

**PMP41015 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	0.1uF	06033C104KAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
2	C2, C3	2	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, 0805	805
3	C4	1	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	603
4	C5	1	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	805
5	C6, C7, C8, C9	4	22uF	CL32A226KAJNNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 10%, X5R, 1210	1210
6	C10	1	1uF	8.85012E+11	Würth Elektronik	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
7	C11	1	10pF	500R07S100JV4T	Johanson Technology	CAP, CERM, 10 pF, 50 V, +/- 5%, COG/NP0, 0402	402
8	C12	1	1000pF	C0805C102JBRACU	Kemet	CAP, CERM, 1000 pF, 630 V, +/- 5%, X7R, 0805	805
9	C13, C16	2	2200pF	VY2222M35V5UG6TV5	Vishay-Bccomponents	CAP, CERM, 2200 pF, X1 440 VAC/Y2 300 VAC, +/- 20%, Y5U, Body9x5mm	Body9x5mm
10	C14	1	0.1uF	ECQ-U2A104ML	Panasonic	CAP, Film, 0.1 uF, 275 V, +/- 20%, TH	17.5x5.5x12.5mm
11	C15	1	0.33uF	ECQ-U2A334ML	Panasonic	CAP, Film, 0.33 uF, 275 V, +/- 20%, TH	RCAP, 17.5x17.5x9.5mm
12	C17	1	680uF	B41896C7687M000	TDK	CAP, AL, 680 uF, 35 V, +/- 20%, 0.041 ohm, AEC-Q200 Grade 1, TH	D12.5xL25mm
13	C18	1	1000pF	GRM31A7UJ2102JW31D	MuRata	CAP, CERM, 1000 pF, 630 V, +/- 5%, U2J, 1206	1206
14	C19	1	680uF	EMVA6R3AD681MHA0G	Chem-Con	CAP, AL, 680 uF, 6.3 V, +/- 20%, SMD	HA0
15	C20, C21	2	120uF	LLS2W121MELA	Nichicon	CAP, AL, 120 uF, 450 V, +/- 20%, TH	D25xL32mm
16	C22	1	4.7uF	CGA4J1X7R1H475K125AC	TDK Corporation	Cap Ceramic 4.7uF 50V X7R 10% Pad SMD 0805 +125°C Automotive T/R	805
17	C23	1	560pF	06033C561KAT2A	AVX	CAP, CERM, 560 pF, 50 V, +/- 10%, X7R, 0603	603
18	C24	1	0.047uF	C1608X5R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X5R, 0603	603
19	C25	1	2200pF	C045-E2GA222M-NKA	TDK	CAP, CERM, 2200 pF, V, +/- 20%, E, D9xT6mm	D9xT6mm
20	C26	1	3300pF	C0603C332F5GACTU	Kemet	CAP, CERM, 3300 pF, 50 V, +/- 1%, COG/NP0, 0603	603
21	C28, C29, C32	3	1000uF	ELX2350ELL102MK25S	Chem-Con	CAP, AL, 1000 uF, 35 V, +/- 20%, AEC-Q200 Grade 2, TH	D12.5xL20mm
22	C30	1	47pF	C0603C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, COG/NP0, 0603	603
23	C31	1	4.7uF	UUD1H4R7MCL1GS	Nichicon	CAP, AL, 4.7 uF, 50 V, +/- 20%, 1.52 ohm, SMD	5x5.8
24	C33, C34	2	4.7uF	C2012X7R1H475K125AC	TDK	4.7uF ±10% 50V Ceramic Capacitor X7R 0805 (2012 Metric)	805
25	D2	1	200V	MBRB20200CTT4G	ON Semiconductor	Diode, Schottky, 200 V, 20 A, DDPAK	DDPAK
26	D3	1	170V	SMBJ170A-13-F	Diodes Inc.	Diode, TVS, Uni, 170 V, 275 Vc, SMB	SMB
27	D4	1	1000V	RS1MB-13-F	Diodes Inc.	Diode, P-N, 1000 V, 1 A, SMB	SMB
28	D5	1	600V	US1J-13-F	Diodes Inc.	Diode, Ultrafast, 600 V, 1 A, SMA	SMA
29	D6	1	40V	BAS40-7-F	Diodes Inc.	Diode, Schottky, 40 V, 0.2 A, SOT-23	SOT-23
30	D7	1	600V	KBURJ-E4/51	Vishay-Semiconductor	Diode, Switching-Bridge, 600 V, 8 A, TH	23.2x6.85mm
31	F1	1		39215000000	Littelfuse	Fuse, 5 A, 250VAC/VDC, TH	8x8.5x4mm
32	H1	1		V6560W	Assman WSW	Heat Sink TO-220	Heat Sink TO-220
33	J1, J3	2		393570002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
34	J2	1		393570003	Molex	Terminal Block, 3.5 mm, 3x1, Tin, TH	Terminal Block, 3.5 mm, 3x1, TH
35	L1	1		7443331000	Würth Elektronik	WE-HCC SMT High Current Cube Inductor, size 1090, 10uH, 9A, 23.1mOhm	
36	L2	1	820uH	7447709821	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 820 uH, 0.95 A, 1 ohm, SMD	SMD
37	L4	1		750343092	Würth Electronics	Power Common Mode Choke	PTH 14MM0 8MM89
38	L5	1	20mH	744823220	Würth Elektronik	Coupled inductor, 20 mH, 1.5 A, 0.27 ohm, TH	13x2x17.5mm
39	Q1	1		IPAW60R360P7SXKA1	Infineon	N-Channel 650V 9A (Tc) 22W (Tc) Through Hole PG-TO220 Full Pack	PG-TO220-3
40	Q2	1		TLP292(GR-TPL_E	Toshiba	OPTOISOLATOR 3.75KV TRANS 4-SO	SO4
41	R1	1	10	CPF0402B10RE1	TE Connectivity	RES, 10.0, 0.1%, 0.063 W, 0402	402
42	R3	1	100k	CRCW0402100KFKEDC	Vishay	RES, 100 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Thick Film	402
43	R4	1	23.7k	RC0201FR-0723K7L	Yageo America	RES, 23.7 k, 1%, 0.05 W, 0201	201
44	R5, R20, R21	3	750k	CRCW1206750KFKEA	Vishay-Dale	RES, 750 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
45	R6	1	10	RC0805JR-0710RL	Yageo America	RES, 10, 5%, 0.125 W, 0805	805
46	R7	1	86.6k	CRCW0603866KFKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
47	R8	1	1.50k	RC0603FR-071K5L	Yageo	RES, 1.50 k, 1%, 0.1 W, 0603	603
48	R9	1	383k	RT0603BRD07383KL	Yageo America	RES, 383 k, 0.1%, 0.1 W, 0603	603
49	R10	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
50	R11	1	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
51	R12	1	330k	CRCW1206330KJNEA	Vishay-Dale	RES, 330 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
52	R13	1	2.2	ERJ-3RQF2R2V	Panasonic	RES, 2.20, 1%, 0.1 W, 0603	603
53	R14	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
54	R15	1	100k	RC0603FR-07100KL	Yageo	RES, 100 k, 1%, 0.1 W, 0603	603
55	R16	1	22.0k	RC0603FR-0722KL	Yageo	RES, 22.0 k, 1%, 0.1 W, 0603	603
56	R17	1	0.33	ERJ-8RQFR33V	Panasonic	RES, 0.33, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
57	R18	1	4.99k	CPF0603B4K99E	TE Connectivity	RES, 4.99 k, 0.1%, 0.063 W, 0603	603
58	R19	1	44.2k	RC0603FR-0744K2L	Yageo	RES, 44.2 k, 1%, 0.1 W, 0603	603
59	R22	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
60	R23, R26	2	47k	PR02000204702JR500	Vishay-Bccomponents	RES, 47 k, 5%, 2 W, AEC-Q200 Grade 0, Axial resistor	Axial resistor
61	R24	1	2.4k	CRCW04022K40JNED	Vishay-Dale	RES, 2.4 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
62	R25	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
63	R27	1	120k	CRCW0402120KFKEA	Vishay-Dale	RES, 120 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
64	R28	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
65	R29	1	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	603
66	R30	1	47	CRCW120647R0JNEA	Vishay-Dale	RES, 47, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
67	R31	1	10	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
68	RT1	1	4.7	B57237S0479M000	TDK	Thermistor NTC, 4.70 ohm, 20%, 15x7mm	15x7mm
69	T1	1	300uH	750345036	Würth	300uH, ER28-17, TH	
70	TP1	1		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
71	U1	1		LMR33620ADDAR	Texas Instruments	3.8V to 36V 3A/2A Synchronous Step-Down Voltage Regulator, DDA0008J (SOIC-8)	DDA0008J
72	U2	1		UCC28740DR	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A (SOIC-7)	D0007A
73	U3	1		LTV-817S	Lite-On	Optocoupler, 5 kV, 50-600% CTR, SMT	DIP-4 SMT
74	U4	1		TL431LIBQDBZR	Texas Instruments	Programmable Shunt Regulator with Optimized Reference Current, DBZ0003A (SOT-23-3)	DBZ0003A
75	C27	0	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	603
76	R2	0	100k	CRCW0402100KFKEDC	Vishay	RES, 100 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Thick Film	402

## 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 © 2024, Texas Instruments Incorporated