

PMP23200 REV C Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC101	1		PMP23200	Any	Printed Circuit Board	
+12Vp, +12Vs, VIN	3		5000	Keystone Electronics	Test Point, Miniature, Red, TH	Red Miniature Testpoint
C101, C102, C113	3	0.1uF	GCM188R71E104KA57D	MuRata	CAP, CERM, 0.1 μ F, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C103, C104	2	10uF	GCM32EL8EH106KA07L	MuRata	CAP, CERM, 10 μ F, 50 V, +/- 10%, X8L, AEC-Q200 Grade 0, 1210	1210
C105	1	10pF	GCM1885C2A100JA16D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C106	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C107, C202, C207, C214	4	2.2uF	GRM219R71C225KE15	MuRata	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0805	0805
C108, C110, C112	3	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C109	1	5600pF	GRM188R71E562KA01D	MuRata	CAP, CERM, 5600 pF, 25 V, +/- 10%, X7R, 0603	0603
C111, C205, C210, C215, C216	5	2.2uF	GRM188Z71C225KE43	MuRata	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
C114, C116	2	4.7uF	GRM21BC81E475KA12L	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X6S, 0805	0805
C115	1	2200pF	GRM188R71E222KA01D	MuRata	CAP, CERM, 2200 pF, 25 V, +/- 10%, X7R, 0603	0603
C117	1	220pF	GRM188R71H221KA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
C118, C119	2	47uF	C3216X5R1C476M160AB	TDK	CAP, CERM, 47 uF, 16 V, +/- 15%, X5R, 1206	1206
C120	1	0.047uF	GRM31MR72A473KA01L	MuRata	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, 1206	1206
C121, C122	2	220uF	TPSE227K010R0050	AVX	CAP, TA, 220 uF, 10 V, +/- 10%, 0.05 ohm, SMD	7343-43
C123, C124	2	2200pF	GRM3195C1H222JA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 1206	1206
C201, C206, C213	3	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C203, C208	2	0.1uF	C0603C104K5RACAUTO	Kemet	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C204, C209	2	1uF	08055C105K4Z2A	AVX	CAP, CERM, 1 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C211, C212	2	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
D101	1	100V	B1100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMA	SMA
D103, D105	2	40V	B340B-13-F	Diodes Inc.	Diode, Schottky, 40 V, 3 A, SMB	SMB
D201, D203	2		SS1H20LW	Taiwan Semiconductor	Diode Schottky 200 V 1A Surface Mount SOD-123W	SOD-123W
D202, D204	2	12V	BZT52B12-E3-08	Vishay-Semiconductor	Diode, Zener, 12 V, 500 mW, AEC-Q101, SOD-123	SOD-123
D205, D206, D207, D208, D209, D210	6	40V	PMEG4030ER,115	Nexperia	Diode, Schottky, 40 V, 3 A, AEC-Q101, SOD-123W	SOD-123W
D301, D302	2	100V	B1100B-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMB	SMB
D303	1		SMCJ17A-13-F	Diodes	27.6V Clamp 53.3A Ipp Tvs Diode Surface Mount SMC	SMC
H101, H102, H103, H104	4		4824	Keystone		HEX STANDOFF 6- 32 NYLON 1-1/2 inch
J101, J102, J103	3		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
L101	1	230nH	SLC1480-231MLB	Coilcraft	Inductor, Shielded, Ferrite, 230 nH, 55 A, 0.00015 ohm, SMD	SMD 13.46x8.0x12.95mm
L201, L202	2	100uH	B82789C0104H001	TDK	Coupled inductor, 100 μ H, 0.15 A, 1.5 ohm, SMD	4.5x3.0x3.2mm
LOOP	1		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
PGND, SGND	4		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
Q101, Q102, Q103, Q104	4		EPC2022	EPC	MOSFET N-Channel 100 V 90A (Ta) Surface Mount Die	LGA30
Q105, Q106, Q107, Q108	4	40V	EPC2024	EPC	MOSFET, N-CH, 40 V, 90 A, 6.05x2.3mm	6.05x2.3mm
Q201, Q202	2	40 V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q203, Q204	2	50V	BSS138	Fairchild Semiconductor	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23
R101	1	2.49	CRCW12062R49FKEA	Vishay-Dale	RES, 2.49, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R102	1	0.3	MCR25JZHFLR300	Rohm	RES, 0.3, 1%, 0.5 W, 1210	1210
R103	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R104, R105, R201, R203, R205, R212, R214, R216, R231, R232	10	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R106, R110, R122, R223, R224	5	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R107	1	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R108	1	205k	RC0603FR-07205KL	Yageo	RES, 205 k, 1%, 0.1 W, 0603	0603
R109	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R111	1	102k	CRCW0603102KFKEA	Vishay-Dale	RES, 102 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R112, R113, R114, R115, R117, R118, R119, R120, R209, R211, R220, R222	12	1	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R116	1	12.1k	CRCW060312K1FKEA	Vishay-Dale	RES, 12.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R121, R208, R210, R219, R221	5	10	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R123	1	1.40k	RT0603BRD071K4L	Yageo America	RES, 1.40 k, 0.1%, 0.1 W, 0603	0603
R124, R125, R301	3	100	RC1210JR-07100RL	Yageo	RES, 100, 5%, 0.5 W, 1210	1210
R128, R129, R130, R131, R132, R133, R134, R135	8	10	RC1210JR-0710RL	Yageo	RES, 10, 5%, 0.5 W, 1210	1210
R202, R213, R230	3	10.0k	RG1608P-103-B-T5	Susumu Co Ltd	RES, 10.0 k, 0.1%, 0.1 W, 0603	0603
R204, R215	2	0	CRCW08050000Z0EAHP	Vishay-Dale	RES, 0, 5%, 0.333 W, AEC-Q200 Grade 0, 0805	0805
R206, R217, R229	3	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R207, R218	2	2	MCT06030C2008FP500	Vishay/Beyschlag	RES, 2.00, 1%, 0.125 W, 0603	0603
R225, R226	2	0	RC0805JR-070RL	Yageo America	RES, 0, 5%, 0.125 W, 0805	0805
R227, R228	2	301	CRCW0603301RFKEA	Vishay-Dale	RES, 301, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
SGND	1		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
SYNC	1		5002	Keystone Electronics	Test Point, Miniature, White, TH	White Miniature Testpoint
T101	1		CST7030-050LC	Coilcraft	Current Sense Transformer, 333uH, SMT	7x5.2mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
T103	1		PA0805NL	Pulse Electronics	Power Transformer 6: 6/1: 1: 1: 1 1750VDC Dual Prim. Quad Sec. Flange Mount	SMT_XFRMR_23MM37_21MM60
U101	1		TPS7H5001HKY-EM	Texas Instruments	Radiation-Hardness-Assured Si and GaN Dual Output Controller	CFP22
U201, U202, U203	3		TPS7H6003/EM	Texas Instruments	Radiation-Hardness-Assured 200-V, 1.5-A 3-A, Half Bridge GaN FET Gate Driver	CFP48
VOUT	1		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
D102	0	100V	SS110-TP	Micro Commercial Component	Diode, Schottky, 100 V, 1 A, SMA	SMA
D104	0	20V	3SMAJ5932B-TP	Micro Commercial Component	Diode, Zener, 20 V, 3 W, SMA	SMA
Q109	0	60 V	NJVMJD3055T4G	ON Semiconductor	Transistor, NPN, 60 V, 10 A, AEC-Q101, DPAK	DPAK
R126, R127	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
T102	0		PQC2662	Standex Electronics	Planar transformer	PTH5_40MM0_34MM0

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