Filename: PMP5568 - 350W PSU - MCU CARD REVB\_bom.xls

Date: 07/26/2011

## PMP5568 - 350W PSU - MCU CARD REVB BOM

COUNT		Value	Description	Size	Part Number	Mfr
	C1, C2, C6, C11,					
2	C19, C22, C24,	100nF	Capacitor, Ceramic, 16V, X7R, 15%	0603	Std	Std
	C26, C28, C5					
1	C101	1nF	Capacitor, Ceramic, 16V, X7R, 15%	0603	Std	Std
2	C12, C13	22uF	Capacitor, Ceramic, 6.3V, X5R, 15%	1210	Std	Std
	C14, C15, C16,					
8	C17, C18, C23,	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	Std	Std
	C25, C27					
2	C20, C21	10uF	Capacitor, Ceramic, 6.3V, X5R, 15%	0603	Std	Std
2	C3, C4	4.7uF	Capacitor, Ceramic, 25V, X5R, 15%	1206	Std	Std
1	C7	22pF	Capacitor, Ceramic, 50V, C0G, 5%	0603	Std	Std
1	C8	22nF	Capacitor, Ceramic, 16V, X7R, 15%	0603	Std	Std
2	C9, C10	open	Capacitor, Ceramic, 25V, X7R, 15%	0603	Std	Std
1	D1	MBRM120	Diode, Schottky, 1A, 20V	457-04	MBRM120E	On Semi
1	D2	MA2SD10	Diode, Schottky, 200mA, 20V	0.047 x 0.031 inch	MA2SD10	Panasonic
1	D3	Red	Diode, LED, THT, 3mm, red	T1-3/4	TLHR4400	Vishay
5	J2, J3, J4, J5, J10	PEC05SAAN	Header, Male 5-pin, 100mil spacing,	0.100 inch x 5	PEC05SAAN	Sullins
3	J6, J7, J8	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
1	J9	PEC10DAAN	Header, Female, 2x10-pin, 100mil spacing	0.100 inch x 10 x 2	SSW-110-01-T-D	Samtec
1	L1	4.7uH	Inductor, 0.7A	0.126 x 0.098 inch	VLF3010AT-4R7MR70	TDK
1	L2	100uH	Inductor, SMT, 253mOhm, 1.2A sat, 1.1A rms	0.402 x 0.394 inch	MSS1048-104ML	Coilcraft
1	Q1	BSS138	MOSFET, Nch, 50V, 0.22A, 3.5 Ohm	SOT23	BSS138	Fairchild
1	R1	82.5k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R10, R21, R25,	10	Decistor Chip 1/16W 10/	0603	Std	Std
4	R26	10	Resistor, Chip, 1/16W, 1%	0603	Sid	Sid
1	R101	3.32k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
5	R13, R17, R18,	681	Resistor, Chip, 1/16W, 1%	0603	Std	Std
5	R19, R20	001	Resistor, Chip, 1/16vv, 1%	0603	Siu	Siu
3	R14, R15, R16	100k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R2	20.5k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R22, R23, R24	100	Resistor, Chip, 1/4 watt, 1%	1206	Std	Std
	R27, R28, R29,					
7	R30, R43, R45,	10.0k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R46					
1	R3	432k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R31	27.4k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1		20k	Potentiometer, Single turn Cermet,	0.087 x 0.108 inch	3302W-3-203E	Bourns
	R32		Open-frame, 2mm SMT, Top-Adjust			
1	R33	22.1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R34	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std

1	R35	NTC	NTC, 100k, 5%	1206	NCP18WF104J03RB	muRata
1	R36	4.75k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R37, R38	1.00k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R4, R11, R12, R39	open	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R40, R44	5.11k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R41	25.5k	Resistor, Chip, 1/16W, x%	0603	Std	Std
1	R42	33.2	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R5	29.4k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R6	5.62k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R7	34.8k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R8	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R9	open	Resistor, Chip, 1/16W, 1%	0805	Std	Std
4	S1, S2, S3, S4	B3J-2100	Switch, SPST NO Single LED 5VDC, 1mA	12x18 mm	B3J-2100	Omron
2	TP1, TP2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
11	TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20		Thru Hole, 15 mil, plated			
1	TP3	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
1	U1	EADIP162	LCD MODULE, 2x16, 6.68mm	26.8 x 68.0mm	DIP162J-DN3LW	Electronic Assembly
1	U2	MSP430F2252RHA	IC, Mixed Signal Microcontroller	QFN-40	MSP430F2252RHA	Texas Instruments
1	U3	TPS54140DGQ	IC, DC-DC Converter With Eco-Mode, 1.5A, 42V	MSOP-10	TPS54140DGQ	Texas Instruments
1	U4	TPS715345DCKR	IC, High Input Voltage, Micropower	SOP-5 (DCK)	TPS715345DCKR	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.