

PMP10655 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB	1		PMP10655	Any	Printed Circuit Board	
C1, C2, C42, C43	4	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C3, C45	2	0.1uF	GRM32NR72A104KA01L	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 1210	1210
C4, C5, C7, C39, C40, C41	6	82uF	APXH160ARA820MH70G	Nippon Chemi-Con	CAP, AL, 82uF, 16V, +/-20%, 0.03 ohm, SMD	H70
C6	1	4.7uF	C3225X7S2A475K200AB	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
C8, C38	2	47uF	C3216X5R1C476M160AB	TDK	CAP, CERM, 47uF, 16V, +/-15%, X5R, 1206	1206
C9, C37	2	33pF	06031A330JAT2A	AVX	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C10	1	150uF	EEV-FK1J151Q	Panasonic	CAP, AL, 150 uF, 63 V, +/- 20%, 0.16 ohm, SMD	SMT Radial H13
C11, C13	2	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1uF, 100V, +/-20%, X7R, 1206	1206
C12, C36	2	470pF	08051A471JAT2A	AVX	CAP, CERM, 470 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
C14, C15, C16, C33, C34, C35, C50, C51	8	2.2uF	CL31B225KCHSNE	Samsung Electro-Mechanics A	CAP CER 2.2UF 100V 10% X7R 1206	1206 (3216 Metric)
C18, C31	2	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0603	0603
C19, C30	2	47pF	C0603C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C20, C27, C28, C47	4	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C21, C29	2	0.33uF	GRM21AR72A334KAC5L	MuRata	CAP, CERM, 0.33 uF, 100 V, +/- 10%, X7R, 0805	0805
C22, C24	2	2.2uF	C0603C225M8PACTU	Kemet	CAP, CERM, 2.2 uF, 10 V, +/- 20%, X5R, 0603	0603
C23, C25	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603
C26	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47uF, 100V, +/-10%, X7R, 0805	0805
C44, C46	2	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
C48	1	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
C49	1	0.1uF	GRM188R72A104KA35J	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
D1, D4	2	70V	B170-13-F	Diodes Inc.	Diode, Schottky, 70V, 1A, SMA	SMA
D2, D3, D5, D9	4	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D6	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D7, D10	2	60V	SS16T3G	ON Semiconductor	Diode, Schottky, 60 V, 1 A, SMA	SMA
D8	1	60V	SMBJ60A-13-F	Diodes Inc.	Diode, TVS, Uni, 60 V, 600 W, SMB	SMB
D11, R3, R10, R20, R25, R41, R48	7	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1, J2, J3	3	2x1	1715721	Phoenix Contact	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block
L1	1	1.9uH	7443556190	Würth Elektronik	Inductor, Shielded Drum Core, WE-Superflux200, 1.9 uH, 32.5 A, 0.0012 ohm, SMD	18.3x8.9x18.2mm
L2, L3	2	1.5uH	XAL1010-152MEB	Coilcraft	Inductor, Shielded, Composite, 1.5 uH, 36.6 A, 0.0016 ohm, SMD	Inductor, 11.3x10x10mm
L4	1	220uH	DO1608C-224MLB	Coilcraft	Inductor, Drum Core, Ferrite, 220 uH, 0.22 A, 3.11 ohm, SMD	DO1608C
Q1, Q2, Q3, Q4, Q6, Q7, Q8, Q9	8	40V	BUK9Y21-40E,115	NXP Semiconductor	MOSFET, N-CH, 40 V, 33 A, AEC-Q101, SOT669	SOT669
Q5	1	60V	IPB90N06S4L-04	Infineon	MOSFET, N-CH, 60V, 90A, D2PAK	D2PAK
R1, R26	2	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
R2	1	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
R4a, R4b, R24a, R24b	4	0.008	PMR100HZPFU8L00	Rohm	RES, 0.008, 1%, 2 W, 2512	2512

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R5a, R5b, R5c	3	1.0	CRCW12061R00JNEA	Vishay-Dale	RES, 1.0 ohm, 5%, 0.25W, 1206	1206
R6, R23	2	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
R7, R21	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R8, R22	2	8.2	CRCW20108R20JNEF	Vishay-Dale	RES, 8.2, 5%, 0.75 W, 2010	2010
R9, R12, R13, R16, R17, R19	6	4.99	CRCW06034R99FKEA	Vishay-Dale	RES, 4.99, 1%, 0.1 W, 0603	0603
R11, R18, R56	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R14	1	0	RC0603JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.1W, 0603	0603
R15	1	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
R33, R34	2	267	CRCW0603267RFKEA	Vishay-Dale	RES, 267, 1%, 0.1 W, 0603	0603
R35, R38	2	38.3k	CRCW060338K3FKEA	Vishay-Dale	RES, 38.3 k, 1%, 0.1 W, 0603	0603
R39, R40	2	17.8k	CRCW060317K8FKEA	Vishay-Dale	RES, 17.8 k, 1%, 0.1 W, 0603	0603
R58, R59	2	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
TP1, TP2, TP9, TP12, TP15	5	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP3, TP6, TP7, TP8, TP13, TP14, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP28	15	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP4, TP5, TP10, TP11, TP16, TP17, TP26, TP27	8	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1	1		LM5140QRWGTQ1	Texas Instruments	Wide Input Range Dual Synchronous Buck Controller, RHA0040C	RHA0040C
U2	1		LM5050Q1MK-1/NOPB	Texas Instruments	LM5050-1 High Side OR-ing FET Controller, DDC0006A	DDC0006A
C52, C53	0	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
C54, C55	0	0.1uF	C0603C104K4RACTU	Kemet	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0603	0603
D12, D13	0	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R27, R28	0	1.40k	CRCW06031K40FKEA	Vishay-Dale	RES, 1.40k ohm, 1%, 0.1W, 0603	0603
R29, R30, R31, R32	0	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R36, R37, R42, R43, R51	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R44	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R45, R46, R50, R52	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R47	0	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1k ohm, 1%, 0.1W, 0603	0603
R49, R54	0	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
R53, R55	0	5.11k	CRCW06035K11FKEA	Vishay-Dale	RES, 5.11k ohm, 1%, 0.1W, 0603	0603
R57	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
T1	0	470uH	P0502NLT	Pulse Engineering	Coupled inductor, 470 uH, 14 A, 0.008 ohm, +/- 35%, SMD	30.99x25.4mm
U3	0		LMV431A1MF/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 3-pin SOT-23	MF03A
U4, U5	0		LMC7101QM5/NOPB	Texas Instruments	Automotive CMOS Low Power with Rail-to-Rail Input and Output	MF05A_L

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