

Variant: 001
Generated: 6/3/2025 10:33 AM
TID #: N/A



PMP41131 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C2, C19, C22	3	0.1uF	C3216X7T2W104M160AA	TDK	CAP, CERM, 0.1 uF, 450 V, +/- 20%, X7T, 1206	1206
2	C3	1	1000pF	GRM31BR7J3102KW01L	MuRata	CAP, CERM, 1000 pF, 630 V, +/- 10%, X7R, 1206	1206
3	C4, C6	2	10uF	TMK212BBJ106KG-T	Taiyo Yuden	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805
4	C5	1	2.2uF	GRM188R6YAZ225KA12D	MuRata	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X5R, 0603	0603
5	C7	1	0.1uF	MX2224KQ3B40YC3F00R			
6	C8, C9	2	39uF	KCXE2502G470MF	Yongming	Aluminum Electrolytic Capacitor, Radial, THT, D10 x H20-mm, 39uF, 400V	
7	C10	1	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C11	1	2.2uF	GRM155R61E225ME15D	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 20%, X5R, 0402	0402
9	C12	1	3300pF	GRM155R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
10	C13	1		8.85342E+11	Würth Elektronik	WCAP-CSMH Multilayer Ceramic Chip Capacitor, Mid and High Voltage, size 0805, X7R Class II, 1nF, 200VDC	
11	C14, C23	2	0.015uF	GRM155R71E153KA61D	MuRata	CAP, CERM, 0.015 uF, 25 V, +/- 10%, X7R, 0402	0402
12	C15	1	10uF	GRM188R61E106KA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0603	0603
13	C16	1	330pF	GRM155R71H331KA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0402	0402
14	C17	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
15	C18	1	0.018uF	GRM155R71H183KA12D	MuRata	CAP, CERM, 0.018 uF, 50 V, +/- 10%, X7R, 0402	0402
16	C26	1	1000pF	C0402C102J3RACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 5%, X7R, 0402	0402
17	C27, C28, C29, C30	4		8.85012E+11	Würth Elektronik	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0402, X7R, 470pF, 25VDC	
18	C31	1	1uF	CGA3E1X7R1E105K080AC	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
19	C32	1	1nF	TMY1102M	SICHUAN TRX TECHNOLOGY	SMD-Y1 a.c. ceramic capacitor 1000pF 20% 400VAC 7.8x5.4x2.45mm	7854
20	C38	1	1uF	C1608X7R1V105K080AC	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, 0603	0603
21	C49	1	33uF	C3216X5R1E336M160AC	TDK	CAP, CERM, 33 uF, 25 V, +/- 20%, X5R, 1206	1206
22	D1	1		Z4DGP406L-HF	Comchip	Bridge Rectifier Single Phase Standard 600 V Surface Mount Z4-D	SMT_8MM1_10MM5
23	D2, D7	2	5V	CDSOD323-T05C	Bourns	Diode, TVS, Bi, 5 V, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
24	D3	1	1000V	MRA4007T3G	ON Semiconductor	Diode, Standard Recovery Rectifier, 1000 V, 1 A, AEC-Q101, SMA	SMA
25	D4, D5	2	600V	ES1JFL	ON Semiconductor	Diode, Switching, 600 V, 1 A, SOD-123	SOD-123
26	D6, D8	2		STS321050B331	Eaton	18V Clamp 22A (8/20us) Ipp Tvs Diode Surface Mount SOD-323	SOD-323
27	D9	1	200V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200 V, 0.2 A, SOD-123	SOD-123
28	D13	1	40V	RB521SM-40T2R	Rohm	Diode, Schottky, 40 V, 0.2 A, SOD-523	SOD-523
29	EC6, EC7	2	470uF			25V/470uF D5.5*11mm	
30	F1	1		JFC2410-1400TS	Shenzhen JDT Fuse	50A SMD Fuse 4A 250V 250V SMD Disposable fuses ROHS	SMT_FUSE_6MM1_2MM6
31	J4	1		DX07S024JJ2R1300	JAE Electronics	Receptacle, USB 3.1 Type C, R/A, Gold, SMT	Receptacle, USB 3.1 Type C, R/A, SMT
32	L1	1	68uH	MNR-6045-680MTS	Mag Layers	Inductor, Wirewound, Ferrite, 68 uH, 0.9 A, 0.33 ohm, SMD	6 x 4.5 x 6mm
33	L5	1		MDM-9070F-102	MAG-AGA	Wire Wound Common Mode Choke 1000Ohm @ 100MHz, 4A IDC, 9.0x7.0x4.8mm SMT	SMT_CMC_9MM0_7MM0
34	Q1	1	150V	BSC093N15NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 150 V, 87 A, PG-TDSON-8	PG-TDSON-8
35	Q2	1	30V	CSD17575Q3	Texas Instruments	MOSFET, N-CH, 30 V, 60 A, DQG0008A (VSON-CLIP-8)	DQG0008A
36	R1	1	470k	CRCW0805470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
37	R3, R17	2	30	RC1206FR-0730RL	Yageo America	RES, 30.0, 1%, 0.25 W, 1206	1206
38	R4, R12	2	1.1	CRCW04021R10FKED	Vishay-Dale	RES, 1.10, 1%, 0.063 W, 0402	0402
39	R5	1	4.7k	CRCW12064K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.25 W, 1206	1206
40	R7	1	7.68k	CRCW04027K68FKED	Vishay-Dale	RES, 7.68 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
41	R8	1	28.7k	CRCW040228K7FKED	Vishay-Dale	RES, 28.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
42	R9	1	2.2	CRCW04022R20JNED	Vishay-Dale	RES, 2.2, 5%, 0.063 W, 0402	0402
43	R10	1	3.01k	CRCW04023K01FKED	Vishay-Dale	RES, 3.01 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
44	R13	1	150	CRCW0402150RFKED	Vishay-Dale	RES, 150, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
45	R14	1	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
46	R18	1	1	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, 0402	0402
47	R21	1	1.00k	RC0402FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.0625 W, 0402	0402
48	R22	1	0.005	CSR1206-0R005F1	Riedon	RES, 0.005, 1%, 1 W, 1206	1206
49	R23, R29	2	3.30k	ERJ-2RKF3301X	Panasonic	RES, 3.30 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
50	R24, R25, R27, R28	4	6.8	CRCW04026R80JNED	Vishay-Dale	RES, 6.8, 5%, 0.063 W, 0402	0402
51	R26	1	51k	CRCW040251K0JNED	Vishay-Dale	RES, 51 k, 5%, 0.063 W, 0402	0402
52	R32	1	300	RC0603FR-07300RL	Yageo	RES, 300, 1%, 0.1 W, 0603	0603
53	R34	1	47.0k	CRCW060347K0FKEA	Vishay-Dale	RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
54	R35	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
55	R36	1	1.0k	ESR03EZP1J102	Rohm	RES, 1.0 k, 5%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
56	R42	1	11.5k	CRCW040211K5FKED	Vishay-Dale	RES, 11.5 k, 1%, 0.063 W, 0402	0402
57	R43	1	5.23k	CRCW04025K23FKED	Vishay-Dale	RES, 5.23 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
58	R50	1	12	CRCW060312R0JNEA	Vishay-Dale	RES, 12, 5%, 0.1 W, 0603	0603
59	RT1	1	100k	NCP15WF104F03RC	MuRata	Thermistor NTC, 100k ohm, 1%, 0402	0402
60	T1	1				EQ25/LP	
61	T2	1					
62	U1	1		IP2723TH	Injoinic	Integrate multiple protocols, fast charging protocol IC for USB-C port	QFN24
63	U3	1		VOL618A-2T	Vishay-Semiconductor	Optocoupler, 5 kV, 63-125% CTR, SMT	8x2x4mm
64	U5	1		MP6908GJ-Z	Monolithic Power Systems	FAST TURN-OFF INTELLIGENT RECTIF	TSOT23-6
65	U8	1		UCG2862	Texas Instruments	UCG2862	VQFN12
66	C1	0			Holley Stone	2220 SMD, 33nF, 250VAC, Holley Stone	
67	C20	0	4700pF	GRM155R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0402	0402
68	C21	0	100pF	8.85012E+11	Würth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
69	R2	0	1.1	CRCW04021R10FKED	Vishay-Dale	RES, 1.10, 1%, 0.063 W, 0402	0402
70	R11	0	43.0k	RG1608P-433-B-T5	Susumu Co Ltd	RES, 43.0 k, 0.1%, 0.1 W, 0603	0603
71	R15	0	4.70k	RC0402FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.0625 W, 0402	0402
72	R19	0	33.0k	RG1608P-333-B-T5	Susumu Co Ltd	RES, 33.0 k, 0.1%, 0.1 W, 0603	0603
73	R30	0	1.00k	MCR01MZPF1001	Rohm	RES, 1.00 k, 1%, 0.063 W, 0402	0402
74	U2	0		ATL431AIDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A (SOT-23-3)	DBZ0003A

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), 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 will 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](#) or other applicable terms available either on [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.

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

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2025, Texas Instruments Incorporated

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), 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 will 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](#) 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.

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

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2025, Texas Instruments Incorporated