

PMP10116_RevC BOM

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C13, C19		DNP	Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%,	Used in PnP output
, ,			'	'	[PackageReference]	· '
C2, C3, C20, C21	4	470uF	EKMQ351VSN471MA30S	Chemi-Con	CAP, AL, 470 µF, 350 V, +/- 20%, ohm, TH	D35xL30
C4, C14	2	4700pF	GRM31BR72J472KW01L	MuRata	CAP, CERM, 4700 pF, 630 V, +/- 10%, X7R, 1206	1206
C5, C10, C41	3	4700pF	VY2472M49Y5US63V7	Vishay-Bccomponents	CAP, CERM, 4700 pF, 440 V, +/- 20%, Y5U, TH, 12.5x5mm	TH, 12.5x5mm
C6	1	0.47uF	B32923C3474M	EPCOS Inc	CAP, Film, 0.47 μF, 630 V, +/- 20%, TH	B32923 16.5mm
C7	1	1uF	B32923C3105M	EPCOS Inc	CAP, Film, 1 µF, 630 V, +/- 20%, 0.018 ohm, TH	B32923_20.5mm
C8, C9	2	0.47uF	B32923C3474K	TDK	CAP, Film, 0.47 µF, 630 V, +/- 10%, TH	B32923_16.5mm
C11	1	1000pF	06035A102KAT2A	AVX	CAP, CERM, 1000 pF, 50 V, +/- 10%, C0G/NP0, 0603	0603
C12	1	47uF	EEE-FC1E470P	Panasonic	CAP, AL, 47uF, 25V, +/-20%, 0.4 ohm, SMD	SMT Radial E
C15, C43	2	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C16, C17	2	82pF	GRM1885C1H820JA01D	MuRata	CAP, CERM, 82 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C18	1	2.2uF	C3225X7R1H225K250AB	TDK	CAP, CERM, 2.2 μF, 50 V, +/- 10%, X7R, 1210	1210
C22	1	0.22uF	GRM21BR71H224KA01L	MuRata	CAP, CERM, 0.22 μF, 50 V, +/- 10%, X7R, 0805	0805
C23, C35	2	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 μF, 25 V, +/- 10%, X7R, 0603	0603
C24, C29	2	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V, +/- 5%, X7R, 0603	0603
C25	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
C26	1	1uF	C2012X7R1H105K125AB	TDK	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
C27, C36	2	1uF	GRM21BR71C105KA01L	MuRata	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0805	0805
C28	1	100uF	EEE-FC1V101P	Panasonic	CAP, AL, 100 µF, 35 V, +/- 20%, 0.15 ohm, SMD	SMT Radial G
C30, C37	2	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C31	1	22pF	06035A220JAT2A	AVX	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C32, C44	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603
C33		0.47uF	GRM21BR71H474KA88L	MuRata	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, 0805	0805
C34	1	470pF	GRM188R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
C38		0.01uF	GRM216R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0805	0805
C39		0.047uF	08055C473JAT2A	AVX	CAP, CERM, 0.047 µF, 50 V, +/- 5%, X7R, 0805	0805
C40		4.7uF	C2012X5R1E475K125AB	TDK	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X5R, 0805	0805
C42	1	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C101	1	4.7uF	C3216X7R1E475K	TDK	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X7R, 1206	1206
D1, D8		STTH212S	STTH212S	ST	Diode, Ultrafast, 1200V, SMC	SMC
D2	1	400V	GBU4G	Vishay-Semiconductor	Diode, Switching-Bridge, 400 V, 4 A, TH	GBU
D3, D9	2	600V	STTH2R06U	ST Microelectronics	Diode, Superfast Rectifier, 600 V, 2A, SMB	SMB
D4, D6	2	150V	3smaj5953b		Diode, Zener, 150 V, 3 W, SMA	SMA
D5, D10	2	100V	SS110-TP		Diode, Schottky, 100V, 1A, SMA	SMA
D7		5.1V	MMBZ5230BLT1G	ON Semiconductor	Diode, Zener, 4.7V, 225mW, SOT-23	SOT-23
D11		5.1V	MMBZ5231BLT1G	ON Semiconductor	Diode, Zener, 5.1 V, 225 mW, SOT-23	SOT-23
D12		18V	MMSZ5248B-7-F	Diodes Inc.	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
D13		100V	1N4148W-TP		Diode, Switching, 100 V, 0.15 A, SOD-123	SOD-123
D14		30V	BAT54A-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
F1		2A	38312000000	Littelfuse	Fuse, 2A, 300 V, TH	TR5 fuse 8.5mm DIA

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L1	1	330uH	DO5010H-334MLB	Coilcraft	Inductor, Drum Core, Ferrite, 330 µH, 1 A, 0.56 ohm,	DO5010H
					SMD	
L2	1	2.2mH	744823422	Wurth Elektronik eiSos	Coupled inductor, 2.2 mH,	13x22x17.5mm
L3	1	20mH	744824220	Wurth Elektronik	Coupled inductor, 20 mH	18.5x33x27.5 mm
Q1, Q3	2	800V	SPP11N80C3	Infineon Technologies	MOSFET, N-CH, 800 V, 11 A, TO-220FP	TO-220FP
Q2	1	0.3V	MMBT3904LT1G	ON Semiconductor	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23
Q4, Q101	2	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q5, Q6	2	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
R1	1	0.51	MCR25JZHFLR510	Rohm	RES, 0.51 ohm, 1%, 0.5W, 1210	1210
R2, R7, R9	3	2.00Meg	CRCW08052M00FKEA	Vishay-Dale	RES, 2.00 M, 1%, 0.125 W, 0805	0805
R3, R4, R19, R20	4	200k	CRCW2010200KJNEF	Vishay-Dale	RES, 200 k, 5%, 0.75 W, 2010	2010
R5, R22	2	20.0	CRCW201020R0FKEF	Vishay-Dale	RES, 20.0, 1%, 0.75 W, 2010	2010
R6, R8	2	DNP	CRCW1206470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.25 W, 1206	1206
R10, R28, R32	3	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, 0805, RES, 10.0 ohm, 1%,	0805
, ,					0.125W, 0805, RES, 10.0, 1%, 0.125 W, 0805	
R11, R17, R21	3	200k	CRCW1206200KFKEA	Vishay-Dale	RES, 200k ohm, 1%, 0.25W, 1206	1206
R12, R37	2	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
R13	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50k ohm, 1%, 0.1W, 0603	0603
R14, R15	2	0.1	ERJ-L14KF10CU	Panasonic	RES, 0.1, 1%, 0.33 W, 1210	1210
R16	1	42.2k	CRCW080542K2FKEA	Vishay-Dale	RES, 42.2 k, 1%, 0.125 W, 0805	0805
R18	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R23, R24	2	36.5k	CRCW060336K5FKEA	Vishay-Dale	RES, 36.5 k, 1%, 0.1 W, 0603	0603
R25, R55, R60,	5	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R105, R106				1.5		
R26	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9 ohm, 1%, 0.1W, 0603	0603
R27	1	255k	CRCW0603255KFKEA	Vishay-Dale	RES, 255 k, 1%, 0.1 W, 0603	0603
R29	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R30	1	57.6k	CRCW060357K6FKEA	Vishay-Dale	RES, 57.6 k, 1%, 0.1 W, 0603	0603
R31, R46, R56	3	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603, RES, 1.00k ohm, 1%,	0603
,,				1	0.1W, 0603, RES, 1.00 k, 1%, 0.1 W, 0603	
R33	1	2200pF	C0603C222K5RACTU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
R34	1	82.5k	CRCW060382K5FKEA	Vishay-Dale	RES, 82.5 k, 1%, 0.1 W, 0603	0603
R35, R59		24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, 0603	0603
R36	1	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, 0603	0603
R38, R53	•	49.9k	RC0603FR-0749K9L	Yageo America	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R39, R54		3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, 0603	0603
R40	1	18.2k	CRCW060318K2FKEA	Vishay-Dale	RES, 18.2 k, 1%, 0.1 W, 0603	0603
R41, R43	•	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R42		243k	CRCW0603243KFKEA	Vishay-Dale	RES, 243 k, 1%, 0.1 W, 0603	0603
R44	1	2.00k	CRCW06032K00FKEA	Vishay-Dale Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R45	1	19.1k	CRCW060319K1FKEA	Vishay-Dale	RES, 19.1 k, 1%, 0.1 W, 0603	0603
R47, R48, R51	3	10.0k	CRCW060319KITKEA	Vishay-Dale Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R49	1	200	CRCW0603200RFKEA	Vishay-Dale Vishay-Dale	RES, 200, 1%, 0.1 W, 0603	0603
R50	1	0	RC0603FR-072KL	Yageo America	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R52	1	DNP	DNP	Used in BOM report	RES, xxx ohm, x%, xW, [PackageReference]	Used in PnP output
R57	1	DNP	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R58	1	DNP	CRCW060349R9FKEA	Vishay-Dale Vishay-Dale	RES, 49.9 ohm, 1%, 0.1W, 0603	0603
R61	1	1.00Meg	CRCW060349K9FKEA	Vishay-Dale Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R62	1	200k	CRCW06031W00FKEA	Vishay-Dale Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
R63	1	15.0k	CRCW0603200KFKEA		RES, 15.0 k, 1%, 0.1 W, 0603	0603
NUS	ı	13.0K	ICKCM 0003 13KUFKEA	Vishay-Dale	INEO, 10.0 K, 170, 0.1 W, 0003	10003

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R64	1	365k	CRCW0603365KFKEA	Vishay-Dale	RES, 365 k, 1%, 0.1 W, 0603	0603
R65	1	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5 k, 1%, 0.1 W, 0603	0603
R66	1	2.43k	CRCW06032K43FKEA	Vishay-Dale	RES, 2.43 k, 1%, 0.1 W, 0603	0603
R101, R102,	4	432k	CMF50432K00FHEB	Vishay-Dale	RES, 432 k, 1%, 0.25 W, TH	1/4W Resistor
R103, R104						
RV1	1	DNP	S20K275	EPCOS Inc	Varistor 275V RMS 10MM Radial, TH	10mm Radial
T1	1	400 uH	750315289	Wurth Elektronik eiSos	Transformer, 400 uH, TH	37.34x35.56mm
T2	1	400 uH	750315290	Wurth Elektronik eiSos	Transformer, 400 uH, TH	37.34x35.56mm
TP1, TP2, TP3, TP5	4	Double	1503-2	Keystone	Terminal, Turret, TH, Double	Keystone1503-2
TP4	1	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP6, TP7, TP8, TP10	4	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP9, TP11	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		LM4040A50	Texas Instruments	Precision Micropower Shunt Voltage Reference, 3-pin SOT-23, Pb-Free	MF03A
U2	1	UCC28063A	UCC28063A	Texas Instruments	IC, Interleave PFC Controller	SO16
U3	1	LMV358	LMV358	Texas Instruments	General Purpose, Low Voltage, R-R Out, 1MHz Dual Op Amp	M08A_L
U4	1		FOD817A	Fairchild Semiconductor	High Operating Temperature Phototransistor Optocoupler, DIP-4	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U5	1	DNP	TL431A	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

DNP = DO NOT POPULATE

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