

PMP20818 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC81	1		PMP20818	Any	Printed Circuit Board	
C1, C2, C3, C4	4	4.7uF	UMK316AB7475KL-T	Taiyo Yuden	CAP, CERM, 4.7 μ F, 50 V, +/- 10%, X7R, 1206_190	1206_190
C5	1	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C6	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47 μ F, 100 V, +/- 10%, X7R, 0805	0805
C7	1	4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 μ F, 16 V, +/- 10%, X5R, 0603	0603
C8	1	0.47uF	CGA3E3X7R1H474K080AB	TDK	CAP, CERM, 0.47 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C11, C12	2	470uF	16SVPE470M	Panasonic	CAP, Aluminum Polymer, 470 μ F, 16 V, +/- 20%, 0.01 ohm, JC0 SMD	JC0
C13, C14	2	47uF	CGA9N3X7R1C476M230KB	TDK	CAP, CERM, 47 μ F, 16 V, +/- 20%, X7R, AEC-Q200 Grade 1,	
C15	1	33pF	06035A330JAT2A	AVX	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C16	1	0.068uF	GRM188R71E683KA01D	MuRata	CAP, CERM, 0.068 μ F, 25 V, +/- 10%, X7R, 0603	0603
C17, C19	2	0.01uF	C1608X7R2A103M	TDK	CAP, CERM, 0.01 μ F, 100 V, +/- 20%, X7R, 0603	0603
C18, C30	2	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C20	1	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01 μ F, 25 V, +/- 10%, X7R, 0603	0603
C21	1	4.7uF	GRM31CR71E475KA88L	MuRata	CAP, CERM, 4.7 μ F, 25 V, +/- 10%, X7R, 1206	1206
C22	1	47uF	UUD1E470MCL1GS	Nichicon	CAP, AL, 47 μ F, 25 V, +/- 20%, 0.44 ohm, SMD	6.3x5.8
C23	1	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C24	1	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 μ F, 25 V, +/- 5%, X7R, 0603	0603
C25	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 μ F, 50 V, +/- 10%, X7R, 0603	0603
C26	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 μ F, 100 V, +/- 10%, X7R, 1210	1210
C27, C28	2	1000uF	UPW1J102MHD	Nichicon	CAP, AL, 1000 μ F, 63 V, +/- 20%, 0.043 ohm, TH	D16xL31.5mm
C29	1	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 μ F, 16 V, +/- 10%, X7R, 0603	0603
D1	1	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D2	1	100V	SSA210	Fairchild Semiconductor	Diode, Schottky, 100 V, 2 A, AEC-Q101, SMA	SMA
D3	1	30V	MBRB1530CT-T	Diodes Inc.	Diode, Schottky, 30 V, 15 A, DDPAK	DDPAK
D4	1	100V	DFLS1100-7	Diodes Inc.	Diode, Schottky, 100 V, 1 A, PowerDI123	PowerDI123
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, J5, J7, J8, J9, J10, J11, J12	9		575-4	Keystone	Standard Banana Jack, Uninsulated, 5.5mm	Keystone_575-4
J3, J6	2		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
J4	1		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
L1	1	6.8uH	XAL1510-682MEB	Coilcraft	Inductor, Shielded, Composite, 6.8 μ H, 26 A, 0.00417 ohm, SMD	15.4 x 11 x 16.4mm
L2	1	33uH	LPS4018-333MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 33 μ H, 0.68 A, 0.42 ohm, SMD	LPS4018
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
Q1, Q2, Q3, Q4	4	60V	CSD18534Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 50 A, DQJ0008A (VSONP-8)	DQJ0008A
Q5	1	100V	CSD19538Q2	Texas Instruments	MOSFET, N-CH, 100 V, 4.5 A, DQK0006C (WSON-6)	DQK0006C
Q6	1	60V	2N7002ET1G	ON Semiconductor	MOSFET, N-CH, 60 V, 0.26 A, SOT-23	SOT-23
R2, R19	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R4, R5, R6, R7, R9, R11, R16	7	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R8	1	0.004	KRL6432E-M-R004-F-T1	Susumu Co Ltd	RES, 0.004, 1%, 3 W, 2512 WIDE	2512 WIDE
R12, R29	2	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47, 5%, 0.1 W, 0603	0603
R13	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R14	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R18	1	82.5k	CRCW060382K5FKEA	Vishay-Dale	RES, 82.5 k, 1%, 0.1 W, 0603	0603

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R20	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603
R21	1	5.62k	CRCW06035K62FKEA	Vishay-Dale	RES, 5.62 k, 1%, 0.1 W, 0603	0603
R22	1	40.2k	CRCW060340K2FKEA	Vishay-Dale	RES, 40.2 k, 1%, 0.1 W, 0603	0603
R23, R30	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R24	1	487k	CRCW0603487KFKEA	Vishay-Dale	RES, 487 k, 1%, 0.1 W, 0603	0603
R25	1	12.7k	CRCW060312K7FKEA	Vishay-Dale	RES, 12.7 k, 1%, 0.1 W, 0603	0603
R26	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R27	1	90.9k	CRCW060390K9FKEA	Vishay-Dale	RES, 90.9 k, 1%, 0.1 W, 0603	0603
R28	1	0.2	CSR1206FKR200	Stackpole Electronics Inc	RES, 0.2, 1%, 0.5 W, 1206	1206
SH-J1, SH-J2, SH-J3	3		60900213421	Würth Elektronik	Shunt, 2.54mm, Gold, Black	Shunt, 2.54mm, Black
TP1, TP4, TP9, TP10, TP12	5		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP2, TP5, TP8, TP11, TP16	5		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP3, TP6, TP7, TP13, TP14, TP15, TP17	7		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
U1	1		LM5141QRGEQ1	Texas Instruments	IC, PWM, Buck Controller, w/ Dither	RGE0024H
U2	1		LM3481MM/NOPB	Texas Instruments	High Efficiency Low-Side N-Channel Controller for Switching Regulators, 10-pin MSOP, Pb-Free	MUB10A
C9, C10	0	1000pF	GRM1885C2A102JA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R1, R17	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R3, R10	0	1.0	CRM1206-JW-1R0ELF	Bourns	RES, 1.0, 5%, 0.5 W, 1206	1206
R15	0	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603

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