

## Bill of Materials

## PMP10558

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note				
	Transformer 750314463											
1	3	C1, C2, C3	2.2uF	CAP, CERM, 2.2 μF, 35 V, +/- 10%, X7R, 0805	TDK	C2012X7R1V225K085AC	0805_HV					
2	2	C4, C5	0.01uF	CAP, CERM, 0.01 μF, 25 V, +/- 5%, COG/NP0, 0603	TDK	C1608C0G1E103J	0603					
3	1	C6	1000pF	CAP, CERM, 1000 pF, 25 V, +/- 5%, COG/NPO, 0603	MuRata	GRM1885C1E102JA01D	0603					
4	2	C7, C8	10uF	CAP, CERM, 10 μF, 25 V, +/- 20%, X7R, 1210	TDK	C3225X7R1E106M	1210					
5	1	C9	1uF	CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0603	TDK	C1608X5R1C105K	0603					
6	1	C10	1uF	CAP, CERM, 1 µF, 100 V, +/- 10%, X7R, 1210	TDK	C3225X7R2A105K200AA	1210					
7		C11	0.1uF	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	TDK	C2012X7R2A104K	0805 HV					
8	1	C12	1000pF	CAP, CERM, 1000 pF, 1000 V, +/- 5%, COG/NPO, 1210	Vishay-Vitramon	VJ1210A102JXGAT5Z	1210	1				
9		D1	200V	Diode, Fast Rectifier, 200 V, 0.8 A, SOD-123	Rohm	RF081M2STR	SOD-123					
10		D2, D3	100V	Diode, Schottky, 100 V, 1 A, SOD-123FL	ON Semiconductor	MBR1H100SFT3G	SOD-123FL					
11		D4	45V	Diode, Schottky, 45 V, 0.1 A, SOD-523	Diodes Inc.	SDM10U45-7-F	SOD-523	+				
12	_	FB, SW	Red	Test Point, Miniature, Red, TH	Keystone	5000	Keystone5000	+				
13		GND	Black	Test Point, Miniature, Red, TH		5001	Keystone5001					
					Keystone	1502-2		+				
14		GND, GND, IGND, IGND, Vin, Vopri, Vout1, Vout2, Vout3	Double	Terminal, Turret, TH, Double	Keystone		Keystone1502-2	-				
15		R1	24.3k 5.23k	RES, 24.3 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060324K3FKEA	0603 0603	-				
16		R2, R3 R4		RES, 5.23 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06035K23FKEA	0603	-				
17		R5	40.2k	RES, 40.2 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0740K2L		<u> </u>				
18 19		R6	100k 332k	RES, 100 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603100KFKEA	0603 0603	-				
		R7	154k	RES, 332 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603332KFKEA	0603	-				
20				RES, 154 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603154KFKEA						
21		R8	8.87k 20.0k	RES, 8.87 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06038K87FKEA	0603					
		U1	20.0K	RES, 20.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060320K0FKEA						
23		T1	45uH	100V Constant On-Time PFET Buck Switching Controller, 8-pin PSOP, Pb-Free	Texas Instruments Wurth Elektronik	LM5017MRX/NOPB	MRA08A_N XFMR Wurth ER11p5 12pin SMT	-				
24	1	111	45uH	XFMR, SMT 45uH, 750314463 Transformer 750314462	wurth Elektronik	750314463	XFMR_Wurtn_ER11p5_12pin_SM1					
1	1	C1	4.7uF	CAP, CERM, 4.7 µF, 16 V, +/- 5%, COG/NPO, 0805	MuRata	GRM21BR71C475KA73L	0805					
2		C2, C3	2.2uF	CAP, CERM, 2.2 µF, 25 V, +/- 5%, COG/NPO, 0805	MuRata	GRM21BR61E225KA12L	0805	+				
3		C4. C5	0.01uF	CAP, CERM, 0.01 μF, 25 V, +/- 5%, COG/NPO, 0603	TDK	C1608C0G1E103J	0603	+				
4		C6	1000pF		MuRata	GRM1885C1E102JA01D	0603	<del>                                     </del>				
5		C7, C8	1000pr 10uF	CAP, CERM, 1000 pF, 25 V, +/- 5%, COG/NPO, 0603	TDK		1210	+				
		C7, C8		CAP, CERM, 10 μF, 25 V, +/- 20%, X7R, 1210		C3225X7R1E106M		<u> </u>				
6			1uF	CAP, CERM, 1 μF, 16 V, +/- 10%, X5R, 0603	TDK	C1608X5R1C105K	0603					
7		C10	1uF	CAP, CERM, 1 μF, 100 V, +/- 10%, X7R, 1210	TDK	C3225X7R2A105K200AA	1210					
8		C11	0.1uF	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 0805	TDK	C2012X7R2A104K	0805_HV					
9		C12	1000pF	CAP, CERM, 1000 pF, 1000 V, +/- 5%, COG/NPO, 1210	Vishay-Vitramon	VJ1210A102JXGAT5Z	1210					
10		D1	60V	Diode, Schottky, 60 V, 1 A, SOD-123FL	Diodes Inc.	DFLS160-7	SOD 123					
11		D2, D3	100V	Diode, Schottky, 100 V, 0.15 A, SOD-123	Diodes Inc.	BAT46W-7-F	SOD-123					
12	1	D4	45V	Diode, Schottky, 45 V, 0.1 A, SOD-523	Diodes Inc.	SDM10U45-7-F	SOD-523					
13	2	FB, SW	Red	Test Point, Miniature, Red, TH	Keystone	5000	Keystone5000					
14	1	GND	Black	Test Point, Miniature, Black, TH	Keystone	5001	Keystone5001					
15	9	GND, GND, IGND, IGND, Vin, Vopri, Vout1, Vout2, Vout3	Double	Terminal, Turret, TH, Double	Keystone	1502-2	Keystone1502-2					
16		R1	5.1k	RES, 5.1 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06035K10JNEA	0603					
17		R2, R3	10k	RES, 10 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0FKEA	0603	†				
18		R4	40.2k	RES, 40.2 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0740K2L	0603	1				
19		R5	100k	RES, 100 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603100KFKEA	0603	†				
20		R6	316k	RES, 316 k, 1%, 0.1 W, 0603	Vishay-Dale Vishay-Dale	CRCW0603316KFKEA	0603	+				
21		R7	154k		Vishay-Dale Vishay-Dale	CRCW0603316KFKEA	0603	<del>                                     </del>				
22		R8	154k 8.87k	RES, 154 k, 1%, 0.1 W, 0603			0603	+				
				RES, 8.87 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06038K87FKEA		<del>                                     </del>				
23		R9	21k	RES, 21 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060321K0FKEA	0603	<del>                                     </del>				
24		U1	ł	100V Constant On-Time PFET Buck Switching Controller, 8-pin PSOP, Pb-Free	Texas Instruments	LM5017MRX/NOPB	MRA08A_N	<b> </b>				
25	1	T1	45uH	XFMR, SMT 45uH, 750314463	Wurth Elektronik	750314463	XFMR_Wurth_ER11p5_12pin_SMT					

Transformer 750314461

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2	2	C2, C3	4.7uF	CAP, CERM, 4.7 μF, 16 V, +/- 5%, COG/NPO, 0805	MuRata	GRM21BR71C475KA73L	0805	
3	2	C4, C5	0.01uF	CAP, CERM, 0.01 μF, 25 V, +/- 5%, COG/NP0, 0603	TDK	C1608C0G1E103J	0603	
4	1	C6	1000pF	CAP, CERM, 1000 pF, 25 V, +/- 5%, COG/NPO, 0603	MuRata	GRM1885C1E102JA01D	0603	
5	2	C7, C8	10uF	CAP, CERM, 10 μF, 25 V, +/- 20%, X7R, 1210	TDK	C3225X7R1E106M	1210	
6		C9	1uF	CAP, CERM, 1 μF, 16 V, +/- 10%, X5R, 0603	TDK	C1608X5R1C105K	0603	
7		C10	1uF	CAP, CERM, 1 μF, 100 V, +/- 10%, X7R, 1210	TDK	C3225X7R2A105K200AA	1210	
8	1	C11	0.1uF	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 0805	TDK	C2012X7R2A104K	0805_HV	
9	1	C12	1000pF	CAP, CERM, 1000 pF, 1000 V, +/- 5%, COG/NPO, 1210	Vishay-Vitramon	VJ1210A102JXGAT5Z	1210	
10	1	D1	200V	Diode, Fast Rectifier, 200 V, 0.8 A, SOD-123	Rohm	RF081M2STR	SOD-123	
11	2	D2, D3	60V	Diode, Schottky, 60 V, 1 A, SOD-123FL	Diodes Inc.	DFLS160-7	SOD 123	
12	1	D4	45V	Diode, Schottky, 45 V, 0.1 A, SOD-523	Diodes Inc.	SDM10U45-7-F	SOD-523	
13		FB, SW	Red	Test Point, Miniature, Red, TH	Keystone	5000	Keystone5000	
14	1	GND	Black	Test Point, Miniature, Black, TH	Keystone	5001	Keystone5001	
15	9	GND, GND, IGND, IGND, Vin, Vopri, Vout1, Vout2, Vout3	Double	Terminal, Turret, TH, Double	Keystone	1502-2	Keystone1502-2	
16	1		15k	RES, 15 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060315K0FKEA	0603	
17	2	R2, R3	5.23k	RES, 5.23 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06035K23FKEA	0603	
18	1	R4	40.2k	RES, 40.2 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0740K2L	0603	
19	1	R5	100k	RES, 100 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603100KFKEA	0603	
20	1	R6	332k	RES, 332 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603332KFKEA	0603	
21	1	R7	150k	RES, 150 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603150KFKEA	0603	
22	1	R8	8.87k	RES, 8.87 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06038K87FKEA	0603	
23	1	R9	20.5k	RES, 20.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060320K5FKEA	0603	
24	1	U1		100V Constant On-Time PFET Buck Switching Controller, 8-pin PSOP, Pb-Free	Texas Instruments	LM5017MRX/NOPB	MRA08A_N	
25	1	T1	45uH	XFMR, SMT 45uH, 750314463	Wurth Elektronik	750314463	XFMR_Wurth_ER11p5_12pin_SMT	

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