

Filename: PMP10099RevB - BoM.xls
 Variant: None
 Generated: 1/30/2015 1:59:33 PM

PMP10099 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1_A, C1_B, C1_C, C1_D, C1_E, C1_F, C1_G, C1_H	8	22uF	EEE-FK1K220P	Panasonic	CAP, AL, 22 μ F, 80 V, +/- 20%, 1.3 ohm, SMD	SMT Radial F
2	C2_A, C2_B, C2_C, C2_D, C2_E, C2_F, C2_G, C2_H	8	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 μ F, 100 V, +/- 10%, X7R, 1210	1210
3	C3_A, C3_B, C3_C, C3_D, C3_E, C3_F, C3_G, C3_H	8	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, 0603	0603
4	C4_A, C4_B, C4_C, C4_D, C4_E, C4_F, C4_G, C4_H, C10_A, C10_B, C10_C, C10_D, C10_E, C10_F, C10_G, C10_H	16	0.1uF	HMK212B7104KG-T	Taiyo Yuden	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, 0805	0805
5	C5_A, C5_B, C5_C, C5_D, C5_E, C5_F, C5_G, C5_H	8	33pF	GRM2195C2A330JZ01D	MuRata	CAP, CERM, 33 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
6	C6_A, C6_B, C6_C, C6_D, C6_E, C6_F, C6_G, C6_H	8	330uF	EEE-FK1C331P	Panasonic	CAP, AL, 330 μ F, 16 V, +/- 20%, 0.16 ohm, SMD	SMT Radial F
7	C7_A, C7_B, C7_C, C7_D, C7_E, C7_F, C7_G, C7_H	8	10uF	GRM31CR71E106KA12L	MuRata	CAP, CERM, 10 μ F, 25 V, +/- 10%, X7R, 1206	1206

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
8	C8_A, C8_B, C8_C, C8_D, C8_E, C8_F, C8_G, C8_H, C9_A, C9_B, C9_C, C9_D, C9_E, C9_F, C9_G, C9_H, C14_A, C14_B, C14_C, C14_D, C14_E, C14_F, C14_G, C14_H, C16_A, C16_B, C16_C, C16_D, C16_E, C16_F, C16_G, C16_H, C24_A, C24_B, C24_C, C24_D, C24_E, C24_F, C24_G, C24_H	40	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
9	C11_A, C11_B, C11_C, C11_D, C11_E, C11_F, C11_G, C11_H, C17_A, C17_B, C17_C, C17_D, C17_E, C17_F, C17_G, C17_H, C26_A, C26_B, C26_C, C26_D, C26_E, C26_F, C26_G, C26_H	24	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
10	C12_A, C12_B, C12_C, C12_D, C12_E, C12_F, C12_G, C12_H, C13_A, C13_B, C13_C, C13_D, C13_E, C13_F, C13_G, C13_H	16	56pF	GRM1885C1H560JA01D	MuRata	CAP, CERM, 56 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
11	C15_A, C15_B, C15_C, C15_D, C15_E, C15_F, C15_G, C15_H, C18_A, C18_B, C18_C, C18_D, C18_E, C18_F, C18_G, C18_H	16	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
12	C19_A, C19_B, C19_C, C19_D, C19_E, C19_F, C19_G, C19_H, C20_A, C20_B, C20_C, C20_D, C20_E, C20_F, C20_G, C20_H	16	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210
13	C21_A, C21_B, C21_C, C21_D, C21_E, C21_F, C21_G, C21_H	8	10uF	GRM21BR71A106KE51K	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805_140	0805_140
14	C22_A, C22_B, C22_C, C22_D, C22_E, C22_F, C22_G, C22_H	8	22pF	GRM1885C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
15	C23_A, C23_B, C23_C, C23_D, C23_E, C23_F, C23_G, C23_H	8	6800pF	GRM188R71H682KA01D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0603	0603
16	C25_A, C25_B, C25_C, C25_D, C25_E, C25_F, C25_G, C25_H	8	1000pF	1812GC102KA1	AVX	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
17	D1_A, D1_B, D1_C, D1_D, D1_E, D1_F, D1_G, D1_H	8	200V	MURA120T3G	ON Semiconductor	Diode, Ultrafast, 200 V, 1 A, SMA	SMA

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
18	D2_A, D2_B, D2_C, D2_D, D2_E, D2_F, D2_G, D2_H, D5_A, D5_B, D5_C, D5_D, D5_E, D5_F, D5_G, D5_H	16	75V	BAS16-7-F	Diodes Inc.	Diode, Ultrafast, 75 V, 0.3 A, SOT-23	SOT-23
19	D3_A, D3_B, D3_C, D3_D, D3_E, D3_F, D3_G, D3_H	8	60V	MBRS360T3G	ON Semiconductor	Diode, Schottky, 60 V, 3 A, SMC	SMC
20	D4_A, D4_B, D4_C, D4_D, D4_E, D4_F, D4_G, D4_H	8	12V	BZX384-C12,115	NXP Semiconductor	Diode, Zener, 12 V, 300 mW, SOD-323	SOD-323
21	FID1, FID2, FID3, FID4	4		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
22	J1_A, J1_B, J1_C, J1_D, J1_E, J1_F, J1_G, J1_H, J9	9		ED555/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
23	J2, J3, J4, J5, J6, J7, J8	7		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
24	L1_A, L1_B, L1_C, L1_D, L1_E, L1_F, L1_G, L1_H	8	330nH	744383360033	Würth Elektronik eiSos	Inductor, 330 nH, 5.5 A, 0.014 ohm, SMD	SMD, 2-Leads, Body 3.2x3.2mm
25	Q1_A, Q1_B, Q1_C, Q1_D, Q1_E, Q1_F, Q1_G, Q1_H	8	150V	FDS86242	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 4.1 A, SOIC-8	SOIC-8
26	R1_A, R1_B, R1_C, R1_D, R1_E, R1_F, R1_G, R1_H	8	47k	CRCW120647K0JNEA	Vishay-Dale	RES, 47 k, 5%, 0.25 W, 1206	1206
27	R2_A, R2_B, R2_C, R2_D, R2_E, R2_F, R2_G, R2_H	8	100	CRCW0805100RJNEA	Vishay-Dale	RES, 100 ohm, 5%, 0.125W, 0805	0805

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
28	R3_A, R3_B, R3_C, R3_D, R3_E, R3_F, R3_G, R3_H	8	0.2	CSR1206FKR200	Stackpole Electronics Inc	RES, 0.2, 1%, 0.5 W, 1206	1206
29	R4_A, R4_B, R4_C, R4_D, R4_E, R4_F, R4_G, R4_H	8	76.8k	CRCW080576K8FKEA	Vishay-Dale	RES, 76.8 k, 1%, 0.125 W, 0805	0805
30	R5_A, R5_B, R5_C, R5_D, R5_E, R5_F, R5_G, R5_H	8	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.125W, 0805	0805
31	R6_A, R6_B, R6_C, R6_D, R6_E, R6_F, R6_G, R6_H	8	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
32	R7_A, R7_B, R7_C, R7_D, R7_E, R7_F, R7_G, R7_H	8	3.92k	CRCW08053K92FKEA	Vishay-Dale	RES, 3.92k ohm, 1%, 0.125W, 0805	0805
33	R8_A, R8_B, R8_C, R8_D, R8_E, R8_F, R8_G, R8_H, R9_A, R9_B, R9_C, R9_D, R9_E, R9_F, R9_G, R9_H	16	698	CRCW0603698RFKEA	Vishay-Dale	RES, 698, 1%, 0.1 W, 0603	0603
34	R10_A, R10_B, R10_C, R10_D, R10_E, R10_F, R10_G, R10_H, R14_A, R14_B, R14_C, R14_D, R14_E, R14_F, R14_G, R14_H	16	45.3k	CRCW060345K3FKEA	Vishay-Dale	RES, 45.3 k, 1%, 0.1 W, 0603	0603

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
35	R11_A, R11_B, R11_C, R11_D, R11_E, R11_F, R11_G, R11_H, R16_A, R16_B, R16_C, R16_D, R16_E, R16_F, R16_G, R16_H	16	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, 0603	0603
36	R12_A, R12_B, R12_C, R12_D, R12_E, R12_F, R12_G, R12_H, R13_A, R13_B, R13_C, R13_D, R13_E, R13_F, R13_G, R13_H, R18_A, R18_B, R18_C, R18_D, R18_E, R18_F, R18_G, R18_H	24	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
37	R15_A, R15_B, R15_C, R15_D, R15_E, R15_F, R15_G, R15_H	8	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
38	R17_A, R17_B, R17_C, R17_D, R17_E, R17_F, R17_G, R17_H	8	2.74	CRCW06032R74FKEA	Vishay-Dale	RES, 2.74, 1%, 0.1 W, 0603	0603
39	R19_A, R19_B, R19_C, R19_D, R19_E, R19_F, R19_G, R19_H	8	47.5k	CRCW060347K5FKEA	Vishay-Dale	RES, 47.5 k, 1%, 0.1 W, 0603	0603
40	R20_A, R20_B, R20_C, R20_D, R20_E, R20_F, R20_G, R20_H	8	0.33	ERJ-8RQFR33V	Panasonic	RES, 0.33, 1%, 0.25 W, 1206	1206

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
41	R21_A, R21_B, R21_C, R21_D, R21_E, R21_F, R21_G, R21_H, R23_A, R23_B, R23_C, R23_D, R23_E, R23_F, R23_G, R23_H	16	2.49k	CRCW06032K49FKEA	Vishay-Dale	RES, 2.49 k, 1%, 0.1 W, 0603	0603
42	R22_A, R22_B, R22_C, R22_D, R22_E, R22_F, R22_G, R22_H, R24_A, R24_B, R24_C, R24_D, R24_E, R24_F, R24_G, R24_H	16	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
43	R25_A, R25_B, R25_C, R25_D, R25_E, R25_F, R25_G, R25_H	8	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
44	R26_A, R26_B, R26_C, R26_D, R26_E, R26_F, R26_G, R26_H	8	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
45	R27_A, R27_B, R27_C, R27_D, R27_E, R27_F, R27_G, R27_H	8	1.15k	CRCW06031K15FKEA	Vishay-Dale	RES, 1.15 k, 1%, 0.1 W, 0603	0603
46	T1_A, T1_B, T1_C, T1_D, T1_E, T1_F, T1_G, T1_H	8	120 uH	7491193912	Würth Elektronik eiSos	Transformer, 120 uH, SMT	SMT, 12-Leads, Body 17.5x16mm, Pitch 2.54mm
47	TP1_A, TP1_B, TP1_C, TP1_D, TP1_E, TP1_F, TP1_G, TP1_H, TP3	9	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
48	TP2_A, TP2_B, TP2_C, TP2_D, TP2_E, TP2_F, TP2_G, TP2_H, TP4	9	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
49	U1_A, U1_B, U1_C, U1_D, U1_E, U1_F, U1_G, U1_H	8		UCC29002DR/1	Texas Instruments	ADVANCED 8-PIN LOAD SHARE CONTROLLER	SO-8
50	U2_A, U2_B, U2_C, U2_D, U2_E, U2_F, U2_G, U2_H	8		LM5022MM	Texas Instruments	60V Low Side Controller for Boost and SEPIC	MUB10A
51	U3_A, U3_B, U3_C, U3_D, U3_E, U3_F, U3_G, U3_H	8		FOD817DS	Fairchild Semiconductor	Optocoupler, 5kV RMS, SMT	DIP-4L Gullwing
52	U4_A, U4_B, U4_C, U4_D, U4_E, U4_F, U4_G, U4_H	8		LMV431AIMF	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulator	MF03A

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. **TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.** TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have **not** been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.