

Filename: PMP8621RevC - BoM.xls

Generated: 6/4/2013 5:02:18 PM

18..30V -> 300V @ 10mA

Quantity	Designator	Value	Description	Package	PartNumber	Manufacturer
1	C1	4.7uF	CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H475KA88L	MuRata
1	C2	1uF	CAP, CERM, 0.1uF, 1000V, +/-10%, X7R, 2220	2220	C5750X7T2W105M250KE	TDK
1	C3	330pF	CAP, CERM, 330pF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H331KA01D	MuRata
1	C4	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	GRM188R71C105KA12D	MuRata
1	C5	100pF	CAP, CERM, 100pF, 50V, +/-5%, COG/NP0, 0603	0603	GRM1885C1H101JA01D	MuRata
1	C6	18pF	CAP, CERM, 18pF, 50V, +/-5%, COG/NP0, 0603	0603	GRM1885C1H180JA01D	MuRata
1	C7	1800pF	CAP, CERM, 1800pF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H182KA01D	MuRata
1	C8	1uF	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603	GRM185R61C105KE44D	MuRata
1	C9	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	GCM188R71H104KA57B	MuRata
7	C101, C102, C103, C104, C105, C106, C107	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	C2012X7R2A104K	TDK
7	D1, D101, D102, D103, D104, D105, D106	1V	Diode, Switching, 100V, 0.2A, SOD-323	SOD-323	MMDL914	MCC
1	D2	16V	Diode, Zener, 16V, 225mW, SOT-23	SOT-23	BZX84C16LT1G	ON Semiconductor
1	D3	5.1V	Diode, Zener, 5.1V, 225mW, SOT-23	SOT-23	BZX84B5V1LT1G	ON Semiconductor
4	GND-1, GND-2, VIN-1, VOUT-2	None	Test point, 55 mil SMT	None	None	None
1	L1	68uH	Inductor, Drum Core, 68uH, 0.64A, 0.46 ohm	WE-PD2-MS	744774168	Wurth Elektronik eiSos
1	Q1	100V	MOSFET, N-CH, 100V, 1.5A, SOT-23	SOT-23	Si2328DS	Vishay-Siliconix
1	Q2	0.2V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor
1	R1	10	RES, 10 ohm, 5%, 0.1W, 0603	0603	CRCW060310R0JNEA	Vishay-Dale
2	R2, R3	30.1k	RES, 30.1k ohm, 1%, 0.1W, 0603	0603	CRCW060330K1FKEA	Vishay-Dale
1	R4	182k	RES, 182k ohm, 1%, 0.1W, 0603	0603	CRCW0603182KFKEA	Vishay-Dale
1	R5	3.3	RES, 3.3 ohm, 5%, 0.1W, 0603	0603	CRCW06033R30JNEA	Vishay-Dale
1	R6	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale
1	R7	0.1	RES, 0.1 ohm, 1%, 0.1W, 0603	0603	ERJ-3RSFR10V	Panasonic
1	R8	200k	RES, 200k ohm, 1%, 0.1W, 0603	0603	CRCW0603200KFKEA	Vishay-Dale
1	R9	100k	RES, 100k ohm, 1%, 0.1W, 0603	0603	CRCW0603100KFKEA	Vishay-Dale
4	R10, R11, R12, R13	200k	RES, 200k ohm, 5%, 0.25W, 1206	1206	CRCW1206200KJNEA	Vishay-Dale
1	R14	49.9	RES, 49.9 ohm, 1%, 0.1W, 0603	0603	CRCW060349R9FKEA	Vishay-Dale
1	R15	1.87k	RES, 1.87k ohm, 1%, 0.1W, 0603	0603	CRCW06031K87FKEA	Vishay-Dale
1	U1	TPS40210	4.5 to 52 V Input Current Mode Boost Controller	DGQ0010D	TPS40210DGQ	Texas Instruments

## 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.