACAUTO	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C22	1	0.1uF	C0603C104J5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 0603	0603
C23	1	0.33uF	C0603C334K4RACTU	Kemet	CAP, CERM, 0.33 uF, 16 V, +/- 10%, X7R, 0603	0603
C25, C30	2	150pF	GRM1885C1H151JA01D	MuRata	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C29, C34	2	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C31	1	DNP	DNP	MuRata	DNP	0603
C32	1	0.033uF	C0603C333J3RACTU	Kemet	CAP, CERM, 0.033 uF, 25 V, +/- 5%, X7R, 0603	0603
C33	1	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C37	1	1uF	C1608X5R1H105K080AB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X5R, 0603	0603
C100	1	10uF	GRM21BR61C106KE15L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X5R, 0805	0805
D1, D2, D100	3	100V	MBR1H100SFT3G	ON Semiconductor	Diode, Schottky, 100 V, 1 A, SOD-123FL	SOD-123FL
D3, D4, D101, D102	4	30V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
J1, J2	2		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
J3	1		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
L1, L2	2	47uH	74435574700	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 47 uH, 6.8 A, 0.0335 ohm, SMD	18.3x8.9x18.2mm
L3, L5	2	60 ohm	742792410	Würth Elektronik	Ferrite Bead, 60 ohm @ 100 MHz, 6 A, 1806	1806
L4	1		XGL4020-471MEC	Coilcraft	Shielded Power Inductors	SMT 4MM0 4MM0
L6	1				COUPLED INDUCTOR	
Q1, Q2	2	80V	CSD19502Q5B	Texas Instruments	MOSFET, N-CH, 80 V, 100 A, DNK0008A (VSON-CLIP-8)	DNK0008A
Q3	1	-45V	BCM857BS,115	Nexperia	Bipolar (BJT) Transistor Array 2 PNP (Dual) Matched Pair 45V 100mA 175MHz 300mW Surface Mount 6-TSSOP	TSSOP6
R1	1	10	CRCW060310R0JNEAHP	Vishay-Dale	RES, 10, 5%, 0.25 W, 0603	0603
R2, R4, R33, R34, R100	5	10	RT0603DRE0710RL	Yageo America	RES, 10.0, 0.5%, 0.1 W, 0603	0603
R3, R10	2	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
R5	1	0.025	CSRN2010FK25L0	Stackpole Electronics Inc	RES, 0.025, 1%, 1 W, 2010	2010
R6	1	3.24	CRCW12063R24FKEA	Vishay-Dale	RES, 3.24, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R7	1	4.7	RC0805FR-074R7L	Yageo America	RES, 4.70, 1%, 0.125 W, 0805	0805
R8	1	0.007	KRL3264-C-R007-G-T1	Susumu Co Ltd	RES, 0.007, 2%, 1 W, 2512	2512

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R9	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R11	1	1.00k	RT0603DRD071KL	Yageo	RES, 1.00 k, 0.5%, 0.1 W, 0603	0603
R12, R101	2	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	0603
R13, R14	2	100	ERJ-3EKF1000V	Panasonic	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R15	1	90.9k	CRCW060390K9FKEA	Vishay-Dale	RES, 90.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R16	1	10.5k	CRCW060310K5FKEA	Vishay-Dale	RES, 10.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R17	1	16.5k	RC0603FR-0716K5L	Yageo	RES, 16.5 k, 1%, 0.1 W, 0603	0603
R18	1	147k	RC0603FR-07147KL	Yageo	RES, 147 k, 1%, 0.1 W, 0603	0603
R19	1	88.7k	CRCW060388K7FKEA	Vishay-Dale	RES, 88.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R20	1	68.0k	RC0603FR-0768KL	Yageo	RES, 68.0 k, 1%, 0.1 W, 0603	0603
R21, R23, R29, R31	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R22, R30	2	100k	PV36W104C01B00	Bourns	Potentiometer, 100k Ohm, 0.5W, TH	9.53x4.83mm
R24	1	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R25	1	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R26	1	2.20k	RC0603FR-072K2L	Yageo	RES, 2.20 k, 1%, 0.1 W, 0603	0603
R27	1	20.0k	RC0603FR-0720KL	Yageo	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R28	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R32	1	8.25k	CRCW06038K25FKEA	Vishay-Dale	RES, 8.25 k, 1%, 0.1 W, 0603	0603
TP1, TP4, TP6, TP7, TP15	5		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP5, TP10	3		5014	Keystone	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
TP3, TP8, TP9, TP11, TP13	5		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP12, TP14	2		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1	1		INA293A2IDBVR	Texas Instruments	INA293 High-Voltage, High Bandwidth, Unidirectional, 110-V Common-Mode, Current-Sense Amplifier, DBV0005A (SOT-23-5)	DBV0005A
U2	1		LM5122MHX/NOPB	Texas Instruments	3-65V Wide Vin, Current Mode Synchronous Boost Controller with Multiphase Capability, PWP0020A (HTSSOP-20)	PWP0020A
U3	1		TLC272AID	Texas Instruments	LinCMOS(TM) Precision Dual Operational Amplifier, 4 to 16 V, -40 to 85 degC, 8-pin SOIC (D8), Green (RoHS & no Sb/Br)	D0008A
U4	1	LM4040D30	LM4040D30IDBZR	Texas Instruments	Precision Micropower Shunt Voltage Reference, 1% accuracy, 3 V, 15 ppm / degC, 15 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

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