

PMP10748 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
PCB	1		PMP10748	Any	Printed Circuit Board	
C1, C21	2	100pF	08055A101JAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0805	0805
C3in, C4, C4in, C5	4	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 μF, 50 V, +/- 10%, X7R, 1210	1210
C8, C33	2	0.1uF	C2012X7R2A104K	TDK	Ceramic, X7R, 100V, 10%	0805
C11		0.22uF	C0805C224K5RACTU	Kemet	CAP, CERM, 0.22 µF, 50 V, +/- 10%, X7R, 0805	0805
C55	1	220uF	EEE-FC1H221P	Panasonic	CAP, AL, 220 µF, 50 V, +/- 20%, 0.3 ohm, SMD	SMT Radial G
C56	1	1000uF	EEV-FK1H102M	Panasonic	CAP, AL, 1000 μF, 50 V, +/- 20%, 0.073 ohm, SMD	SMT Radial J16
DRV1, DRV2, DRV3, H1, H2, Output, Output, VIN1, VIN2	9	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
EN	1	Double	1503-2	Keystone Electronics	Terminal, Turret, TH, Double	
FET1_B, FET2_B, FET3_A	3	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
GND1, GND2, GNDout	3	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
GND, J4	2		6092	Keystone	Standard Banana Jack, Insulated, Black	6092
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H9, H10, H11, H12	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J3, VBAT_1, VBAT_2	3		6091	Keystone	Standard Banana Jack, Insulated, Red	6091
L1, L2	2	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
R2	1	240k	CRCW0805240KJNEA	Vishay-Dale	RES, 240 k, 5%, 0.125 W, 0805	0805
R3	1	14.0k	CRCW080514K0FKEA	Vishay-Dale	RES, 14.0 k, 1%, 0.125 W, 0805	0805
R4	1	4.99k	CRCW12064K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.25 W, 1206	1206
R5	1	0	CRCW06030000Z0EA	Vishay-Dale	5%, 0.1W	0603
R6	1	100k	CRCW0603100kFKEA	Vishay-Dale	1%, 0.1W	0603
Ru	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
STATUS	1	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_ Miniature
TP3, TP4	2	Orange	5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
U1, U2	2		LM74610QDGKRQ1	Texas Instruments	Smart Diode Controller, DGK0008A	DGK0008A
U3	1		LM5060Q1MM/NOPB	Texas Instruments	High-Side Protection Controller with Low Quiescent Current, 10-pin MSOP, Pb-Free	MUB10A
VCAP_1, VCAP_2	2	2.2uF	C2012X5R1H225K125AB	TDK	CAP, CERM, 2.2 μF, 50 V, +/- 10%, X5R, 0805	0805
FET1_A, FET2_A	0	40V	CSD18501Q5A	Texas Instruments	MOSFET, N-CH, 40 V, 22 A, SON 5x6mm	SON 5x6mm
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
Q1	0	100V	SUM40N10-30	Vishay-Siliconix	40A, 35nC, rDS(on) @ 4.5V =	DDPAK
Ro	0	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805

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 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.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2015, Texas Instruments Incorporated