

Filename: BOM-PMP9088(001) E2.xls

Variant: 001

Generated: 10/25/2013 4:14:12 PM

SVN path: \$URL::

\$

SVN rev: \$Rev:: \$

Universal AC Input 5V@1.2A Single Board Cube Charger

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer
C1	1	0.22µF	CAP, CERM, 0.22µF, 250V, +/-10%, C Series, 1210	1210 (3225 Metric)	C3225X7T2W224K200A A	TDK Corporation
C2	1	8.2µF	CAP, AL, 8.2µF, 400V, +/-20%, TH	Radial D8x16mm	UVC2G8R2MPD	Nichicon
C4	1	4.7µF	CAP, CERM, 4.7µF, 50V, +/-10%, X5R, 0805	0805	C2012X5R1H475K125A B	TDK
C5	1	220µF	CAP, AL, 220µF, 6.3V, +/-20%, 0.018 ohm, TH	6.3x5.5mm	6SEPC220M	Panasonic
C7	1	560µF	CAP, AL, 560µF, 6.3V, +/-20%, 0.007 ohm, TH	6.3x9mm	6SEPC560MW	Panasonic
C8	1	0.1µF	CAP, CERM, 0.1µF, 50V, +/-10%, X7R, 0603	0603	C1608X7R1H104K	TDK
D1	1	1.15V	Diode, Switching-Bridge, 600V, 0.5A, MiniDIP	MiniDIP	RH06-T	Diodes Inc.
D2	1	1.25V @ 200mA	Diode, Ultrafast, 100V, 0.25A, SOD-323	SC-76, SOD-323	BAS21AHT1G	ON Semiconductor
D3	1	400V	Diode, Superfast Rectifier, 400V, 1A, PowerDI123	PowerDI123	DFLU1400-7	Diodes Inc.
D4	1	45V	Diode, Schottky, 45V, 10A, PowerDI5	PowerDI5	PDS1045-13	Diodes Inc.
D5	1	82V	Diode, Zener, 82V, 1W, SMA	SMA	SMAJ4762A	Micro Commercial Component
D6	1	30V	Diode, Zener, 30V, 500mW, 1.2x1.2x2.0 mm	1.2x1.2x2.0 mm	BZM55C30	Vishay-Semiconductor
FR	1		Fuse, 1A, 250V, TH	Fuse, 7.11x3.94mm	0263001.WRT1L	Littelfuse
J1	1		Connector, Receptacle, USB Type A, Vertical, TH	13.68x14.47x7mm	0673298020	Molex
L1	1	1mH	Inductor, Unshielded Drum Core, Ferrite, 1mH, 0.25A, 4.38 ohm, TH	D6 x 8.5mm	7447462102	Würth Elektronik eiSos
Q1	1	1.5V	Transistor, NPN, 400V, 1.5A, SOT-32	SOT-32	ST13003-K	STMicroelectronics
R1	1	10.0k	RES, 10.0k ohm, 1%, 0.125W, 0805	0805	CRCW080510K0FKEA	Vishay-Dale
R2	1	487	RES, 487 ohm, 1%, 0.125W, 0805	0805	CRCW0805487RFKEA	Vishay-Dale
R3	1	332k	RES, 332k ohm, 1%, 0.1W, 0603	0603	CRCW0603332KFKEA	Vishay-Dale
R4	1	47	RES, 47 ohm, 5%, 0.1W, 0603	0603	CRCW060347R0JNEA	Vishay-Dale
R5A, R5B, R5C	3	1.47Meg	RES, 1.47Meg ohm, 1%, 0.125W, 0805	0805	CRCW08051M47FKEA	Vishay-Dale
R7	1	39k	RES, 39k ohm, 5%, 0.1W, 0603	0603	CRCW060339K0JNEA	Vishay-Dale
R8	1	82k	RES, 82k ohm, 5%, 0.125W, 0805	0805	CRCW080582K0JNEA	Vishay-Dale
R9	1	33.2k	RES, 33.2k ohm, 1%, 0.1W, 0603	0603	CRCW060333K2FKEA	Vishay-Dale
R10	1	470	RES, 470 ohm, 5%, 0.1W, 0603	0603	CRCW0603470RJNEA	Vishay-Dale
R11	1	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale
R12	1	2.21	RES, 2.21 ohm, 1%, 0.125W, 0805	0805	CRCW08052R21FKEA	Vishay-Dale
R13	1	8.25	RES, 8.25 ohm, 1%, 0.125W, 0805	0805	CRCW08058R25FKEA	Vishay-Dale
R14	1	6.2k	RES, 6.2k ohm, 5%, 0.125W, 0805	0805	CRCW08056K20JNEA	Vishay-Dale
R16	1	47k	RES, 47k ohm, 5%, 0.1W, 0603	0603	CRCW060347K0JNEA	Vishay-Dale
R17	1	51k	RES, 51k ohm, 5%, 0.1W, 0603	0603	CRCW060351K0JNEA	Vishay-Dale
R18	1	75.0k	RES, 75.0k ohm, 1%, 0.1W, 0603	0603	CRCW060375K0FKEA	Vishay-Dale
R19	1	51.1k	RES, 51.1k ohm, 1%, 0.1W, 0603	0603	CRCW060351K1FKEA	Vishay-Dale
T1	1	1.5mH	Transformer, 1.5mH, TH	15.62x14.1x10mm	750341872	Würth Elektronik eiSos
TP1, TP2	2		Connector, Receptacle, Pin (15-22mil), TH	PCB Pin (0461)	0461-0-15-15-21-14-04-0	Mill-Max

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer
U1	1		Constant-Voltage, Constant-Current Controller With Primary-Side Regulation, DBV0006A	DBV0006A	UCC28722BV	Texas Instruments

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.