

## PMP22771 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C3, C5, C11, C12, C15, C18, C20	8	10uF	CGA5L1X7R1E106K160AE	TDK	CAP, CERM, 10 $\mu$ F, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C2, C10, C14, C19	4	4.7uF	CGA5L3X7R1H475K160AE	TDK	CAP, CERM, 4.7 $\mu$ F, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C4	1	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C6	1	100uF	EEHZC1H101P	Panasonic	CAP, Polymer Hybrid, 100 uF, 50 V, +/- 20%, 28 mohm, 10x10 SMD	10x10
C7, C8	2	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C9	1	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C13, C25	2	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C16	1	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C17	1	1000pF	GCM1885C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C21	1	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C22	1	330pF	GRM188R71H331KA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0603	0603
C23	1	0.1uF	CGA3E2X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C24	1	0.033uF	CGA3E3X7S2A333K080AB	TDK	CAP, CERM, 0.033 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0603	0603
C26	1	1000pF	C1206C102KGRACAUTO	Kemet	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
D1, D5, D8, D12	4	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
D2, D6, D9, D13	4	18V	MMSZ5248B-7-F	Diodes Inc.	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
D3, D7, D10, D14	4	5.1V	MMSZ5231B-7-F	Diodes Inc.	Diode, Zener, 5.1 V, 500 mW, SOD-123	SOD-123
D4	1	100V	BAT46WH,115	Nexperia	Diode, Schottky, 100 V, 0.25 A, SOD-123F	SOD-123F
D11	1	30V	MBR130LSFT1G	ON Semiconductor	Diode, Schottky, 30 V, 1 A, AEC-Q101, SOD-123FL	SOD-123FL
D15	1	100V	BAT41ZFILM	STMicroelectronics	Diode, Schottky, 100 V, 0.2 A, SOD-123	SOD-123
P1, P3, P4, P5	4		691313710003	Würth Elektronik	Serie 3137 - 5.00mm Close Horizontal PCB Header WR-TBL, 3 pin	
P2	1		691313710002	Würth Elektronik	Serie 3137 - 5.00mm Close Horizontal PCB Header WR-TBL, 2 pin	
P6, P7, P8, P9	4		691352710003	Würth Elektronik	3 Position Terminal Block Plug, Female Sockets 0.197" (5.00mm)	
P10	1		691352710002	Würth Elektronik	2 Position Terminal Block Plug, Female Sockets 0.197" (5.00mm)	
Q1	1	80V	BSZ340N08NS3 G	Infineon Technologies	MOSFET, N-CH, 80 V, 23 A, PG-TSDSON-8	PG-TSDSON-8
R1, R5, R9, R16	4	4.7	CRCW12064R70JNEAHP	Vishay-Dale	RES, 4.7, 5%, 0.75 W, AEC-Q200 Grade 0, 1206	1206
R2, R6, R10, R19	4	17.8k	CRCW080517K8FKEA	Vishay-Dale	RES, 17.8 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R3, R7, R13, R20	4	5.11k	CRCW08055K11FKEA	Vishay-Dale	RES, 5.11 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R4	1	1.5k	CRCW12061K50JNEA	Vishay-Dale	RES, 1.5 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R8, R12	2	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R11	1	133k	CRCW0603133KFKEA	Vishay-Dale	RES, 133 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R14, R25	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R15	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R17	1	0.024	ERJ-8CWFR024V	Panasonic	RES, 0.024, 1%, 1 W, AEC-Q200 Grade 0, 1206	1206
R18	1	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R21	1	37.4k	CRCW060337K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R22	1	54.9k	CRCW060354K9FKEA	Vishay-Dale	RES, 54.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R23	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R24	1	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R27	1	432	CRCW0603432RFKEA	Vishay-Dale	RES, 432, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
T1	1		VGT15SEFD-250S4A7	TDK	Flyback Converters For For AC/DC Converters SMPS Transformer 2600Vrms Isolation Surface Mount	SMT_TRANSFORMER_23MM0_15MM4
TP1, TP6	2		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP2, TP8, TP9, TP10	4		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP3	1		RCU-0C	TE Connectivity	PC Test Point, SMT	1.6x0.8mm
TP4, TP5	2		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
U1	1		LM51551QDSSTQ1	Texas Instruments	Automotive Grade 2.2-MHz Wide Input Non-synchronous Boost Controller, DSS0012C (WSON-12)	DSS0012C
Q2	0	60V	2N7002W-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.115 A, SOT-323	SOT-323
R26, R28	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
TP7	0		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
TP11	0		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint

## 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, 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 (<https://www.ti.com/legal/termsofsale.html>) 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.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2021, Texas Instruments Incorporated