

Filename: BOM-PMP9362(001).xls

Variant: 001

Generated: 1/14/2015 11:43:11 AM

### LM5017 Sync-Flyback

Designator	Description	Manufacturer	PartNumber	Quantity
!PCB	PMP9291 Rev4	Any	PMP9291 Rev4	1
C30	Ceramic, X7R, 1000V, 10%	Vishay-Vitramon	VJ1210Y102KXGAT5Z	1
C31, C32	CAP, CERM, 2.2uF, 25V, +/-10%, X7R, 0805	MuRata	GRM21BR71E225KA73L	2
C33	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0603	MuRata	GRM188R71C103KA01D	1
C34	CAP, CERM, 0.01uF, 50V, +/-5%, X7R, 0603	Kemet	C0603C103J5RACTU	1
C35	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	Kemet	C0603C105K4PACTU	1
C36	CAP, CERM, 1000pF, 50V, +/-10%, COG/NPO, 0603	AVX	06035A102KAT2A	1
C37, C38	CAP, CERM, 2.2uF, 50V, +/-10%, X5R, 1206	MuRata	GRM31CR61H225KA88L	2
C39, C40	CAP, CERM, 2.2uF, 16V, +/-10%, X7R, 0805	TDK	C2012X7R1C225K	2
C41	CAP, CERM, 1uF, 50V, X5R, 20%, 0805	AVX	08055D105MAT	1
D4	Diode, Ultrafast, 100V, 0.25A, SOD-323	NXP Semiconductor	BAS316,115	1
GND1, GND2, GNDin	Test Point, TH, Miniature, Black	Keystone	5001	3
H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	4
H5, H6, H7, H8	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	4
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H 10,000 per roll	Brady	THT-14-423-10	1
Q13	MOSFET, N-CH, 60V, 50A, SON 5x6mm	Texas Instruments	CSD18537NQ5A	1
Q14	Transistor, NPN, 40V, 0.2A, SOT-23	Diodes Inc.	MMBT3904-7-F	1
Q15	Transistor, PNP, 40V, 0.2A, SOT-23	Fairchild Semiconductor	MMBT3906	1
R1	Inductor, Wirewound, Shielded, 0.47uH, 3.3A, 0.056ohm Max., SMT	TDK	VLS252012T-R47N2R1	1
R3	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	1
R27	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	1
R29	RES, 7.50k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06037K50FKEA	1
R30	RES, 182k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603182KFKEA	1
R31	RES, 127k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW0805127KFKEA	1
R32	RES, 0 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12060000Z0EA	1
R33	RES, 54.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060354K9FKEA	1
R35	RES, 20.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K0FKEA	1
R36	RES, 10 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310R0JNEA	1
R37	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	1
SW1, SW2, Vin, Vo1, Vo2	Test Point, TH, Miniature, Red	Keystone	5000	5
T1	1:1:1:1:1 Turns Ratio Versatile Transformers	Cooper Bussmann Coiltronics	VPH2-0216	1
U2		Texas Instruments	LM5017MR	1

## 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.