

## PMP22817 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	47uF	EEE-FK1H470XP	Panasonic	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D8
C2, C8, C12	3	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	805
C3	1	10uF	CGA6P3X7S1H106K250AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
C4, C7, C11, C16, C19, C20, C26, C28, C39, C40, C41, C42, C43, C44, C45, C48	16	0.1uF	CGA3E2X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C5, C10, C25	3	2.2uF	GRT188C8YA225KE13D	Murata	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X6S, 0603	603
C6, C13, C14	3	22uF	TMK325B7226KMHT	Taiyo Yuden	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C9	1	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C17	1	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	603
C18, C53	2	330pF	GRM188R72A331KA01D	MuRata	CAP, CERM, 330 pF, 100 V, +/- 10%, X7R, 0603	603
C21	1	2200pF	GRM188R72A222KA01D	MuRata	CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, 0603	603
C22, C29, C30, C31, C34, C35, C38	7	100pF	GCM1885C2A101JA16D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0603	603
C27	1	2200pF	CGA3E2X7R2A222K080AA	TDK	CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C33, C46, C47	3	4.7uF	GCM188C70J475KE02D	MuRata	CAP, CERM, 4.7 uF, 6.3 V, +/- 10%, X7S, 0603	603
D1	1	100V	PMEG10010ELRX	Nexperia	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
D2	1	1200V	STTH112A	STMicroelectronics	Diode, Ultrafast, 1200 V, 1 A, SMA	SMA
D3	1	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
D4, D5	2		SMCJ300A	Littelfuse Inc	486V Clamp 3.1A Ipp Tvs Diode Surface Mount DO-214AB (SMCJ)	DO214AB
D6	1	40V	FSV340AF	Fairchild Semiconductor	Diode, Schottky, 40 V, 3 A, AEC-Q101, SMAF	SMAF
J1, J2	2		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
J3	1		PBC08DAAN	Sullins Connector Solutions	Header, 100mil, 8x2, Gold, TH	PBC08DAAN
J4	1		TSW-106-07-G-D	Samtec	Header, 100mil, 6x2, Gold, TH	6x2 Header
J5	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
L1	1	100uH	MSD1048H-104ME	Coilcraft	Coupled inductor, 100 uH, 1.3 A ISAT, 0.39 ohm, SMD	10.3x10.3mm
Q1	1		IAUZ30N10S5L240ATMA1	Infineon	N-Channel 100 V 30A (Tc) 45.5W (Tc) Surface Mount PG-TSDSON-8-32	TDSON8
R1	1	10	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R2	1	69.8k	CRCW060369K8FKEA	Vishay-Dale	RES, 69.8 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R4	1	402	CRCW0805402RFKEA	Vishay-Dale	RES, 402, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R5, R6	2	221	CRCW0603221RFKEA	Vishay-Dale	RES, 221, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R7, R13, R14, R16, R17, R29, R30, R31	8	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R8	1	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R11	1	0.1	UR73V2BTDR100F	KOA Speer	RES, 0.1, 1%, 0.5 W, AEC-Q200 Grade 1, 1206	1206
R12	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R15	1	115k	CRCW0603115KFKEA	Vishay-Dale	RES, 115 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R18	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R19	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R20, R24, R32, R41, R45, R46, R49, R51	7	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R24	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R21	1	48.7k	CRCW060348K7FKEA	Vishay-Dale	RES, 48.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R22	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23	1	1.00k	CRCW08051K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R25, R34, R36, R40, R44	5	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R26, R27, R28, R33, R35, R39	6	4.3	CRCW12064R30JNEA	Vishay-Dale	RES, 4.3, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R42, R43, R48	3	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
TP1, TP2, TP3, TP9, TP12	5		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP4, TP5, TP10, TP11	4		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP6, TP7	2		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
U1	1		UCC14240QDWRQ1	Texas Instruments	2W, 24V-Vin, 25V-Vout, High-Efficiency, >2. 5 kVRMS Isolated DC-DC Converter	SOIC36
U2	1		LM5156HQPWRQ1	Texas Instruments	2.2-MHz Wide VIN 65-V Non-synchronous Boost/SEPIC/Flyback Controller with 150°C Junction Temperature	TSSOP14
U3	1		UCC5870QDWJQ1	Texas Instruments	Isolated IGBT, SiC MOSFET Gate Driver With Real-Time Programmability, DWJ0036A (SOIC-36)	DWJ0036A
C32	0	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C36, C37, C49, C52	0	100pF	GCM1885C2A101JA16D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	603
R9, R50, R52	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R10, R47	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R37	0	3.01k	CRCW06033K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R38	0	12.1k	CRCW060312K1FKEA	Vishay-Dale	RES, 12.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
TP8	0		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint

## 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 © 2022, Texas Instruments Incorporated