

PMP21107 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB1	1		PMP21107	Any	Printed Circuit Board	
C1	1	180uF	UCZ1J181MNQ1MS	Nichicon	CAP, AL, 180 µF, 63 V, +/- 20%, 0.2 ohm, AEC-Q200 Grade 1, SMD	D12.5xL13.5mm
C2, C7	2	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
C3, C8, C9, C101	4	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C4, C5	2	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1 µF, 100 V, +/- 20%, X7R, 1206	1206
C6, C24, C26	3	0.01uF	C1608X7R2A103M	TDK	CAP, CERM, 0.01 µF, 100 V, +/- 20%, X7R, 0603	0603
C10, C15	2	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C11	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47 µF, 100 V, +/- 10%, X7R, 0805	0805
C12	1	4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, 0603	0603
C13	1	0.47uF	CGA3E3X7R1H474K080AB	TDK	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C14	1	1000pF	GCM2165C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0805	0805
C16, C17	2	100uF	LMK325ABJ107MMHT	Taiyo Yuden	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, AEC-Q200 Grade 3, 1210	1210
C18, C19	2	100uF	LMK325ABJ107MMHT	Taiyo Yuden	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, AEC-Q200 Grade 3, 1210	1210
C20	1	4700pF	GRM188R71E472KA01D	MuRata	CAP, CERM, 4700 pF, 25 V, +/- 10%, X7R, 0603	0603
C22	1	33pF	GRM1885C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C23	1	0.068uF	GRM188R71E683KA01D	MuRata	CAP, CERM, 0.068 µF, 25 V, +/- 10%, X7R, 0603	0603
C25	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 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
H3, H4, H5, H6	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H7, H8, H9, H10	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1	1		1729018	Phoenix Contact	TERM BLOCK 2POS 5mm, TH	10x10x8.1 mm
J2	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
L1	1		ACM1211-102-2PL-TL01	TDK	Coupled inductor, 6 A, 0.014 ohm, SMD	SMD, 12x11mm
L2	1	1.8uH	7447798180	Würth Elektronik	Inductor, Shielded, Metal Composite, 1.8 µH, 12.8 A, 0.0038 ohm, SMD	10.2 x 6.4 x 10.2mm
L3	1	2.2uH	IHLP3232DZER2R2M01	Vishay-Dale	Inductor, Shielded, Powdered Iron, 2.2 µH, 10.5 A, 0.0137 ohm, SMD	322x158x322mil
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	1	60V	SQJB60EP-T1_GE3	Vishay-Siliconix	MOSFET, 2-CH, N-CH, 60 V, 15 A, AEC-Q101, PowerPAK SO-8 Dual Asymmetric	PowerPAK SO-8 Dual Asymmetric
R1	1	0.33	ERJ-8RQFR33V	Panasonic	RES, 0.33, 1%, 0.25 W, 1206	1206
R3	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R4	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R6, R7, R8, R11, R13, R21	6	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R9	1	0.007	KRL6432E-M-R007-F-T1	Susumu Co Ltd	RES, 0.007, 1%, 3 W, 2512 WIDE	2512 WIDE
R10	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R12	1	1.0	CRM1206-JW-1R0ELF	Bourns	RES, 1.0, 5%, 0.5 W, 1206	1206
R14	1	28.0k	CRCW060328K0FKEA	Vishay-Dale	RES, 28.0 k, 1%, 0.1 W, 0603	0603
R16	1	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, 0603	0603
R17	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
R20	1	21.0k	CRCW060321K0FKEA	Vishay-Dale	RES, 21.0 k, 1%, 0.1 W, 0603	0603
R23	1	12.1k	CRCW060312K1FKEA	Vishay-Dale	RES, 12.1 k, 1%, 0.1 W, 0603	0603
SH-J1	1		60900213421	Würth Elektronik	Shunt, 2.54mm, Gold, Black	Shunt, 2.54mm, Black

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP1, TP4, TP6	3	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP2, TP8, TP9	3		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP3	1		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP5, TP7	2	Triple	1598-2	Keystone	Terminal, Turret, TH, Triple	Keystone1598-2
U1	1		LM25141QRGERQ1	Texas Instruments	Automotive, 2.2MHz, Low Iq Synchronous Buck Controller With Frequency Spread Spectrum, RGE0024J (VQFN-24)	RGE0024J
C21	0	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
C27	0	0.01uF	C1608X7R2A103M	TDK	CAP, CERM, 0.01 μF, 100 V, +/- 20%, X7R, 0603	0603
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R2, R5, R22	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R15	0	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R18	0	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R19	0	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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