

PMP21529 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB1	1		PMP21529	Any	Printed Circuit Board	
C1, C2, C3, C4, C5, C6, C7, C8	8	10uF	22201C106MAT2A	AVX	CAP, CERM, 10 uF, 100 V, +/- 20%, X7R, 2220	2220
C9	1	220uF	EEE-TK1J221AQ	Panasonic	CAP, AL, 220 uF, 63 V, +/- 20%, 0.26 ohm, AEC-Q200 Grade 1, SMD	SMT Radial H13
C10	1	100uF	EMVA101ATR101MKE0S	Chemi-Con	CAP, AL, 100 uF, 100 V, +/- 20%, SMD	KE0
C11, C12	2	6800pF	GRM188R71E682KA01D	MuRata	CAP, CERM, 6800 pF, 25 V, +/- 10%, X7R, 0603	0603
C13, C14, C21, C24, C27, C28	6	22pF	06035A220JAT2A	AVX	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C15, C16	2	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
C17, C18	2	330pF	06035A331JAT2A	AVX	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C19, C29, C50	3	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0805	0805
C20, C22, C51	3	2.2uF	C0603C225K8PACTU	Kemet	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, 0603	0603
C23, C30	2	2.2uF	C3216X7S2A225K160AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7S, 1206	1206
C25, C49, C66	3	220pF	C0603C221K5RACTU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
C26, C40, C47, C60	4	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
C31, C34	2	2.2uF	C0805C225K4RACTU	Kemet	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0805	0805
C32	1	10uF	C2012X5R1E106K125AB	TDK	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805
C33	1	10uF	C0603C106M9PACTU	Kemet	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
C35	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
C36	1	0.01uF	C0603C103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C37, C52	2	1uF	EMK107B7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
C38	1	47pF	GRM21A5C2E470JW01D	MuRata	CAP, CERM, 47 pF, 250 V, +/- 5%, C0G/NP0, 0805	0805
C39	1	47pF	06035A470JAT2A	AVX	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C41	1	1uF	C0603C105K4PACTU	Kemet	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0603	0603
C42, C43, C44	3	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
C45	1	1uF	GRM155R70J105KA12D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
C46	1	330pF	C0603C331K5RACTU	Kemet	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0603	0603
C48	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C53	1	0.01uF	C0603H103J3GACTU	Kemet	CAP, CERM, 0.01 uF, 25 V, +/- 5%, C0G/NP0, 0603	0603
C54, C56, C57	3	2.2uF	EMK107BB7225MA-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
C55, C59	2	33pF	06031A330JAT2A	AVX	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C58, C64	2	4.7uF	GRM32DC72A475KE01L	MuRata	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
C61, C65	2	1uF	C3216X7R2A105K160AA	TDK	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
D1, D2, D3, D4	4	40V	MBR0540T1G	ON Semiconductor	Diode, Schottky, 40 V, 0.5 A, SOD-123	SOD-123
D5	1	100V	PMEG10010ELRX	Nexperia	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
D6	1	100V	MMBD914	Fairchild Semiconductor	Diode, P-N, 100 V, 0.2 A, SOT-23	SOT-23
D8	1	40V	MBR140SFT1G	ON Semiconductor	Diode, Schottky, 40 V, 1 A, SOD-123FL	SOD-123FL
D9	1	70V	BAW56-V-GS08	Vishay-Semiconductor	Diode, Switching, 70 V, 0.25 A, SOT-23	SOT-23
D10, D11, D12	3	Green	LTST-C190GKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
F1, F2	2		SSQ 15	Bel Fuse	Fuse, 15 A, SMD	6.1x2.54x2.54mm
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, J3	2		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
J5	1		HTSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	Header, 100mil, 5x1, TH
J6	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header

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J7	1		HTSW-102-09-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 2x1, 2.54mm, TH
L1	1	15uH	SER2918H-153KL	Coilcraft	Inductor, Shielded E Core, Ferrite, 15 uH, 21.9 A, 0.0026 ohm, SMD	29.7x17.78x27.94mm
Q1, Q2, Q3, Q4	4	80V	IPB180N08S402ATMA1	Infineon Technologies	MOSFET, N-CH, 80 V, 180 A, AEC-Q101, DDPAK-7	DDPAK-7
Q5	1	200V	FDS2670	Fairchild Semiconductor	MOSFET, N-CH, 200 V, 3 A, SOIC-8	SOIC-8
Q6, Q7	2	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
R1, R2	2	41.2k	RT0603BRD0741K2L	Yageo America	RES, 41.2 k, 0.1%, 0.1 W, 0603	0603
R3, R4, R11, R12, R48, R54, R55	7	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R5, R6, R7, R8	4	5.11	CRCW08055R11FKEA	Vishay-Dale	RES, 5.11, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R9, R10	2	1.10k	RT0603BRD071K1L	Yageo America	RES, 1.10 k, 0.1%, 0.1 W, 0603	0603
R13, R14	2	0.002	ERJ-M1WTF2M0U	Panasonic	RES, 0.002, 1%, 1 W, 2512	2512
R15, R20	2	120	CRCW0603120RJNEA	Vishay-Dale	RES, 120, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R16, R19, R25, R26	4	120k	RC0603FR-07120KL	Yageo	RES, 120 k, 1%, 0.1 W, 0603	0603
R17, R18, R21, R22, R34, R41, R49, R50	8	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R23, R24	2	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R28	1	2.03k	RT0603DRE072K03L	Yageo America	RES, 2.03 k, 0.5%, 0.1 W, 0603	0603
R29, R30	2	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R32	1	3.74k	RC0603FR-073K74L	Yageo	RES, 3.74 k, 1%, 0.1 W, 0603	0603
R33	1	90.9k	CRCW080590K9FKEA	Vishay-Dale	RES, 90.9 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R35	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R36, R37	2	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R38	1	1.00	RT0603DRE071RL	Yageo America	RES, 1.00, 0.5%, 0.1 W, 0603	0603
R39	1	750	CRCW0603750RFKEA	Vishay-Dale	RES, 750, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R40, R46, R47, R51	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R42	1	4.53k	CRCW06034K53FKEA	Vishay-Dale	RES, 4.53 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R43	1	33.2	CRCW060333R2FKEA	Vishay-Dale	RES, 33.2, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R44	1	3.01	CRCW08053R01FKEA	Vishay-Dale	RES, 3.01, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R45, R56, R57	3	2.2k	CRCW06032K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R52, R53	2	3.16k	CRCW06033K16FKEA	Vishay-Dale	RES, 3.16 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R58, R59	2	200k	CRCW0603200KJNEA	Vishay-Dale	RES, 200 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
S1	1		G12AP	NKK Switches	Switch, Toggle, SPDT 1Pos, TH	7 X 11 X4.5 mm
S2, S3, S4	3		SKRKAEE010	Alps	Switch, Push Button, SMD	2.9x2x3.9mm SMD
T1	1	540uH	031-00019	XFMRS, Inc.	Auxiliary Flyback Transformer, 540 uH, SMT	SMD, 8-Leads, Body 400x300mil, Pitch 79mil
TP1, TP2, TP3, TP4, TP7, TP8, TP9, TP10, TP16, TP17	10		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP11, TP12, TP13, TP19	4		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1, U4	2		UCC27211ADRM	Texas Instruments	120-V Boot, 4-A Peak, High Frequency High-Side and Low-Side Driver, DRM0008A (VSON-8)	DRM0008A
U2, U3	2		OPA2211AIDDA	Texas Instruments	1.1 nV/rtHz Noise, Low Power, Precision Operational Amplifier, 4.5 to 36 V, -40 to 125 degC, 8-pin SOP (DDA8), Green (RoHS & no Sb/Br)	DDA0008C
U5	1		TLV1117-33IDCY	Texas Instruments	Single-Output LDO, 800mA, Fixed (3.3), Internal Current Limit, Thermal Overload Protection, DCY0004A (SOT-223-4)	DCY0004A
U6	1		UCC3813D-1	Texas Instruments	Low Power Economy BiCMOS Current Mode PWM, D0008A (SOIC-8)	D0008A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U7	1		UCD3138RJAT	Texas Instruments	Highly Integrated Digital Controller for Isolated Power with 3 Feedback Loops and 8 DPWM Outputs, RJA0040A (VQFN-40)	RJA0040A
C62, C63	0	5600pF	GRM3195C2A562JA01D	MuRata	CAP, CERM, 5600 pF, 100 V, +/- 5%, C0G/NP0, 1206	1206
D7	0	100V	PMEG10010ELRX	Nexperia	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
D13, D14	0	100V	MBR1H100SFT3G	ON Semiconductor	Diode, Schottky, 100 V, 1 A, SOD-123FL	SOD-123FL
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
R60, R61	0	3.3	CRM2010-JW-3R3ELF	Bourns	RES, 3.3, 5%, 1 W, 2010	2010

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