

Filename: PMP8505 REV\_A\_bom.xls

Date: 10/25/2012

## PMP8505 REV\_A BOM

COUNT	RefDes	Value	Description	Size	Part Number	Mfr
1	C3	0.047uF	Capacitor, Ceramic, 630V, X7R, 20%	1210	C3225X7R2J473M	TDK
1	C4	330pF	Capacitor, Ceramic, 630V, C0G, NP0, ±5%	1206	Std	Std
1	C8	680uF	Capacitor, Aluminum, 16V, 105C, 20%	0.315 inch	EKZM160ELL681MH15D	Nippon Chemi-Con
1	C11	470pF	CAP 250VAC CERAMIC Y2/X1	0.236 x 0.315 inch	ECK-NVS471KB	Panasonic
1	C12	10pF	Capacitor, Ceramic, 50V, C0G, 10%	0603	STD	STD
1	C14	47uF	Capacitor, Aluminum, SM, ±20%, 35V,	D Code	EEEFK1V470P	Panasonic
1	C16	1nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std
1	C17	1000pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std
1	C100	0.047uF	Capacitor, Ceramic, 16V, X7R, 10%	0603	Std	Std
2	C1-2	6.8uF	Capacitor, Aluminum, 450V, 105C, 20%	0.315 inch	EKXJ451ELL6R8MJ16S	Nippon Chemi-Con
3	C5-7	22uF	Capacitor, Ceramic, 16V, X7R, 20%	1210	C3225X7R1C226M	TDK
3	C9 C13 C15	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1H104K	TDK
1	D1	RH06-T	Diode, Bridge, 0.5-A, 600-V	MiniDIP	RH06-T	Diodes
1	D3	US1K	Diode, Rectifier, 1A, 800V	SMA	US1K	Diodes
1	D4	BAS21	Diode, Switching, 200-mA, 200-V, 330-mW	SOT23	BAS21	Zetex
1	D5	MBR0520L	Diode, Schottky, 0.5A, 20V	SOD-123	MBR0520L	Fairchild
1	D100	20V	Diode, Zener, 20-V, 350-mW	SOT-23	BZX84C20LT1	ON Semi
1	D101	MBRS3100T3	Diode, Schottky 3-A 100-V	SMC	MBRS3100T3	On Semi
1	L1	1000 uH	Inductor, Radial, 0.25A, 6 Ohm	6mm x 8.5mm	7447462102	WE
1	L2	1.2uH	Inductor, SMT, 5.3A, 17milliohm	0.235 x 0.380	DO1813HC-122ML	Coilcraft
1	Q5	SPD02N80C3	MOSFET, N-ch, 800V, 2-A, 2.7 ohm	DPAK	SPD02N80C3	Infineon
1	R1	2.2	Resistor, Chip, 1/16W, 5%	0805	Std	Std
1	R2	100	Resistor, Chip, 1/10W, 5%	0805	CRCW0805-xxx-J	Vishay
1	R3	220K	Resistor, Chip, 1/2W, 1%	2010	Std	Vishay
1	R5	4.7	Resistor, Fusible Power, 1W	0.300 X 0.100 inch	NFR0100004708JR500	Vishay
1	R11	169k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R12	10	Resistor, Chip, 1/16W, 5%	0805	Std	Std
1	R13	61.9k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R16	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R17	4.75k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R18	100k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R19	20k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R21	26.1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std

1	R102	1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R14-15 R20	100k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
2	R4 R6	3MEG	Resistor, 1/4 watt, 5%	1206	Std	Std
1	T2	800uH	Transformer, Flyback	0.840 x 1.150 inch	SP-EFD 20 Rel. 184281-d	Kaschke
1	TP1	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
1	TP4	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
3	TP2-3 TP5	5002	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 inch	5002	Keystone
1	U1	UCC28610D	IC, Flyback Green-Mode Controller	SO8	UCC28610D	TI
1	U2	TCMT1107	IC, Photocoupler	MF4	TCMT1107	Vishay
1	U3	TL432A	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL432AIDBZR	TI

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
  2. These assemblies must be clean and free from flux and all contaminants.  
Use of no clean flux is not acceptable.
  3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
  4. Ref designators marked with an asterisk (\*\*\*) cannot be substituted.  
All other components can be substituted with equivalent MFG's components.

## 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.