

## PMP23389 REV B.1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C24	1	39pF	GRM1885C1H390JA01D	MuRata	CAP, CERM, 39 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C20	1	68pF	GRM1885C1H680JA01D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C21, C25, C100, C101	4	100pF	CGA3E2NP01H101J080AA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
C28, C29	2	1000pF	GCM1885C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C102	1	6800pF	GRM188R71H682KA01D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0603	0603
C18	1	0.018uF	C0603C183K1RACTU	Kemet	CAP, CERM, 0.018 uF, 100 V, +/- 10%, X7R, 0603	0603
C23	1	0.1uF	CGA3E2X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C4	1	0.22uF	GCM188R71E224KA55D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C17	1	0.47uF	GCM188R71E474KA64D	MuRata	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C5, C6, C7, C8, C14, C15, C19, C27	8	1uF	CGA3E1X7R1V105K080AE	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C16	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
C22	1	3.3uF	CGA4J1X7R1V335K125AC	TDK	CAP, CERM, 3.3 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C11, C12, C13	3	22uF	GCM31CR71A226KE02L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C1, C2, C3	3	10uF	CGA5L1X7R1V106K160AC	TDK	CAP, CERM, 10 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
C9	1	330uF	T541X337M010AH6720	Kemet	CAP, Tantalum Polymer, 330 uF, 10 V, +/- 20%, 7343-43 SMD	7343-43
D1	1		SS2040FL R1_00001	Panjit	Diode 40 V 2A Surface Mount SOD-123FL	SOD123FL
D2, D5, D6	3	100V	1N4148WS-HG3-08	Vishay-Semiconductor	Diode, Switching, 100 V, 150 A, AEC-Q101, SOD-323	SOD-323
J1, J3, J5, J6	4		575-8	Keystone	Standard Banana Jack, Uninsulated, 8.9mm	Keystone575-8
J2, J4	2		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
L1	1	1uH	SGIHL48FAB1R0M81P	Vishay	Inductor 1uH 20% 23.5A 2-Pin Surface Mount T/R	SMD2
Q1, Q2	2		EPC7019GC	EPC Space	MOSFET N-Channel 40 V 80A (Tc) Surface Mount 5-SMD	FSMD-G
R100	1	750k	CRCW0402750KFKED	Vishay-Dale	RES, 750 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R2, R9, R13, R16, R39, R40, R41	7	0	RMCF0603ZT0R00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R35, R37	2	0	RCS06030000Z0EA	Vishay-Dale	RES, 0, 0%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
R1	1	2	RC0603FR-072RL	Yageo	RES, 2.00, 1%, 0.1 W, 0603	0603
R18	1	20	RC0603FR-0720RL	Yageo	RES, 20.0, 1%, 0.1 W, 0603	0603
R25, R32	2	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R7	1	5.23k	CRCW06035K23FKEA	Vishay-Dale	RES, 5.23 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3, R11, R12, R42, R43	5	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R22	1	13.7k	CRCW060313K7FKEA	Vishay-Dale	RES, 13.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R8, R17	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R19, R20	2	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R15, R24, R27, R29, R31, R34	6	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	0603
R21	1	130k	CRCW0603130KFKEA	Vishay-Dale	RES, 130 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R10	1	143k	CRCW0603143KFKEA	Vishay-Dale	RES, 143 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4	1	0.003	PA2512FKF070R003E	Yageo America	RES, 0.003, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512

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R101, R102	2	2	CRCW25122R00JNEG	Vishay-Dale	RES, 2.0, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
TP1, TP3, TP5, TP6, TP8, TP11, TP14	7		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP4, TP7, TP9, TP10, TP12, TP15	7		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP13	1		5128	Keystone Electronics	Test Point, Multipurpose, Grey, TH	Grey Multipurpose Testpoint
U1	1		TPS7H6003/EM	Texas Instruments	Radiation-Hardness-Assured 200-V, 1.5-A 3-A, Half Bridge GaN FET Gate Driver	CFP48
U2	1		TPS7H5002HFT/EM	Texas Instruments	Radiation-Hardness-Assured Current Mode PWM Controllers	CFP-22
U3	1		LM158AHRQMLV	Texas Instruments	Low Power Dual Operational Amplifier, 8-pin TO-99	TO-CAN (LMC)-8
C10	0	330uF	T541X337M010AH6720	Kemet	CAP, Tantalum Polymer, 330 µF, 10 V, +/- 20%, 7343-43 SMD	7343-43
C26	0	0.047uF	CGA3E2X7R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
D3, D4	0		SS2040FL R1 00001	Panjit	Diode 40 V 2A Surface Mount SOD-123FL	SOD123FL
R5, R6, R26, R30, R36, R38	0	0	RCS06030000Z0EA	Vishay-Dale	RES, 0, 0%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
R14, R28, R33	0	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R23	0	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

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