

PMP31202 Rev B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C6, C9, C10, C15, C16, C17, C18, C19, C24, C25, C26, C27, C28, C57, C58, C59, C60, C61, C66, C67, C68, C69, C70	24	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C2, C5, C8, C20, C23, C40, C41, C62, C65, C82, C83	11	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	805
C3, C4, C21, C22, C63, C64	6	0.01uF	GRM188R72A103KA01D	MuRata	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	603
C7	1	100uF	EEH-ZC1H101P	Panasonic	CAP, Polymer Hybrid, 100 uF, 50 V, +/- 20%, 0.028 ohm, AEC-Q200 Grade 1, D10xL10.2mm SMD	D10xL10.2mm
C12, C54	2	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	805
C13, C55	2	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C14, C56	2	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0603	603
C29, C30, C71, C72	4	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C35, C36, C73, C78	4	330uF	EEHZC1E331P	Panasonic	CAP, Polymer Hybrid, 330 uF, 25 V, +/- 20%, 20 ohm, 10x10 SMD	10x10
C37, C38, C39, C42, C43, C44, C79, C80, C81, C84, C85, C86	12	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
C45, C46, C51, C87, C88	5	33pF	06031A330JAT2A	AVX	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	603
C47	1	330pF	GRM188R71H331KA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0603	603
C48	1	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C49	1	0.33uF	GRM188R71C334KA01D	MuRata	CAP, CERM, 0.33 uF, 16 V, +/- 10%, X7R, 0603	603
C50, C89	2	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7R, 0603	603
C52	1	0.015uF	GRM188R71E153KA01D	MuRata	CAP, CERM, 0.015 uF, 25 V, +/- 10%, X7R, 0603	603
D1, D2, D5, D6	4	60V	PMEG6010CEJ,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D3, D4, D7, D8	4	40V	B340A-13-F	Diodes Inc.	Diode, Schottky, 40 V, 3 A, SMA	SMA
J1, J3	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
J2, J6	2		TSM-102-03-T-SV	Samtec	Header, 2.54mm, 2x1, Tin, SMT	Header, 2.54mm, 2x1, SMT
J4, J5	2		CB70-14-CY	Panduit	Terminal 90A Lug	CB70-14-CY
L1	1	150nH	PA2607.151NLT	Pulse Engineering	Inductor, Ferrite Bead, Ferrite, 150 nH, 41 A, 0.00029 ohm, SMD	10.31x7.65mm
L2	1	1uH	XAL1010-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 uH, 43.5 A, 0.001 ohm, SMD	Inductor, 11.3x10x10mm
L3, L4, L5, L6	4	6.8uH	XAL1510-682MEB	Coilcraft	Inductor, Shielded, Composite, 6.8 uH, 26 A, 0.00417 ohm, SMD	15.4 x 11 x 16.4mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
NWA, SW1, SW2, SW3, SW4, TP2, TP6, TP7, TP8, TP9	10		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	8	40V	NVMFS5C456NL	ON Semiconductor	MOSFET, N-CH, 40 V, 61 A, AEC-Q101, SO-8FL	SO-8FL
R1, R20, R21, R22, R24, R32, R51, R52, R53	9	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	603
R2, R3, R33, R34	4	2.21	CRCW06032R21FKEA	Vishay-Dale	RES, 2.21, 1%, 0.1 W, 0603	603
R4, R5, R35, R36	4	4.75	CRCW06034R75FKEA	Vishay-Dale	RES, 4.75, 1%, 0.1 W, 0603	603
R6, R7, R37, R38, R61, R71, R371, R381	8	0.007	PE1206FRF470R007L	Yageo America	RES, 0.007, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
R10, R13, R41, R44	4	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R11, R12, R42, R43	4	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	603
R26	1	221k	CRCW0603221KFKEA	Vishay-Dale	RES, 221 k, 1%, 0.1 W, 0603	603
R27	1	121k	CRCW0603121KFKEA	Vishay-Dale	RES, 121 k, 1%, 0.1 W, 0603	603
R28	1	19.6k	CRCW060319K6FKEA	Vishay-Dale	RES, 19.6 k, 1%, 0.1 W, 0603	603
R29	1	5.49k	CRCW06035K49FKEA	Vishay-Dale	RES, 5.49 k, 1%, 0.1 W, 0603	603
R30, R55	2	110k	CRCW0603110KFKEA	Vishay-Dale	RES, 110 k, 1%, 0.1 W, 0603	603
R31	1	18.2k	CRCW060318K2FKEA	Vishay-Dale	RES, 18.2 k, 1%, 0.1 W, 0603	603
TP1, TP4	2		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP3, TP5	2		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1, U2	2		LM5143QRHARQ1	Texas Instruments	Automotive 3.5-V to 65-V Dual Synchronous Buck Controller With Low IQ	VQFNP40
C11, C53	0	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7R, 0603	603
C31, C34, C74, C77	0	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C32, C33, C75, C76	0	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	603
R8, R9, R39, R40	0	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603	603
R14, R15, R16, R17, R45, R46, R47, R48	0	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	603
R18, R19, R49, R50	0	4.7	CRCW12064R70JNEAHP	Vishay-Dale	RES, 4.7, 5%, 0.75 W, AEC-Q200 Grade 0, 1206	1206
R25, R54	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	603

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