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**PMP9495**

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
PCB	1		Printed Circuit Board		SV601130	Any	-	-
C1	1	68uF	CAP, AL, 68uF, 63V, +/-20%, 0.028 ohm, SMD	2-Pin SMD, Body 10.3 x 10.3 mm, Height 10 mm	PCR1J680MCL1GS	Nichicon		
C2, C3, C4, C5, C6	5	4.7uF	CAP, CERM, 4.7uF, 100V, +/-10%, X7S, 1210	1210	C3225X7S2A475K200A B	TDK		
C7, C8, C9, C10, C11	5	10uF	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H106KA12 L	MuRata		
C12, C13	2	3.3uF	CAP, CERM, 3.3uF, 50V, +/-10%, X7R, 1206	1206	C3216X7r1H335K160A C	TDK		
C14, C15	2	180uF	ALUM SMD CAP 50 180UF 20%	Radial, Can - SMD	PCR1H181MCL1GS	Nichicon	-	-
C16, C17	2	100pF	CAP, CERM, 100pF, 100V, +/-5%, C0G/NP0, 1206	1206	12061A101JAT2A	AVX		
C19, C23, C25, C27, C32	5	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603	GRM188R72A104KA35 D	MuRata		
C20	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603L	GRM188R71E105KA12 D	MuRata		
C21, C24	2	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	0603L	GRM1885C1H470JA01 D	MuRata		
C22	1	0.01uF	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603	06031C103KAT2A	AVX		
C26	1	1000pF	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E102KA01 D	MuRata		
C28	1	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	RC0603JR-070RL	Yageo America		
C29	1	0.022uF	CAP, CERM, 0.022uF, 50V, +/-10%, X7R, 0603	0603	C0603C223K5RACTU	Kemet		
C30, C31, C33	3	100pF	CAP, CERM, 100pF, 100V, +/-5%, C0G/NP0, 0603	0603L	GRM1885C2A101JA01 D	MuRata		
D1	1	20V	Diode, Schottky, 20V, 1A, SMA	SMA	SS12-E3/61T	Vishay-Semiconductor		
D2	1	60V	Diode, Schottky, 60V, 3A, SMA	SMA	B360A-13-F	Diodes Inc.		
D3	1	60V	Diode, Schottky, 60 V, 1 A, SOD-123F	SOD-123F	PMEG6010CEH,115	NXP Semiconductor		
D4, D5	2	100V	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323	BAS316,115	NXP Semiconductor		
H1, H2, H3, H4	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H5, H6, H7, H8	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
J1, J2, J5, J6	4		TEST POINT SLOTTED .118", TH	Test point, TH Slot Test point	1040	Keystone		
J3, J4, J7, J8	4		Standard Banana Jack, Uninsulated, 15A	Banana Jack	108-0740-001	Emerson Network Power		
J9	1	1x3	Header, TH, 100mil, 1x3, Gold plated, 230 mil above insulator	PBC03SAAN	PBC03SAAN	Sullins Connector Solutions		
L1	1	4.7uH	Inductor, Shielded, Composite, 4.7uH, 29A, 0.00335 ohm, SMD	15.4 x 11 x 16.4mm	XAL1510-472MEB	Coilcraft		
Q1, Q2	2	60V	MOSFET, N-CH, 60 V, 19 A, SON 5x6mm	SON 5x6mm	CSD18531Q5A	Texas Instruments		None
Q3, Q4	2	30V	MOSFET, N-CH, 30 V, 100 A, SON 5x6mm	SON 5x6mm	CSD17573Q5B	Texas Instruments		None
R1	1	0	RES, 0 ohm, 5%, 2W, 2512 WIDE	2512 WIDE	RCL12250000Z0EG	Vishay Draloric		
R2	1	0.009	RES, 0.009, 1%, 4 W, 3015 WIDE	3015 WIDE	KRL7638-C-R009-F-T1	Susumu Co Ltd		
R3, R8	2	10.0	RES, 10.0 ohm, 1%, 0.25W, 1206	1206	RC1206FR-0710RL	Yageo America		
R5, R6, R10, R11, R14, R27, R28	7	0	RES, 0 ohm, 5%, 0.1W, 0603	0603L	RC0603JR-070RL	Yageo America		
R13	1	249k	RES, 249k ohm, 1%, 0.1W, 0603	0603	RC0603FR-07249KL	Yageo America		
R15	1	0.008	RES, 0.008, 1%, 4 W, 3015 WIDE	3015 WIDE	KRL7638-C-R008-F-T1	Susumu Co Ltd		
R16	1	59.0k	RES, 59.0k ohm, 1%, 0.1W, 0603	0603L	RC0603FR-0759KL	Yageo America		
R17, R34	2	10.0	RES, 10.0 ohm, 1%, 0.1W, 0603	0603L	RC0603FR-0710RL	Yageo America		
R19, R22, R25, R26	4	100	RES, 100 ohm, 1%, 0.1W, 0603	0603L	RC0603FR-07100RL	Yageo America		
R23, R29	2	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603L	RC0603FR-0710KL	Yageo America		
R24	1	93.1k	RES, 93.1k ohm, 1%, 0.1W, 0603	0603	RC0603FR-0793K1L	Yageo America		
R30	1	17.8k	RES, 17.8 k, 1%, 0.1 W, 0603	0603	CRCW060317K8FKEA	Vishay-Dale		
R31	1	84.5k	RES, 84.5 k, 1%, 0.1 W, 0603	0603	RC0603FR-0784K5L	Yageo America		
R33	1	280k	RES, 280k ohm, 1%, 0.1W, 0603	0603L	RC0603FR-07280KL	Yageo America		
TP1	1	Red	Test Point, Compact, Red, TH	Red Compact Testpoint	5005	Keystone		
TP2	1	Yellow	Test Point, Compact, Yellow, TH	Yellow Compact Testpoint	5009	Keystone		
TP3, TP5	2	Orange	Test Point, Compact, Orange, TH	Orange Compact Testpoint	5008	Keystone		
TP4	1	White	Test Point, Compact, White, TH	White Compact Testpoint	5007	Keystone		
U1	1		42V Wide VIN 4-Switch Synchronous Buck-Boost Controller, PWP0028F	PWP0028F	LM5175PWPR	Texas Instruments	LM5175PWPT	Texas Instruments
C18	0	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	0603L	GRM1885C1H470JA01 D	MuRata		
C34	0		CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	Used in PnP output	Used in BOM report	Used in BOM report	-	-
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
J10, J11	0		TEST POINT SLOTTED .118", TH	Test point, TH Slot Test point	1040	Keystone		
R18, R21	0	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	RC0603FR-07100RL	Yageo America		
R20	0	240k	RES, 240k ohm, 1%, 0.1W, 0603	0603L	RC0603FR-07240KL	Yageo America		
R32	0		RES, xxx ohm, x%, xW, [PackageReference]	Used in PnP output	Used in BOM report	Used in BOM report	-	-

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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