

PMP21887 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP21887	Any	Printed Circuit Board	
C1	1	100pF	C0402C101J3GACTU	Kemet	CAP, CERM, 100 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C2, C3	2	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C4, C5, C7, C8	4	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
C6, C20	2	4.7uF	C0603C475K8PACTU	Kemet	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	0603
C9, C119, C129, C139, C149, C159, C169, C219, C229, C239, C249, C259, C269	13	1000pF	GRM155R61E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X5R, 0402	0402
C10, C31, C610	3	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C32, C33	2	22uF	GRM31CR61C226KE15L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 10%, X5R, 1206	1206
C34, C35, C36	3	270uF	EEHZA1V271P	Panasonic	CAP, Polymer Hybrid, 270 uF, 35 V, +/- 20%, 20 ohm, 10x10 SMD	10x10
C34A, C35A, C36A	3	1uF	UPW2G010MPD1TD	Nichicon	CAP, AL, 1 uF, 400 V, +/- 20%, TH	D10xL12.5mm
C90	1	10uF	GRM31CR61E106KA12L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 1206	1206
C91	1	22uF	GRM31CR60J226KE19L	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 10%, X5R, 1206	1206
C92, C93	2	1uF	C1608X5R1E105K080AC	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0603	0603
C101, C102, C103, C104, C105, C106, C118, C128, C138, C148, C158, C168, C201, C202, C203, C204, C205, C206, C218, C228, C238, C248, C258, C268	24	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
C110, C120, C130, C140, C150, C160, C210, C220, C230, C240, C250, C260	12	4700pF	GRM155R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0402	0402

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C111, C112, C113, C121, C122, C123, C131, C132, C133, C141, C142, C143, C151, C152, C153, C161, C162, C163, C211, C212, C213, C221, C222, C223, C231, C232, C233, C241, C242, C243, C251, C252, C253, C261, C262, C263	36	22uF	C3225X7R1C226K250AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 10%, X7R, 1210	1210
C114, C124, C134, C144, C154, C164, C214, C224, C234, C244, C254, C264	12	2.2uF	GRM188C71E225KE11D	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7S, 0603	0603
C115, C125, C135, C145, C155, C165, C215, C225, C235, C245, C255, C265	12	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C116, C117, C126, C127, C136, C137, C146, C147, C156, C157, C166, C167, C216, C217, C226, C227, C236, C237, C246, C247, C256, C257, C266, C267	24	2.2uF	C1005X5R1A225K050BC	TDK	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, 0402	0402

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C401, C405, C409, C413, C417, C421, C425, C429, C433, C441, C445, C449, C453, C457, C461, C465, C469, C473, C481, C485, C489, C493, C497, C501, C505, C509, C513, C521, C525, C529, C533, C537, C541, C545, C549, C553	36	4.7uF	GRM155R60G475ME47J	MuRata	CAP, CERM, 4.7 μ F, VAC/4 VDC,+/- 20%, X5R, 0402	0402
C402, C406, C410, C414, C418, C422, C426, C430, C434, C438, C442, C446, C450, C454, C458, C462, C466, C470, C474, C478, C482, C486, C490, C494, C498, C502, C506, C510, C514, C518, C522, C526, C530, C534, C538, C542, C546, C550, C554, C558	40	1uF	GRM155R70J105KA12D	MuRata	CAP, CERM, 1 uF, 6.3 V,+/- 10%, X7R, 0402	0402

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C403, C407, C411, C415, C419, C423, C427, C431, C435, C439, C443, C447, C451, C455, C459, C463, C467, C471, C475, C479, C483, C487, C491, C495, C499, C503, C507, C511, C515, C519, C523, C527, C531, C535, C539, C543, C547, C551, C555, C559	40	0.47uF	JMK105B7474KVHF	Taiyo Yuden	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X7R, 0402	0402
C404, C408, C412, C416, C420, C424, C428, C432, C436, C437, C440, C444, C448, C452, C456, C460, C464, C468, C472, C476, C477, C480, C484, C488, C492, C496, C500, C504, C508, C512, C516, C517, C520, C524, C528, C532, C536, C540, C544, C548, C552, C556, C557, C560	44	0.22uF	GRM155R71C224KA12D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	0402
C561, C562, C563, C564, C565, C566, C567	7	47uF	GRM31CR61A476KE15L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 10%, X5R, 1206	1206
C601, C602, C606	3	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X5R, 0402	0402
C611	1	10uF	C2012X5R1E106K125AB	TDK	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C701, C702, C703, C704, C705, C706, C707, C708, C709, C710, C711, C712	12	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C713, C714, C715, C716, C717, C718, C719, C720, C721, C722, C723, C724, C725, C726, C727, C728, C729, C730, C731, C732, C733, C734, C735, C736, C737, C738, C739, C740, C741, C742, C743, C744, C745, C746, C747, C748, C749	37	470uF	EEFSX0D471E4	Panasonic	CAP, Aluminum Polymer, 470 μF, 2 V, +/- 20%, 0.0045 ohm, 7343-20, SMD	7343-20

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C750, C751, C752, C753, C754, C755, C756, C757, C758, C759, C760, C761, C762, C763, C764, C765, C766, C767, C768, C769, C770, C771, C772, C773, C774, C775, C776, C777, C778, C779, C780, C781, C782, C783, C784, C785, C786, C787, C788, C789, C790, C791, C792, C793, C794, C795, C796, C797, C798, C799, C800, C801, C802, C803, C804, C805, C806, C807, C808, C809, C810, C811,	72	47uF	C3216X5R1A476M160AB	TDK	CAP, CERM, 47 uF, 10 V, +/- 20%, X5R, 1206	1206
FID4, FID5, FID6	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
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, J3, J94, J603	4		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J2	1		TSW-105-07-G-D	Samtec	Header, 100mil, 5x2, Gold, TH	5x2 Header
J20	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J31, J32	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
J33, J34	2		WF4202-2WR04WA1	WCON	4.20mm Wafer Doble Row Right Angle Type	HDR8
J35	1		CP-01424110	CviLux Corporation	CP-014 Series Dual Rows Right Angle DIP Headers	HDR24
J90	1		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
J601, J602	2		U.FL-R-SMT-1(01)	Hirose Electric Co. Ltd.	Receptacle, Ultra Miniature Coaxial, Male Pin, 50 ohm, SMT	Ultra small CO-AX SMD
L90	1	2.2uH	VLF302512MT-2R2M	TDK	Inductor, Shielded, Ferrite, 2.2 uH, 1.26 A, 0.066 ohm, SMD	IND_3x1.2x3mm
L110, L120, L130, L140, L150, L160, L210, L220, L230, L240, L250, L260	12	120nH	SLA40476B-150L	Inter-Technical Group	Inductor, Ferrite, 120 nH, 77 A, 0.000125 ohm, SMD Use either Item # 42 or Item # 43	10x6mm

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L111, L121, L131, L141, L151, L161, L211, L221, L231, L241, L251, L261	12	100nH	74431012010A	Würth Elektronik	Inductor, 100 nH, 60 A, 0.000121 ohm, SMD Use either Item # 42 or Item # 43	9.7x5.5mm
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
Q601, Q602	2	25V	CSD16556Q5B	Texas Instruments	MOSFET, N-CH, 25 V, 40 A, DNK0008A (VSON-CLIP-8) Test Interface Only	DNK0008A
Q610	1	40 V	MMBT3904T-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-523	SOT-523
Q611	1	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
R1, R2, R33, R118, R128, R138, R148, R158, R168, R218, R228, R238, R248, R258, R268, R610	16	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R3	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4, R5, R8, R9, R113, R115, R116, R117, R123, R125, R126, R127, R133, R135, R136, R137, R143, R145, R146, R147, R153, R155, R156, R157, R163, R165, R166, R167, R213, R215, R216, R217, R223, R225, R226, R227, R233, R235, R236, R237, R243, R245, R246, R247, R253, R255, R256, R257, R263, R265, R266, R267	52	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R6	1	1.30Meg	CRCW04021M30FKED	Vishay-Dale	RES, 1.30 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R7	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	1	301k	CRCW0402301KFKED	Vishay-Dale	RES, 301 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11	1	86.6k	CRCW040286K6FKED	Vishay-Dale	RES, 86.6 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12, R15, R16, R17, R18, R19, R20, R611	8	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R13, R14	2	121k	CRCW0402121KFKED	Vishay-Dale	RES, 121 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R21	1	200	RC0603FR-07200RL	Yageo	RES, 200, 1%, 0.1 W, 0603	0603
R22, R23	2	255	CRCW0603255RFKEA	Vishay-Dale	RES, 255, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R24	1	1k	3296W-1-102LF	Bourns	TRIMMER, 1k ohm, 0.5W, TH	9.5x10x4.8mm
R25	1	73.2	CRCW040273R2FKED	Vishay-Dale	RES, 73.2, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R31	1	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R32, R606, R607	3	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R81, R85	2	1.00	ERJ-8RQF1R0V	Panasonic	RES, 1.00, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R110, R111, R120, R121, R130, R131, R140, R141, R150, R151, R160, R161, R210, R211, R220, R221, R230, R231, R240, R241, R250, R251, R260, R261	24	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R112, R122, R132, R142, R152, R162, R212, R222, R232, R242, R252, R262	12	2.2	CRCW04022R20JNED	Vishay-Dale	RES, 2.2, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R114, R124, R134, R144, R154, R164, R214, R224, R234, R244, R254, R264	12	110k	CRCW0402110KFKED	Vishay-Dale	RES, 110 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R600, R603	2	1.5	CRCW04021R50JNED	Vishay-Dale	RES, 1.5, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R601, R602	2	0.003	LVK25R003FER	Ohmite	RES, 0.003, 1%, 2 W, 1224	1224
SR 31	1	0.0005	WSL4026L5000FEB	Vishay-Dale	RES, 0.0005, 1%, 3 W, 4026	4026
T31, T32, T33, T35, T36, T37	6		CB70-14-CY	Panduit	Terminal 90A Lug	CB70-14-CY
TP1, TP2	2		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP3, TP4, TP90, TP91	4		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP5, TP38, TP40, TP92, TP600	5		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_ Compact
TP20, TP33, TP36, TP37, TP39	5		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
TP31, TP32	2		5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
TP34, TP35	2		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
TP81, TP82, TP85, TP86	4		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_ Miniature
U1	1		TPS536C7B1RSLR	Texas Instruments	TPS536C7B1RSLR, RSL0048B (VQFN-48)	RSL0048B

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U90	1		TPS73233DBVR	Texas Instruments	Single Output Fast Transient Response LDO, 200 mA, Fixed 3.3 V Output, 1.7 to 5.5 V Input, with Reverse Current Protection, 5-pin SOT-23 (DBV), -40 to 85 degC, Green (RoHS & no Sb/Br)	DBV0005A
U91	1		TPS62163DSGR	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 5 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/Br)	DSG0008A
U110, U120, U130, U140, U150, U160, U210, U220, U230, U240, U250, U260	12		CSD95480RWJ	Texas Instruments	Synchronous Buck NexFET Power Stage, RWJ0041A (VQFN-CLIP-41)	RWJ0041A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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