

PMP21669 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC B1	1		PMP21669	Any	Printed Circuit Board	
C1, C2	2	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C8	1	0.1uF	CGA2B3X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C9	1	4700pF	06031C472KAT2A	AVX	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0603	0603
C11, C19	2	2.2uF	UMK316B7225KD-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 1206	1206
C12, C13	2	10uF	GRM32ER7YA106KA12K	MuRata	CAP, CERM, 10 uF, 35 V,+/- 10%, X7R, 1210	1210
C14, C15	2	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	0603
C16	1	0.1uF	CEU4J2X7R1H104K125AE	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C17, C18	2	10uF	CL32B106KBJNNWE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 50 V,+/- 10%, X7R, 1210	1210
C20, C35, C45	3	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C21	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C22, C23, C25	3	22uF	GRM32ER71A226ME20L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, 1210	1210
C24	1	0.047uF	08055C473JAT2A	AVX	CAP, CERM, 0.047 uF, 50 V, +/- 5%, X7R, 0805	0805
C27, C37	2	10uF	CL21B106KOQNNNE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 0805	0805
C28, C38	2	2.2uF	GCM188C71A225K	MuRata	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7S, 0603	0603
C29, C39	2	470pF	GCM155R71H471KA37D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C30, C40	2	820pF	GRM155R72A821KA01D	MuRata	CAP, CERM, 820 pF, 100 V, +/- 10%, X7R, 0402	0402
C31	1	10pF	CGA2B2C0G1H100D050BA	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C32, C33, C42, C43	4	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	0603
C34, C44	2	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
C41	1	33pF	885012005043	Würth Elektronik	CAP, CERM, 33 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C47, C50	2	22uF	GCM31CR71A226KE02	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C51, C52	2	4700pF	GCM155R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
CF1, CF2	2	4.7uF	CGA6P3X7R1H475M250AB	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
D1	1	28V	SMBJ28CA-13-F	Diodes Inc.	Diode, TVS, Bi, 28 V, 45.4 Vc, SMB	SMB
FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
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		1902B	Keystone		Standoff
J1	1		6091	Keystone	Standard Banana Jack, Insulated, Red	6091
J2	1		6092	Keystone	Standard Banana Jack, Insulated, Black	6092
J3, J5, J7	3		111-0702-001	Cinch Connectivity	Binding Post, Red, TH	Receptacle, 1x1 Position, Dia 10.74mm, Red, TH
J4, J6, J8	3		111-0703-001	Cinch Connectivity	Binding Post, Black, TH	Receptacle, 1x1 Position, Dia 10.74mm, Black, TH
L1, L2	2	2.2uH	XAL4020-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 5.5 A, 0.04 ohm, SMD	4x2.1x4mm
L3	1		DLW5BTM102TQ2K	MuRata	Coupled inductor, 2.5 A, 0.034 ohm, SMD	SMD, 5x5mm
L4, L6	2	600 ohm	7427920415	Würth Elektronik	Ferrite Bead, 600 ohm @ 100 MHz, 0.5 A, 0805	0805
L5, L7	2	560nH	XEL4020-561MEB	Coilcraft	Inductor, Shielded, Composite, 560 nH, 11.3 A, 0.008 ohm, AEC-Q200 Grade 1, SMD	
Q1	1	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
R1, R2	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3	1	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R4, R7	2	7.50	CRCW04027R50FKED	Vishay-Dale	RES, 7.50, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R5	1	57.6k	CRCW040257K6FKED	Vishay-Dale	RES, 57.6 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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R6	1	12.7k	CRCW040212K7FKED	Vishay-Dale	RES, 12.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R8, R9	2	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10, R12	2	0	RMCF0603ZT0R00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R13, R14	2	47.5	CRCW040247R5FKED	Vishay-Dale	RES, 47.5, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15	1	50	504L50R0FTNCFT	AT Ceramics	RES, 50, 1%, 0.125 W, AEC-Q200 Grade 1, 0402	0402
R17, R19	2	8.06k	CRCW04028K06FKED	Vishay-Dale	RES, 8.06 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
TP1	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP2	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		LM74700QDBVTQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A
U2	1		LM53635LQRNLRQ1	Texas Instruments	3.5A, 36 V Synchronous, 2.1MHz, Automotive Step Down DC-DC Converter, RNL0022A (VQFN-HR-22)	RNL0022A
U3, U4	2		TPS62810QWRWYRQ1	Texas Instruments	Automotive Low Input Voltage, Adjustable-Frequency Step-down Converter, RWY0009A (VQFN-HR-9)	RWY0009A
C46	0	820pF	C0603C821K5RACTU	Kemet	CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0603	0603
R11	0	7.5	CRCW06037R50JNEA	Vishay-Dale	RES, 7.5, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

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