

Filename: PMP7957 BOM.xls
 Variant: 001
 Generated: 5/7/2013 4:24:06 PM
 SVN path: \$URL::
 SVN rev: \$Rev:: \$

\$

Change in menu Project

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB	1		Printed Circuit Board		XX###	Any	-	-
C2	1	100uF	CAP, AL, 100uF, 80V, +/-20%, 0.32 ohm, SMD	SMT Radial H13	EEV-FK1K101Q	Panasonic		
C4	1	1uF	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	1206	GRM31CR72A105KA01L	MuRata		
C7, C8	2	10uF	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206	GRM31CR71E106KA12L	MuRata	-	-
C9	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0805	0805	C2012X5R1E105K	TDK	-	-
C10	1	0.01uF	Capacitor		C2012Y5V1H105Z	TDK		
C11	1	10uF	CAP, CERM, 10uF, 25V, +/-10%, X5R, 1206	1206	GRM31CR61E106KA12L	MuRata	-	-
C12, C15	2	100pF	Capacitor		C2012Y5V1H105Z	TDK		
C13	1	1uF	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603	GRM188R61C105KA93D	MuRata	-	-
C16	1	DNP	Capacitor		C2012Y5V1H105Z	TDK		
C17	1	1000pF	CAP CER 1000PF 1.5KV X7R 1206	1206	C1206C102KFRACU	Kemet		
C18	1	0.022uF	CAP, CERM, 0.022uF, 50V, +/-10%, X7R, 0603	0603	C1608X7R1H223K	TDK		
D2	1	1.25V	Diode, Ultrafast, 400V, 1A, SMB	SMB	MURS140-13-F	Diodes Inc.		
D6, Dx1	2	0.35V	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323	BAT54HT1G	ON Semiconductor	-	-
D7	1	12V	Diode, Zener, 12V, 500mW, SOD-123	SOD-123	MMSZ4699-V	Vishay-Semiconductor	-	-
FID1, FID2, FID3	3		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
H1, H2, H3, H4	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Phillips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H5, H6, H7, H8	4		Standoff, Hex, 0.5" #4-40 Nylon	Standoff	1902C	Keystone	-	-
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W	THT-14-423-10	Brady	-	-
Q1	1	80V	MOSFET, N-CH, 80V, 55A, PG-TDSON-8	PG-TDSON-8	BSC123N08NS3 G	Infineon Technologies		None
R2	1	3.32	RES, 3.32 ohm, 1%, 0.25W, 1206	1206	CRCW12063R32FKEA	Vishay-Dale	-	-
R3	1	46.4k	RES, 46.4k ohm, 1%, 0.1W, 0603	0603	CRCW060346K4FKEA	Vishay-Dale	-	-
R4	1	0R	RES, 3.32 ohm, 1%, 0.25W, 1206	1206	CRCW12063R32FKEA	Vishay-Dale	-	-
R5	1	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale	-	-
R6	1	49.9k	RES, 49.9k ohm, 1%, 0.125W, 0805	0805	CRCW080549K9FKEA	Vishay-Dale		
R7	1	1.0k	Resistor		ERJ-6GEYJ102V	Panasonic		
R11	1	33.2k	RES, 33.2k ohm, 1%, 0.1W, 0603	0603	CRCW060333K2FKEA	Vishay-Dale	Equivalent	Any
R12	1	499R	Resistor		ERJ-6GEYJ102V	Panasonic		
R13	1	49.9k	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9FKEA	Vishay-Dale		
R14	1	274k	RES, 274k ohm, 1%, 0.1W, 0603	0603	CRCW0603274KfKEA	Vishay-Dale		
R15	1	5.23k	RES, 5.23k ohm, 1%, 0.1W, 0603	0603	CRCW06035K23FKEA	Vishay-Dale		
RC7	1	0.3	RES, 0.3 ohm, 1%, 2W, 2512	2512	CSRN2512FKR300	Stackpole Electronics Inc		
T1	1		INDUCTOR/TRANSFORMER 12UH SMD	VPH5	VPH5-0083TR-R	Cooper Bussmann	-	-
TP1, TP2, TP3, TP4	4	Double	Terminal, Turret, TH, Double	Keystone1502-2	1502-2	Keystone	Equivalent	Any
TP5, TP7	2	Red	Test Point, TH, Miniature, Red	Keystone5000	5000	Keystone	Equivalent	Any
TP6, TP8	2	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone	Equivalent	Any
U1	1		60V Low Side Controller for Boost and SEPIC, 10-pin MSOP, Pb-Free	MUB10A	LM5022MMX/NOPB	National Semiconductor		
U3	1		High Isolation Voltage Single Transistor Type OptoCoupler	PS2501L	PS2501L-1-A	California Eastern Laboratories		
U4	1		Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 5-pin SOT-23	MF05A	LMV431ACM5	National Semiconductor		
C1	0	100pF	CAP, CERM, 100pF, 1000V, +/-10%, X7R, 1206	1206	VJ1206Y101KXGAT5Z	Vishay-Vitramon	-	-
C14	0	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603	C0603C104K3RACTU	Kemet	-	-
D3	0	39V	Diode, Zener, 39V, 550mW, SMB	SMB	1SMB5939BT3G	ON Semiconductor	-	-
D4	0	0.35V	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323	BAT54HT1G	ON Semiconductor	-	-
D5	0	0.75V	Diode, Schottky, 100V, 1A, SMB	SMB	MBRS1100T3G	ON Semiconductor	-	-
R1	0	DNP, 100R	Resistor		ERJ-6GEYJ102V	Panasonic		
R10	0	DNP	Resistor		ERJ-6GEYJ102V	Panasonic		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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.