

DNP = DO NOT POPULATE

PMP31406 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2	2	15uF	UCS2G150MHD	Nichicon	CAP, AL, 15 μ F, 400 V, +/- 20%, TH	D12.5xL20mm
C3	1	3300pF	GRM31BR73A332KW01L	MuRata	CAP, CERM, 3300 pF, 1000 V, +/- 10%, X7R, 1206	1206
C4, C5	2	0.22uF	8.90324E+11	Wurth Elektronik	CAP, Film, 0.22 uF, 275 V, +/- 10%, TH	15x7mm
C6, C11, C17	3	1500pF	DE2E3KY152MN3AM02F	MuRata	CAP, CERM, 1500 pF, X1 250 VAC/Y2 300 VAC, +/- 20%, E, TH	TH, 2- Leads, Body 7x5mm, Pin Spacing 7.5mm
C7, C8	2	470uF	HHXJ350ARA471MJC5G			RADIAL
C9	1	10uF	GCM31CD71H106K	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7T, 1206 190	1206 190
C10	1	1uF	C2012X6S1H105K125AB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X6S, 0805	0805
C12	1	470pF	GRM188R72E471KW07D	MuRata	CAP, CERM, 470 pF, 250 V, +/- 10%, X7R, 0603	0603
C13	1	2.2uF	GRM219R61E225KA12D	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X5R, 0805	0805
C14	1	1uF	C1608X7R1E105K080AE	TDK	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
C15	1	22uF	TMK325B7226MM-TR	Taiyo Yuden	CAP, CERM, 22 uF, 25 V, +/- 20%, X7R, 1210	1210
C16	1	0.1uF	06035C104KAZ2A	AVX	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C18	1	0.047uF	08055C473KAT2A	AVX	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0805	0805
C19	1	6800pF	C0603C682K5RACTU	Kemet	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0603	0603
C20, C21	2	47pF	CGA3E2NP01H470J080AA	TDK	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
C22	1	0.047uF	C1608X5R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X5R, 0603	0603
D1	1		Z4DGP406L-HF	Comchip	Bridge Rectifier Single Phase Standard 600 V Surface Mount Z4-D	SMT 8MM1 10MM5
D2	1	180V	SMCJ180A	Littelfuse	Diode, TVS, Uni, 180 V, SMC	SMC
D3	1	600V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMA	SMA
D4, D5	2	600V	UFM15PL-TP	Micro Commercial Component	Diode, Ultrafast, 600 V, 1 A, SOD-123FL	SOD-123FL
F1	1		39213150000	Littelfuse	Fuse, 3.15 A, 250VAC/VDC, TH	8x8.5x4mm
J1	1		1715721	Phoenix Contact	Terminal Block, 5.08 mm, 2x1, TH	2POS Terminal Block
L1	1	22uH	7447462220	Wurth Elektronik	Inductor, Unshielded Drum Core, Ferrite, 22 uH, 1.7 A, 0.102 ohm, TH	D6 x 8.5mm
L2	1	4mH	744821240	Wurth Elektronik	Coupled inductor, 4 mH, 1.5 A, 0.14 ohm, TH	15 x 18 x 7.5mm
Q1	1	150V	FDMS86255	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 10 A, SON 5x6mm	SON 5x6mm
R1	1	100		Yageo	RES, 100, 5%, 0.5 W, 1210	1210
R2, R3	2	2.2	ERJ-3RQF2R2V	Panasonic	RES, 2.20, 1%, 0.1 W, 0603	0603
R4	1	51.1	ERJ-8ENF51R1V	Panasonic	RES, 51.1, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R5	1	47.0k	CRCW060347K0FKEA	Vishay-Dale	RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R6	1	22.6k	CRCW060322K6FKEA	Vishay-Dale	RES, 22.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R7	1	28.7k	CRCW060328K7FKEA	Vishay-Dale	RES, 28.7 k, 1%, 0.1 W, 0603	0603
R8	1	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5 k, 1%, 0.1 W, 0603	0603
R9	1	25.5k	CRCW060325K5FKEA	Vishay-Dale	RES, 25.5 k, 1%, 0.1 W, 0603	0603
R10	1	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R11	1	49.9	M55342K12B49D9T	TT Electronics/IRC	RES, 49.9, 1%, 0.1 W, 0603	0603
R12	1	38.3k	RC0603FR-0738K3L	Yageo	RES, 38.3 k, 1%, 0.1 W, 0603	0603
R13	1	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
R14	1	4.70k	RC0603FR-074K7L	Yageo	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R15	1	5.23k	RC0603FR-075K23L	Yageo	RES, 5.23 k, 1%, 0.1 W, 0603	0603
R16	1	22.1k	RC0603FR-0722K1L	Yageo	RES, 22.1 k, 1%, 0.1 W, 0603	0603
R17	1	4.42k	RC0603FR-074K42L	Yageo	RES, 4.42 k, 1%, 0.1 W, 0603	0603
RT1	1	4.7	B57153S0479M000	TDK	Thermistor NTC, 4.70 ohm, 20%, 8.5mm Disc	8.5mm Disc
T1	1		G254013LF	GCI	TRANSFORMER G254013LF	PTH_XRMS_28MM8_28MM5

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP1, TP6, TP7	3		5000	Keystone, Keystone Electronic	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP2, TP4, TP5	3		5002	Keystone Electronics	Test Point, Miniature, White, TH	White Miniature Testpoint
TP3, TP8	2		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		UCC24612-1DBVR	Texas Instruments	High-Frequency Multi-Mode Synchronous Rectifier Controller, DBV0005A (SOT-23-5)	DBV0005A
U2	1		UCG28826	Texas Instruments	UCG28826	VQFN12
U3	1		LTV-817S	Lite-On	Optocoupler, 5 kV, 50-600% CTR, SMT	DIP-4 SMT
U4	1		TL431AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you fully indemnify TI and its representatives against any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#), [TI's General Quality Guidelines](#), or other applicable terms available either on [ti.com](https://www.ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products. Unless TI explicitly designates a product as custom or customer-specified, TI products are standard, catalog, general purpose devices.

TI objects to and rejects any additional or different terms you may propose.

Copyright © 2025, Texas Instruments Incorporated

Last updated 10/2025