

PMP9715 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP9715	Any	Printed Circuit Board	
C2	1	22uF	EKXG401ELL220MK20S	Nippon Chemi-Con	CAP, AL, 22uF, 400V, +/-20%, TH	12.5x20mm
C3	1	47uF	EEU-EE2G470S	Panasonic	CAP, AL, 47uF, 400V, +/-20%, TH	18x20mm
C4	1	0.1uF	B32921C3104M	EPCOS Inc	CAP, Film, 0.1uF, 305V, +/-20%, TH	13x6x12mm
C5, C11	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0402	0402
C6	1	2200pF	DE2E3KY222MA2BM01	MuRata	CAP, CERM, 2200pF, 250V, +/-20%, KY, Radial D8x5mm	Radial D8x5mm
C7, C8	2	180uF	RL81C181MDN1KX	Nichicon	CAP, AL, 180uF, 16V, +/-20%, 0.12 ohm, TH	D8xL8
C9, C12	2	1uF	C1005X5R1E105K050BC	TDK	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0402	0402
C10	1	10uF	C2012X6S1C106MT	TDK	CAP, CERM, 10uF, 16V, +/-10%, X6S, 0805	0805
C13	1	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805	0805
C14	1	4700pF	C1005X7R1H472K	TDK	CAP, CERM, 4700pF, 50V, +/-10%, X7R, 0402	0402
C15	1	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0402	0402
D1	1	1.1V	DF1506S-T	Diodes Inc.	Diode, Switching-Bridge, 600V, 1.5A, DF-S	DF-S
D2	1	100V	SMCJ100A	Littelfuse	Diode, TVS, Uni, 100V, 1500W, SMC	SMC
D3	1	100V	BAS316,115	NXP Semiconductor	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323
D4	1	1.05V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600V, 1A, SMA	SMA
D5	1	200V	BAS21-TP	Micro Commercial Component	Diode, P-N, 200V, 200A, SOT-23	SOT-23
F1	1		39213150000	Littelfuse	Fuse, 3.15A, 250V, TH	8x8.5x4mm
L1	1	33uH	CDRH6D28NP-330NC	Sumida	Inductor, Shielded Drum Core, Ferrite, 33uH, 0.97A, 0.165 ohm, SMD	CDRH6D28
L2	1	1.8mH	744861018	Würth Elektronik eiSos	Coupled inductor, 1.8mH, 1A, 0.31 ohm, TH	17x12.32x15.32 mm
L3	1	50 ohm	HI1206T500R-10	Laird-Signal Integrity Products	Ferrite Bead, 50 ohm @ 100MHz, 6A, 1206	1206
Q1	1	100V	BSS123	Fairchild Semiconductor	MOSFET, N-CH, 100V, 0.17A, SOT-23	SOT-23
Q2	1	100V	CSD19531Q5A	Texas Instruments	MOSFET, N-CH, 100V, 16A, SON 5x6mm	SON 5x6mm
Q3	1	600V	AOD7S60	AOS	MOSFET, N-CH, 600V, 7A, DPAK	DPAK
R1	1	22	CRCW251222R0JNEGHP	Vishay-Dale	RES, 22 ohm, 5%, 1.5W, 2512	2512
R2, R15	2	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
R4	1	374k	CRCW0402374KFKED	Vishay-Dale	RES, 374k ohm, 1%, 0.063W, 0402	0402
R5	1	30.1	CRCW040230R1FKED	Vishay-Dale	RES, 30.1 ohm, 1%, 0.063W, 0402	0402
R6	1	93.1k	CRCW040293K1FKED	Vishay-Dale	RES, 93.1k ohm, 1%, 0.063W, 0402	0402
R7, R14	2	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R8	1	24.9k	CRCW040224K9FKED	Vishay-Dale	RES, 24.9k ohm, 1%, 0.063W, 0402	0402
R9, R13, R16	3	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
R10	1	0.3	CSR1206FKR300	Stackpole Electronics Inc	RES, 0.3 ohm, 1%, 0.5W, 1206	1206
R11	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R12	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99k ohm, 1%, 0.063W, 0402	0402
R17, R18	2	26.1k	CRCW040226K1FKED	Vishay-Dale	RES, 26.1k ohm, 1%, 0.063W, 0402	0402
T1	1	220uH	7508112339	Würth Elektronik eiSos	Transformer, 220uH, TH	25x16x22.2mm
TP1, TP2	2	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP3	1	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP4	1	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1	1		UCC24610DRB	Texas Instruments	GREEN Rectifier Controller Device, DRB0008A	DRB0008A
U2	1		UCC28740D	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A	D0007A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U3	1		TPS71550DCK	Texas Instruments	50 mA, 24 V, 3.2- μ A Supply Current Low-Dropout Linear Regulator in SC70 Package, DCK0005A	DCK0005A
U4	1		VOS617A-7X001T	Vishay-Semiconductor	OptoCoupler, Phototransistor, 80-160%, SSOP-4	7x2.12x2.6mm
U5	1		TL431AIDBZ	Texas Instruments	PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	DBZ0003A

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.