

## PMP31073 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C29, C46, C69, C82, C105	6	DNP	C0805C221J5GACTU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0805	805
C2, C30, C47, C70, C83, C106	6	270uF	EEHZA1V271P	Panasonic	CAP, Polymer Hybrid, 270 uF, 35 V, +/- 20%, 20 ohm, 10x10 SMD	10x10
C3, C31, C48, C71, C84, C107	6	330uF	EEHZC1E331P	Panasonic	CAP, Polymer Hybrid, 330 uF, 25 V, +/- 20%, 20 ohm, 10x10 SMD	10x10
C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117	60	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C14, C15, C59, C60, C95, C96	6	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, 0603	603
C16, C17, C23, C24, C61, C62, C67, C68, C97, C98, C103, C104	12	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C18, C19, C63, C64, C99, C100	6	1uF	06033C105KAT2A	AVX	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
C20, C21, C65, C66, C101, C102	6	0.47uF	CGA3E3X7R1H474M080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0603	603
C22, C42, C43	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	603
C25	1	0.047uF	06033C473JAT2A	AVX	CAP, CERM, 0.047 uF, 25 V, +/- 5%, X7R, 0603	603
C26	1	1500pF	06031C152JAT2A	AVX	CAP, CERM, 1500 pF, 100 V, +/- 5%, X7R, 0603	603
C27	1	0.33uF	C1608X7R1H334K080AC	TDK	CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, 0603	603
C28	1	220pF	06035A221JAT2A	AVX	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C44	1	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	603
C45	1	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	805

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
D1, D4, D5, D8, D9, D12	6	60V	B360A-13-F	Diodes Inc.	Diode, Schottky, 60 V, 3 A, SMA	SMA
D2, D3, D6, D7, D10, D11	6	60V	PMEG6010CEH,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-123F	SOD-123F
IN1	1		5014	Keystone	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
J1	1		GBC06DABN-M30	Sullins Connector Solutions	Header, 2.54mm, 6x2, Gold, Black, SMT	Header, 2.54mm, 6x2, SMT
L1, L2, L3, L4, L5, L6	6	4.7uH	IHLP8787MZER4R7M5A	Vishay	IHLP-8787MZ-5A	SMD2
OUT1, Vin, Vout	3		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
Q1, Q2, Q4, Q5, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q32, Q33, Q34, Q35	24	40V	IAUC100N04S6L025	Infineon Technologies	MOSFET, N-CH, 40 V, 100 A, PG-TDSON-8	PG-TDSON-8
Q3, Q6, Q7, Q9, Q10, Q11	6	60V	2N7002E-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 0.24 A, SOT-23	SOT-23
Q8, Q20, Q21, Q30, Q31	5	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
R1, R37, R43, R69, R73, R99	6	21	ERJ-8ENF21R0V	Panasonic	RES, 21.0, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R2, R39, R44, R70, R74, R100	6	0.0015	ERJ-M1WTF1M5U	Panasonic	RES, 0.0015, 1%, 1 W, 2512	2512
R3, R5, R10, R12, R13, R15, R17, R22, R23, R26, R27, R40, R42, R45, R46, R47, R48, R51, R52, R54, R56, R59, R60, R63, R64, R71, R72, R75, R76, R77, R78, R81, R82, R84, R86, R89, R90, R93, R94, R101, R102	41	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R4, R6, R9, R18, R25, R32	6	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R7, R8	2	100k	CPF0603B100KE	TE Connectivity	RES, 100 k, 0.1%, 0.063 W, 0603	603
R11, R49, R50, R79, R80	5	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R14, R16, R53, R55, R83, R85	6	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R19, R20, R57, R58, R87, R88	6	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R21, R24, R61, R62, R91, R92	6	8.87k	RT0603DRE078K87L	Yageo America	RES, 8.87 k, 0.5%, 0.1 W, 0603	603
R28, R29, R31, R65, R66, R95, R96	7	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R30, R67, R68, R97, R98	5	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R33	1	49.9k	RC0603FR-0749K9L	Yageo	RES, 49.9 k, 1%, 0.1 W, 0603	603
R34	1	49.9	RC0603FR-0749R9L	Yageo	RES, 49.9, 1%, 0.1 W, 0603	603
R35	1	2.61k	RC0603FR-072K61L	Yageo	RES, 2.61 k, 1%, 0.1 W, 0603	603
R36	1	8.66	RT0603DRE078R66L	Yageo America	RES, 8.66, 0.5%, 0.1 W, 0603	603
R38	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R41	1	1	CRCW06031R00JNEA	Vishay-Dale	RES, 1.0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
SYNCIN1, SYNCIN2, SYNCIN3, SYNCIN4, SYNCIN5, SYNCIN6	6		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
T1, T2, T3, T4	4		7461098	Würth Electronics	Conn Terminal M 1 POS Press Fit ST 25 Terminal 1 Port	TERM_REDCUBE_M6
TP1, Vin_GND, Vout_GND	3		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
U1, U2, U6, U7, U8, U9	6		LM5122QMHX/NOPB	Texas Instruments	Automotive Grade, 3-65V Wide Vin, Current Mode Synchronous Boost Controller with Multiphase Capabili, PWP0020A (TSSOP-20)	PWP0020A
U3	1		TLC555QDRQ1	Texas Instruments	Automotive LinCMOS TIMER, D0008A (SOIC-8)	D0008A
U4	1		CD74HC4017QPWRG4Q1	Texas Instruments	Automotive Catalog Decade Counter/Divider with 10 Decoded Outputs, PW0016A (TSSOP-16)	PW0016A
U5	1		LM2936Q-Q1	Texas Instruments	Ultra-Low Quiescent Current LDO Voltage Regulator, 4-pin SOT-223, Pb-Free	DCY0004A

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