

## PMP21697 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP21697	Any	Printed Circuit Board	
C1, C4, C30, C37, C38, C551	6	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
C2, C5, C13, C14, C15, C16, C17, C18, C21, C22, C23, C24, C25, C26, C27, C28	16	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C3, C6, C7, C8, C31, C32, C33, C34, C35, C36	10	68uF	50PFV68M8X10.5	Rubycon	CAP, Polymer Hybrid, 68 uF, 50 V, +/- 20%, 8x10 SMD	8x10
C19, C20	2	330pF	08051C331KAT2A	AVX	CAP, CERM, 330 pF, 100 V, +/- 10%, X7R, 0805	0805
C29, C39, C40	3	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C51	1	1uF	GRM188R61H105KAALD	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X5R, 0603	0603
C52	1	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0805	0805
C53, C54	2	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	0603
C55, C60, C61	3	0.15uF	CGA3E3X7R1H154K080AB	TDK	CAP, CERM, 0.15 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C56, C57, C63, C64	4	100pF	GRM1885C2A101JA01D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C58	1	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603 / Short to disable dithering	0603
C59	1	22nF	GCM155R71E223KA55D	MuRata	CAP 22nF 25V ±10% 0402 (1005 Metric) Thickness 0.6mm SMD	0402
C62	1	10uF	GCM21BC71C106KE36L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0805	0805
C65	1	390pF	GCM155R71H391KA37D	MuRata	CAP 390pF 50V ±10% 0402 (1005 Metric) Thickness 0.6mm SMD	0402
C66	1	0.33uF	GRM188R71C334KA01D	MuRata	CAP, CERM, 0.33 uF, 16 V, +/- 10%, X7R, 0603	0603
C67	1	0.47uF	GRM188R71C474KA88D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, 0603	0603
C68	1	470pF	GCM155R71H471KA37D	MuRata	CAP 470pF 16V ±10% 01005 (0402 Metric) Thickness 0.22mm SMD	0402
C69	1	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C552	1	0.1uF	GCM155R71C104KA55D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
D51, D52	2	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D53	1	60V	PMEG6010CEJ,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D75	1	Green	LTST-C190KGKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
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
J51, J52	2		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
J53	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
L1	1	2uH	XAL1580-202MEB	Coilcraft	Inductor, Shielded, Composite, 2 uH, 39.9 A, 0.001909 ohm, SMD	15.2x8x16.2mm
L11, L22	2	600nH	XAL5030-601MEB	Coilcraft	Inductor, Shielded, Composite, 600 nH, 17.7 A, 0.00411 ohm, AEC-Q200 Grade 1, SMD	5.3x31.x5.5mm
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
Q1, Q2, Q3, Q5, Q6, Q7, Q8	7	60V	SQJA06EP	Vishay	MOSFET, N-CH, 60 V, 57 A, AEC-Q101	PowerPAK_SO-8L
R1	1	0.001	PML100HZPJV1L0	Rohm	RES, 0.001, 5%, 2 W, 2512 WIDE	2512 WIDE
R8	1	0.002	FCSL64R002GER	Ohmite	RES, 0.002, 2%, 2 W, 2512 WIDE	2512 WIDE

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R11, R12, R13, R15, R16, R17, R18, R64, R65	9	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
R19, R20	2	2.2	CRCW12062R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R51, R55	2	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R52	1	64.9k	CRCW060364K9FKEA	Vishay-Dale	RES, 64.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R53, R61	2	93.1k	RC0603FR-0793K1L	Yageo	RES, 93.1 k, 1%, 0.1 W, 0603	0603
R54	1	20	CRCW040220R0JNED	Vishay-Dale	RES, 20, 5%, 63 mW, 0402	0402
R56	1	6.49k	CRCW06036K49FKEA	Vishay-Dale	RES, 6.49 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R57	1	27	CRCW060327R0JNEA	Vishay-Dale	RES, 27, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R58	1	14.7k	CRCW060314K7FKEA	Vishay-Dale	RES, 14.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R59, R60	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R62, R75	2	2.61k	CRCW06032K61FKEA	Vishay-Dale	RES, 2.61 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R63	1	10.0	RC0603FR-0710RL	Yageo	RES, 10.0, 1%, 0.1 W, 0603	0603
R66	1	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R67	1	12.1k	CRCW040212K1FKED	Basic Passives	Chip Resistor, 12.1 KOhm, +/- 1%, 63 mW, -55 to 155 degC, 0402 (1005 Metric), RoHS, Tape and Reel	0402
R68	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R69, R70, R71, R72	4	100	RC0603FR-07100RL	Yageo	RES, 100, 1%, 0.1 W, 0603	0603
R73, R74	2	2.2 Ohm	CRCW04022R20JNED	Vishay-Dale	2R2 0.063W 5% 0402 (1005 Metric) SMD	0402
T1, T2, T3, T4	4		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
TP1, TP5	2		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
TP2, TP6	2		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
TP7, TP8, TP71	3		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_Compact
TP51, TP57	2		5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
TP52, TP55, TP56, TP61, TP72	5		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP53, TP70	2		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
TP54, TP58, TP62	3		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		LM5176PWPR	Texas Instruments	55 V Wide VIN Synchronous 4-Switch Buck-Boost Controller, PWP0028C (TSSOP-28)	PWP0028C
U2	1		TL432BQDBZRQ1	Texas Instruments	Automotive Catalog Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U3	1		SN74LV1T04DBVR	Texas Instruments	Single Power Supply INVERTER Gate logic level shifter, DBV0005A (SOT-23-5)	DBV0005A
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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