

Variant: 001  
 Generated: 4/20/2015 11:32:12 AM  
 TID #: PMP7899



PMP7899 REV D Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		PMP7899	Any	Printed Circuit Board	
2	C2, C3	2	150uF	EEV-FK1J151Q	Panasonic	CAP, AL, 150uF, 63V, +/-20%, 0.16 ohm, SMD	SMT Radial H13
3	C4	1	1uF	C3216X7R2A105M	TDK	CAP, CERM, 1uF, 100V, +/-20%, C Series, 1206	1206
4	C5, C6, C7, C8	4	10uF	GRM31CR71E106KA12L	MuRata	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206
5	C9	1	1uF	C2012X5R1E105K	TDK	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0805	0805
6	C10	1	0.01uF	C2012C0G1E103J	TDK	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0805	0805
7	C11	1	10uF	GRM31CR61E106KA12L	MuRata	CAP, CERM, 10uF, 25V, +/-10%, X5R, 1206	1206
8	C12	1	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603
9	C13	1	1uF	GRM188R61C105KA93D	MuRata	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603
10	C15	1	100pF	C1608C0G2A101J	TDK	CAP, CERM, 100pF, 100V, +/-5%, C0G/NP0, 0603	0603
11	C17	1	1000pF	C1206C102KFRACU	Kemet	CAP CER 1000PF 1.5KV X7R 1206	1206
12	C18	1	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
13	D1	1	1.25V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123
14	D2	1	600V	MURHD560T4G	ON Semiconductor	Ultra-Fast Diode 600V, 5A, DPAK	DPAK
15	D3	1	39V	1SMB5939BT3G	ON Semiconductor	Diode, Zener, 39 V, 550 mW, SMB	SMB
16	D5	1	100V	MBRS1100T3G	ON Semiconductor	Diode, Schottky, 100 V, 1 A, SMB	SMB
17	D6, D8	2	0.35V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
18	D7	1	12V	MMSZ4699-V	Vishay-Semiconductor	Diode, Zener, 12V, 500mW, SOD-123	SOD-123
19	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
20	Q1	1	60V	BSC067N06LS3 G	Infineon Technologies	MOSFET, N-CH, 60V, 50A, PG-TDSON-8	PG-TDSON-8
21	R2	1	3.3	CRCW12063R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.25 W, 1206	1206
22	R3	1	46.4k	CRCW060346K4FKEA	Vishay-Dale	RES, 46.4k ohm, 1%, 0.1W, 0603	0603
23	R4	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.25W, 1206	1206
24	R5, R9	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
25	R6	1	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.125W, 0805	0805
26	R7	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
27	R8	1	2.74	CRCW06032R74FKEA	Vishay-Dale	RES, 2.74, 1%, 0.1 W, 0603	0603
28	R11	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.1W, 0603	0603
29	R12	1	499	CRCW0805499RFKEA	Vishay-Dale	RES, 499 ohm, 1%, 0.125W, 0805	0805
30	R13	1	8.25k	CRCW06038K25FKEA	Vishay-Dale	RES, 8.25 k, 1%, 0.1 W, 0603	0603
31	R14	1	40.2k	CRCW060340K2FKEA	Vishay-Dale	RES, 40.2k ohm, 1%, 0.1W, 0603	0603
32	R15	1	1.05k	CRCW06031K05FKEA	Vishay-Dale	RES, 1.05 k, 1%, 0.1 W, 0603	0603
33	R16	1	47	ERJ-6GEYJ470V	Panasonic	RES, 47, 5%, 0.125 W, 0805	0805
34	T1	1		NA6264-AL	CoilCraft	COILCRAFT TRANSFORMER	NAXXXX-AL
35	T2	1		PA1005.100NLT	Pulse Engineering	XFRMR CURR SENSE 2.0MH 1:100 SMD	PA1005.XXXNL
36	TP1, TP2, TP3, TP4	4	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
37	TP5, TP7	2	Red	5000	Keystone	Test Point, TH, Miniature, Red	Keystone5000
38	TP6, TP8	2	Black	5001	Keystone	Test Point, TH, Miniature, Black	Keystone5001
39	TP9, TP10, TP11	3	White	5002	Keystone	Test Point, TH, Miniature, White	Keystone5002
40	U1	1		LM5022MME/NOPB	Texas Instruments	60V Low Side Controller for Boost and SEPIC, 10-pin MSOP, Pb-Free	MUB10A
41	U3	1		PS2501L-1-L-A	California Eastern Laboratories	High Isolation Voltage Single Transistor Type OptoCoupler 200-400% CTR	PS2501L
42	U4	1		LMV431ACM5/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 5-pin SOT-23, Pb-Free	MF05A
43	C1	0	100pF	C1608C0G2A101J	TDK	CAP, CERM, 100pF, 100V, +/-5%, C0G/NP0, 0603	0603
44	C14	0	0.1uF	C0603C104K3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603
45	C16	0	1000pF	C2012X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0805	0805
46	D4	0	0.35V	BA154HT1G	ON Semiconductor	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
47	R1	0	100	CRCW1206100RFKEA	Vishay-Dale	RES, 100, 1%, 0.25 W, 1206	1206
48	R10	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603

## 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.