

PMP31011 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	0	0.015uF	GRM21BR72A153MA01L	MuRata	CAP, CERM, 0.015 uF, 100 V, +/- 20%, X7R, 0805	805
C2, C3, C4	3	220uF	EEFSX0G221ER	Panasonic	CAP, Aluminum Polymer, 220 uF, 4 V, +/- 20%, 9 ohm, 7343-20, SMD	7343-20
C5, C6, C7, C8, C9, C34	6	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	603
C10	1	0.1uF	GRM155R71C104JA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0402	402
C11, C12, C13, C14, C15, C16, C17, C18	8	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
C19, C20, C21	3		HHXB160ARA471MJA0G	United Chemi-Con	Cap Aluminum Polymer 470uF 16VDC 20% (10 X 10mm) SMD 0.018 Ohm 2600mA 5000h 105C Automotive T/R	RADIAL
C22	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
C23	1	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	402
C24	1	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0402	402
C25	0	22000000uF	JUUMT1226MHD	Nichicon	CAP, Electric Double Layer, 22000000 uF, 2.7 V,+/- 20%, 0.07 ohm, TH	Dia 16mm
C26	1	220pF	GRM155R71H221KA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402	402
C27	1	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	603
C28	1	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V,+/- 10%, X7R, 0603	603
C29	1	6800pF	GRM188R71H682KA01D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0603	603
C30	1	470pF	GRM1555C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, COG/NP0, 0402	402
C31	1	0.68uF	GRM188R71A684KA61D	MuRata	CAP, CERM, 0.68 uF, 10 V, +/- 10%, X7R, 0603	603
C32	1	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1210	1210
C37	1	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	603
C35	1	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	402
C36	1	10uF	GRM21BZ71E106KE15L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 0805	805
D1	1	30V	MBRS130LT3G	ON Semiconductor	Diode, Schottky, 30 V, 1 A, SMB	SMB
D2, D3	2	100V	BAS16LT1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOT-23	SOT-23
D4	1	2.7V	BZT52C2V7T-7	Diodes Inc.	Diode, Zener, 2.7 V, 300 mW, SOD-523	SOD-523
J1, J2	2		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
J3	1		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J4, J5	2		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
L1	1	220nH	XEL4014-221MEB	Coilcraft	Inductor, Shielded, Composite, 220 nH, 12 A, 0.0075 ohm, AEC-Q200 Grade 1, SMD	
L2	1		ETQP8MR68JFA	Panasonic	Power Inductor, Aec-Q200, Shld, 680Nh; Inductance: 680Nh; Rms Current (Irms): 42.6A; Inductor Construction: shielded;...	SMT_INDUCTOR_12 MM6_13MM2
L3	1	10uH	LPS4018-103MRB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 10 uH, 1.25 A, 0.18 ohm, SMD	LPS4018
Q2	1		IAUC120N04S6N010ATMA1	Infineon	Trans Mosfet N-ch 40V 120A 8-PIN Pg-tsdson T/R	TDSON8
Q1	1		BSC093N04LS G	Infineon		
Q4	1	-60V	SQJ415EP-T1_GE3	Vishay-Semiconductor	MOSFET, P-CH, -40 V, -30 A, AEC-Q101, PowerPAK_SO-8L	PowerPAK_SO-8L

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
Q5	1	60 V	MMBT2907ALT1G	ON Semiconductor	Transistor, PNP, 60 V, 0.6 A, SOT-23	SOT-23
R1	0	0.82	CSR1206FTR820	Stackpole Electronics Inc	RES, 0.82, 1%, 0.5 W, 1206	1206
R2, R3	2	0.001	ERJ-M1WTF1M0U	Panasonic	RES, 0.001, 1%, 1 W, 2512	2512
R4	1	0	RCL12250000Z0EG	Vishay Draloric	RES, 0, 5%, 2 W, 2512 WIDE	2512 WIDE
R5, R8	2	1	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R6, R21, R29	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R7, R19, R25, R30, R32	5	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R10, R14	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R11	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R12	1	110k	CRCW0603110KFKEA	Vishay-Dale	RES, 110 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R13	1	2.87k	CRCW06032K87FKEA	Vishay-Dale	RES, 2.87 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R15, R17	2	10	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R16	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R18, R22	2	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R20	1	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R24	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R26	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R28	1	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R31	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
S1	1		G13AP	NKK Switches	Switch, Toggle, SPDT 1Pos, TH	7 X 11 X4.5 mm
T1, T2	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
TP1, TP2, TP6, TP7	4		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP3, TP4, TP8	3		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP5, TP9	2		5014	Keystone	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
U1	1		LM51521QRGRRQ1	Texas Instruments	Automotive Low-IQ Synchronous Boost Controller for Start-stop	VQFN20
U2	1		TPS61071TDDCRQ1	Texas Instruments	Automotive Catalog Adjustable, 600-mA Switch, 90% Efficient PWM Boost Converter, DDC0006A (SOT-23-T-6)	DDC0006A
U3	1		TL431AQDBZRQ1	Texas Instruments	Automotive Catalog Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

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