

Variant: 001  
 Generated: 6/2/2020 4:48:55 PM  
 TID #: N/A



PMP22509 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		PMP22509	Any	Printed Circuit Board	
2	C1	1	330uF	10ZLH330MEFC6.3X11	Rubycon	CAP, AL, 330 uF, 10 V, +/- 20%, 0.094 ohm, TH	Radial Leaded, 2-Leads, Dia 6.3mm, Height 11mm, Pin Spacing 2.5mm
3	C2, C3	2	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, 1206	1206
4	C4, C5, C6	3	4.7uF	C3216X7R1H475K160AC	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
5	C7, C17	2	1000pF	CGA2B2X7R1H102K050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
6	C8	1	0.1uF	GRM21BR72A104KAC4L	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
7	C9	1	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
8	C10	1	100pF	GRM155C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
9	C11	1	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
10	C12	1	100uF	EKMG160ELL101ME11D	Chem-Con	CAP, AL, 100 uF, 16 V, +/- 20%, TH	D5xL11mm
11	C13	1	2200pF	GRM155R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
12	C14, C15, C18	3	1uF	CGA3E1X7R1V105K080AE	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
13	C16	1	2700pF	C1808C272KGRACU	Kemet	CAP, CERM, 2700 pF, 2000 V, +/- 10%, X7R, 1808	1808
14	D1, D3, D4, D6, D7, D8, D10, D11	8	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
15	D2, D5	2	18V	SZMM3Z18VST1G	ON Semiconductor	Diode, Zener, 18 V, 300 mW, AEC-Q101, SOD-323	SOD-323
16	D9	1	15V	MMSZ5245B-7-F	Diodes Inc.	Diode, Zener, 15 V, 500 mW, SOD-123	SOD-123
17	J1, J2	2		691214310002	Würth Elektronik	Terminal Block, 2x1, 3.81mm, 24-16 AWG, 10A, 300VAC, TH	2x1 Terminal Block
18	L1	1	4.7uH	MSS1278T-472MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 4.7 uH, 6.2 A, 0.01 ohm, SMD	MSS1278T
19	L2	1	1mH	LPS4414-105MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 1 mH, 0.11 A, 16.3 ohm, SMD	LPS4414
20	Q1, Q2	2	30V	CSD17579Q3A	Texas Instruments	MOSFET, N-CH, 30 V, 20 A, DNH0008A (VSONP-8)	DNH0008A
21	Q3	1	-150V	FDMC2523P	Fairchild Semiconductor	MOSFET, P-CH, -150 V, -3 A, QFN-8	QFN-8
22	Q4	1	100V	CSD19537Q3	Texas Instruments	MOSFET, N-CH, 100 V, 50 A, DQG0008A (VSON-CLIP-8)	DQG0008A
23	Q5	1	40 V	MMBT3904WT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-323	SOT-323
24	Q6	1	150 V	FMMT495TA	Diodes Inc.	Transistor, NPN, 150 V, 1 A, AEC-Q101, SOT-23	SOT-23
25	R1	1	1.00k	MCR01MZPF1001	Rohm	RES, 1.00 k, 1%, 0.063 W, 0402	0402
26	R2	1	10	CRCW120610R0JNEA	Vishay-Dale	RES, 10, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
27	R3, R6	2	20	CRCW040220R0JNED	Vishay-Dale	RES, 20, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
28	R4, R8, R17	3	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
29	R5, R16, R19	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	R7, R10	2	69.8k	CRCW040269K8FKED	Vishay-Dale	RES, 69.8 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R9	1	0.075	CSR1206FK75L0	Stackpole Electronics Inc	RES, 0.075, 1%, 0.5 W, 1206	1206
32	R11	1	5.36k	CRCW04025K36FKED	Vishay-Dale	RES, 5.36 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
33	R12, R14	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
34	R13	1	86.6k	CRCW040286K6FKED	Vishay-Dale	RES, 86.6 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R15	1	46.4k	CRCW040246K4FKED	Vishay-Dale	RES, 46.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
36	R18, R21, R22	3	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
37	R20	1	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	T1	1		WA8515-ALD	Coilcraft	25 W Forward Mode Transformer for TPS23754	SMT_TRANSFORMER_13MM00_13MM46
39	TP1, TP2	2		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
40	TP3, TP4	2		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
41	U1	1		UCC2897ARGPR	Texas Instruments	Advanced Active Clamp PWM Controller with Current Control, -40 to +125 degC, 20-pin QFN (RGP), Green (RoHS & no Sb/Br)	RGP0020D
42	U2	1		VOS617A-7X001T	Vishay-Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	7x2.12x2.6mm
43	U3	1		TL431LIAIDBZR	Texas Instruments	Programmable Shunt Regulator with Optimized Reference Current, DBZ0003A (SOT-23-3)	DBZ0003A

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