

Filename: PMP21619A_2v7_Aug20_BOM.xls
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Low ESR version: Populate all 8 of the 7.3mm by 4.3 mm caps
 All ceramics version: Populate 33 of the 36 100uF size 1206 output cap placeholders
 First build: August 2018: 2.7V; 60A off 12Vin with two versions
 Only populate 28 of the 86 4.7uF size 0603 output cap placeholders. All populated parts of these groups on top side.

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC	1		Printed Circuit Board		PMP21619	Any		
C10, C20	2	4.7uF	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	0805	C2012X7R1E475K125A B	TDK		
C11, C21	2	1000pF	CAP, CERM, 1000 pF, 50 V, +/- 10%, COG/NP0, 0603	0603	06035A102KAT2A	AVX		
C12, C22	2	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 20%, X7R, 0402	0402	TMK105B7104MV-FR	Taiyo Yuden		
C13, C23	2	1uF	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603	C1608X7R1E105K080A B	TDK		
C14, C15, C16, C24, C25, C26	6	10uF	CAP, CERM, 10 uF, 25 V, +/- 20%, X7R, 1210	1210	C3225X7R1E106M250A C	TDK		
C17, C27	2	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E104KA01 D	MuRata		
C50, C51, C52, C56, C91, C92, C93, C94	8	470uF	CAP, Aluminum Polymer, 330 uF, 4 V, +/- 20%, 0.008 ohm, 7.3x4.2x4.3mm SMD	7.3x4.2x4.3mm	ECASD90G337M008K0 0	MuRata	"Low ESR" output caps version only	
C53, C54, C55	3	100uF	CAP, CERM, 100 uF, 6.3 V, +/- 20%, X6S, 1210	1210	C3225X6S0J107M250A C	TDK	These 3 output caps are in both versions	
C100, C101	2	330uF	CAP, AL, 330 uF, 25 V, +/- 20%, 0.15 ohm, SMD	SMT Radial G	EEE-FC1E331P	Panasonic		
C102-C109, C112-C119, C120-C127, C129-C137	33	100uF	CAP, CERM, 100 uF, 6.3 V, +/- 20%, X5R, 1206	1206	C3216X5R0J107M160A B	TDK	"All ceramic output caps" version only	
C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C238, C239, C245, C246, C247, C248, C260, C261, C262, C283, C284, C285	28	4.7uF	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X6S, 0603	0603	C1608X6S1C475K080A C	TDK	These 28 output caps are in both versions	
C300, C319	2	0.1uF	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0603	0603	C0603X104K8RACTU	Kemet		
C952	1	3300pF	CAP, CERM, 3300 pF, 50 V, +/- 15%, X7R, 0402	0402	GCM155R71H332KA37 D	Murata	add by hand	
C956	1	100pF	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402	0402YC101KAT2A	AVX	add by hand	
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		
J101	1		Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH	800-10-002-10-001000	Mill-Max		
J300	1		Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block	ED120/2DS	On-Shore Technology		
J302, J303	2		Terminal Block, 5.08 mm, 4x1, Brass, TH	4x1 5.08 mm Terminal Block	ED120/4DS	On-Shore Technology		
J304	1		Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH	800-10-003-10-001000	Mill-Max		
J309, J319	2		Receptacle, Ultra Miniature Coaxial, Male Pin, 50 ohm, SMT	Ultra small CO-AX SMD	U.FL-R-SMT-1(01)	Hirose Electric Co. Ltd.		
L1, L2	2	220nH	Inductor, Wirewound, Ferrite, 220 nH, 50 A, 0.00029 ohm, SMD	FP1007R3	FP1007R3-R22-R	Coiltronics		
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch	THT-14-423-10	Brady		
Q300	1	25V	MOSFET, N-CH, 25 V, 113 A, DQH0008A (VSON-CLIP-8)	DQH0008A	CSD16408Q5	Texas Instruments		None
R10	1	23.7k	RES, 23.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402	ERJ-2RKF2372X	Panasonic		
R11	1	40.2k	RES, 40.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW040240K2FKED	Vishay-Dale		
R12, R14	0	DNP		0402				
R13, R21	2	39.2k	RES, 39.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW040239K2FKED	Vishay-Dale		
R15, R25	2	187k	RES, 187 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW0402187KFKED	Vishay-Dale		
R16, R17, R26, R27	4	3.0	RES, 3.0, 5%, 0.125 W, 0805	0805	RC0805JR-073RL	Yageo America		
R19, R29, R31, R41, R54, R55	6	0	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R56	1	100	RES, 100, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW0402100RKFED	Vishay-Dale		
R23, R51	0	DNP		0402				

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R51	1	590	RES, 590, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW0402590RFKED	Vishay-Dale		
R24	1	51.1k	RES, 51.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW040251K1FKED	Vishay-Dale		
R30	1	100k	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW0402100KJNED	Vishay-Dale		
R50, R53	2	10	RES, 10, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW040210R0JNED	Vishay-Dale		
R52	1	1.00k	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW04021K00FKED	Vishay-Dale		
R301	1	1.00	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603	CRCW06031R00FKEA	Vishay-Dale		
R302	1	10.0k	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603	RMCF0603FT10K0	Stackpole Electronics Inc		
R303	1	0.02	RES, 0.02, 1%, 3 W, 2512	2512	CRA2512-FZ-R020ELF	Bourns		
R304, R314	2	49.9	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402	CRCW040249R9FKED	Vishay-Dale		
TP102, TP103, TP105, TP106, TP300, TP301, TP302, TP310	8		Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
TP107	1		Test Point, Miniature, White, TH	White Miniature Testpoint	5002	Keystone		
TP109, TP303, TP304, TP307	4		Test Point, Miniature, Black, TH	Black Miniature Testpoint	5001	Keystone		
TP305, TP308, TP309, TP315	4		Test Point, Compact, SMT	Testpoint_Keystone_ Compact	5016	Keystone		
U1, U2	2		4-16Vin 40A Stackable Synchronous Step-down SWIFT(TM) Converter w/ Adaptive Internal Compensation, RVF0040A (LQFN-CLIP-40)	RVF0040A	TPS543C20RVFT	Texas Instruments	TPS543C20RVFR	Texas Instruments
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	N/A	N/A	N/A		

Notes:

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

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