

PMP21096 REV C Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCBB	1		PMP21096	Any	Printed Circuit Board	
C1, C4, C7, C11, C25, C34, C39, C47, C48, C49, C61, C64, C72, C78, C82, C83, C84, C88, C90, C91, C99, C100, C101	23	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C2, C3, C5, C6, C8, C9, C17	7	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
C10, C98	2	68uF	EEE-FK1J680UP	Panasonic	CAP, AL, 68 uF, 63 V, +/- 20%, 0.65 ohm, SMD	SMT Radial F
C12, C53	2	100uF	EEE-FK1H101P	Panasonic	CAP, AL, 100 uF, 50 V, +/- 20%, 0.34 ohm, SMD	SMT Radial F
C13, C14	2	2200pF	GRM155R72A222KA01D	MuRata	CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, 0402	0402
C15, C16, C18, C19, C20, C21, C22, C40, C41, C42, C43, C54, C55, C57, C58, C59	16	10uF	GRM32ER71H106MA12	MuRata	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
C23, C28, C35, C62, C66, C73, C77, C96	8	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
C24, C63	2	1000pF	GRM1555C1H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C26, C65	2	1uF	CGA3E1X7R1C105K080AC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C27	1	1uF	GCJ21BR71H105MA01L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0805	0805
C29, C67, RH1, RH2, RL1, RL2	6	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
C30, C36, C68, C74	4	220pF	GRM1555C1H221JA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C31, C69	2	0.047uF	C1005X7R1H473K050BB	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0402	0402
C32, C70	2	0.033uF	GRM155R71E333KA88D	MuRata	CAP, CERM, 0.033 uF, 25 V, +/- 10%, X7R, 0402	0402
C33, C71	2	3300pF	GCM155R71H332KA37D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C38, C76	2	6800pF	GRM155R71H682KA88D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0402	0402
C44, C56, C56, C60, C93	5	4.7uF	CGA4J1X7R1E475K125AC	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C45, C81	2	0.33uF	CGA3E3X7R1H334K080AB	TDK	CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C46, C80	2	0.22uF	GRM155R71A224KE01D	MuRata	CAP, CERM, 0.22 uF, 10 V, +/- 10%, X7R, 0402	0402
C50, C52, C85, C87	4	560pF	GRM1555C1H561JA01D	MuRata	CAP, CERM, 560 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C51, C86	2	0.01uF	GCM155R71E103KA37D	MuRata	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0402	0402
C89, C92	2	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
D1, D2	2	28V	SMBJ28A-13-F	Diodes Inc.	Diode, TVS, Uni, 28 V, 45.4 Vc, SMB	SMB
D3, D11	2	60V	PMEG6010CEJ,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D4, D5, D12, D13	4	100V	BAS516,115	NXP Semiconductor	Diode, Switching, 100V, 0.25A, SOD-523	SOD-523
D8, D14	2	8.2V	BZT52C8V2T-7	Diodes Inc.	Diode, Zener, 8.2 V, 300 mW, SOD-523	SOD-523
D10, D18	2	40V	B340A-13-F	Diodes Inc.	Diode, Schottky, 40 V, 3 A, SMA	SMA
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

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H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J3, J4	2		632 723 300 011	Würth Elektronik	Connector, Receptacle, USB Type C, R/A	Connector, Receptacle, USB Type C, R/A, THT/SMT
L1	1	2.2uH	XAL1010-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 32 A, 0.00255 ohm, SMD	Inductor, 11.3x10x10mm
L2, L3, L5, L7, L8	5	50 ohm	BLM31SN500SZ1L	MuRata	Ferrite Bead, 50 ohm @ 100 MHz, 12 A, 1206	1206
L4, L6	2	6.8uH	XAL1510-682MEB	Coilcraft	Inductor, Shielded, Composite, 6.8 µH, 26 A, 0.00417 ohm, SMD	15.4 x 11 x 16.4mm
L12, L13	2	400nH	XAL4020-401MEB	Coilcraft	Inductor, Shielded, Composite, 400 nH, 12.5 A, 0.01 ohm, SMD	4x2.1x4mm
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 x 0.200 inch
Q1	1	60V	NVMFS5C604NLT1G	ON Semiconductor	MOSFET, N-CH, 60 V, 287 A, AEC-Q101, DFN5 5x6mm	DFN5 5x6mm
Q2, Q3, Q4, Q5, Q7, Q8, Q9, Q10	8	40V	NVMFS5C426NT1G	ON Semiconductor	MOSFET, N-CH, 40 V, 235 A, AEC-Q101, SO-8FL	SO-8FL
Q6, Q11	2	40V	BSZ034N04LSATMA1	Infineon Technologies	MOSFET, N-CH, 40 V, 40 A, 8-PG-TSDSON	8-PG-TSDSON
R1, R24	2	97.6k	CRCW040297K6FKED	Vishay-Dale	RES, 97.6 k, 1%, 0.063 W, 0402	0402
R2, R3, R5, R25, R26, R28, R41, R56	8	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
R4, R27	2	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, 0402	0402
R6, R29	2	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R7, R30	2	93.1k	CRCW040293K1FKED	Vishay-Dale	RES, 93.1 k, 1%, 0.063 W, 0402	0402
R8, R31	2	37.4k	CRCW040237K4FKED	Vishay-Dale	RES, 37.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R9, R13, R32, R36	4	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
R10, R11, R33, R34	4	100	RC0402FR-07100RL	Yageo America	RES, 100, 1%, 0.063 W, 0402	0402
R12, R35	2	47	CRCW040247R0JNED	Vishay-Dale	RES, 47, 5%, 0.063 W, 0402	0402
R14, R37	2	6.65k	CRCW04026K65FKED	Vishay-Dale	RES, 6.65 k, 1%, 0.063 W, 0402	0402
R15, R38	2	9.76k	CRCW04029K76FKED	Vishay-Dale	RES, 9.76 k, 1%, 0.063 W, 0402	0402
R16, R39	2	8.06k	CRCW04028K06FKED	Vishay-Dale	RES, 8.06 k, 1%, 0.063 W, 0402	0402
R17, R40	2	9.53k	CRCW04029K53FKED	Vishay-Dale	RES, 9.53 k, 1%, 0.063 W, 0402	0402
R19, R42	2	0.005	WSL12065L000FEA	Vishay-Dale	RES, 0.005, 1%, 0.25 W, 1206	1206
R20, R43	2	24.9	CRCW040224R9FKED	Vishay-Dale	RES, 24.9, 1%, 0.063 W, 0402	0402
R21, R44	2	120	ERJ-P08J121V	Panasonic	RES, 120, 5%, 0.667 W, AEC-Q200 Grade 0, 1206	1206
R22, R45	2	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R23, R46	2	1.00k	RC0402FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.0625 W, 0402	0402
R47, R48, R50	3	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R49	1	7.87k	CRCW04027K87FKED	Vishay-Dale	RES, 7.87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R51	1	158k	CRCW0402158KFKED	Vishay-Dale	RES, 158 k, 1%, 0.063 W, 0402	0402
R52	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
R53	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
RS1, RS2	2	0.006	KRL6432E-M-R006-F-T1	Susumu Co Ltd	RES, 0.006, 1%, 3 W, AEC-Q200 Grade 0, 2512 WIDE	2512 WIDE
TP1, TP3, TP8	3	Red	5000	Keystone	Test Point, TH, Miniature, Red	Keystone5000
TP2, TP6, TP11	3	Black	5001	Keystone	Test Point, TH, Miniature, Black	Keystone5001
TP7, TP12	2	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
U1	1		LM74700QDBVTQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A
U2, U4	2		LM5176PWPR	Texas Instruments	55 V Wide VIN Synchronous 4-Switch Buck-Boost Controller, PWP0028C (TSSOP-28)	PWP0028C
U3, U5	2		TPS25740BRGER	Texas Instruments	USB Type-C and USB PD Source Controller, RGE0024H (VQFN-24)	RGE0024H
U6	1		TLV3501AQDBVRQ1	Texas Instruments	Automotive Catalog 4.5ns Rail-to-Rail, High Speed Comparator in Microsized Packages, DBV0006A (SOT-23-6)	DBV0006A

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U7	1		CD74HC4017QPWRG4Q1	Texas Instruments	High-Speed CMOS Logic Decade Counter/Divider with 10 Decoded Outputs, PW0016A	PW0016A
U8	1		TPS79801QDGNRQ1	Texas Instruments	Single Output Automotive LDO, 50 mA, Adjustable 1.275 to 28 V Output, 3 to 50 V Input, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008B
C37, C75, C94, C95	0	3300pF	GRM2165C2A332JA01D	MuRata	CAP, CERM, 3300 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
R18, R54, R55, R57	0	1.50	CRCW12101R50FKEAHP	Vishay-Dale	RES, 1.50, 1%, 0.75 W, AEC-Q200 Grade 0, 3.2x2.5mm	3.2x2.5mm

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