



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB?	1		PMP7892	Any	PMP7892 REVA	N/A
C1, C6, C101	3	220pF	C0805C221J1GACTU	Kemet	CAP, CERM, 220 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
C2	1	1500uF	EEV-FK1C152Q	Panasonic	CAP, AL, 1500uF, 16V, +/-20%, 0.06 ohm, SMD	SMT Radial H13
C7	1	0.1uF	C3216X7R2E104K	TDK	Ceramic, X7R, 250V, 10%	1206
C8	1	100uF	EEV-FK1K101Q	Panasonic	CAP, AL, 100uF, 80V, +/-20%, 0.32 ohm, SMD	SMT Radial H13
C9, C10, C11, C12	4	4.7uF	C3225X7S2A475M	TDK	CAP, CERM, 4.7uF, 100V, +/-20%, X7S, 1210	1210
C13, C14	2	0.01uF	VJ1210Y103KXGAT5Z	Vishay-Vitramon	CAP, CERM, 0.01uF, 1000V, +/-10%, X7R, 1210	1210
C15, C18	2	100pF	08051A101FAT2A	AVX	Ceramic, C0G/NP0, 100V, 1%	0805
C16, C17	2	0.1uF	C2012X7R1H104K	TDK	Ceramic, X7R, 50V, 10%	0805
C19	1	1uF	C2012X7R1E105K	TDK	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	0805
C20, C21	2	0.33uF	C2012X7R1C334K	TDK	CAP, CERM, 0.33uF, 16V, +/-10%, X7R, 0805	0805
C22	1	0.1uF	C2012X7R1E104K	TDK	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	0805
C23	1	4.7uF	C2012X7R1A475M	TDK	Ceramic, X7R, 10V, 20%	0805
C24	1	1uF	C2012X7R1C105K	TDK	Ceramic, X7R, 16V, 10%	0805
C25, C26	2	0.1uF	C2012X7R2A104K	TDK	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805
D1, D3	2	1.25V	BAV3004W-7-F	Diodes Inc	Diode, Switching, 300V, 225mA, SOD-123	SOD-123
D2, D4	2	200V	MBRB20200CTT4G	ON Semiconductor	Diode, Schottky, 200 V, 20 A, DDPAK	DDPAK
D5, D6	2	1.25V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123
H1, H2, H5, H6	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H3, H4, H7, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
J1, J2, J3, J4	4	Triple	1598-2	Keystone	Terminal, Turret, TH, Triple	Keystone1598-2
J5, J6, J7, J8	4	50 ohm	A-1JB	Amphenol	Connector, RF Jack, Vertical, Gold, SMD	A-1JB
L1	1	22uH	7447709220	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 22 µH, 5.3 A, 0.0233 ohm, SMD	WE-PD-XXL
L2	1	3.3mH	LPS6235-335MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 3.3mH, 0.1A, 9.5 ohm, SMD	LPS6235
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
Q1	1	100V	CSD19533Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 13 A, SON 5x6mm	SON 5x6mm
Q2	1	-150V	IRF6217TRPBF	Vishay-Siliconix	MOSFET, P-CH, -150V, -0.7A, SO-8	SOIC-8
R1, R2	2	51	CRCW120651R0JNEA	Vishay-Dale	RES, 51, 5%, 0.25 W, 1206	1206
R3	1	49.9k	CRCW080549K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.125W, 0805	0805
R4	1	0.1	ERJ-8RSJR10V	Panasonic	RES, 0.1 ohm, 5%, 0.25W, 1206	1206
R5	1	3.01k	CRCW08053K01FKEA	Vishay-Dale	RES, 3.01 k, 1%, 0.125 W, 0805	0805
R6	1	3.92	CRCW08053R92FKEA	Vishay-Dale	RES, 3.92, 1%, 0.125 W, 0805	0805
R7	1	2.43k	CRCW08052K43FKEA	Vishay-Dale	RES, 2.43k ohm, 1%, 0.125W, 0805	0805
R8	1	470	CRCW0805470RJNEA	Vishay-Dale	RES, 470, 5%, 0.125 W, 0805	0805
R9	1	29.4k	CRCW080529K4FKEA	Vishay-Dale	RES, 29.4 k, 1%, 0.125 W, 0805	0805
R10	1	20.0k	CRCW080520K0FKEA	Vishay-Dale	1%, 0.125W	0805
R11	1	51	CRCW080551R0JNEA	Vishay-Dale	RES, 51 ohm, 5%, 0.125W, 0805	0805
R12	1	8.66k	CRCW08058K66FKEA	Vishay-Dale	1%, 0.125W	0805
R13	1	1.00k	CRCW08051k00FKEA	Vishay-Dale	1%, 0.125W	0805
R14, R15, R16, R17	4	49.9	CRCW080549R9FKEA	Vishay-Dale	RES, 49.9 ohm, 1%, 0.125W, 0805	0805
R101	1	51	CRCW120651R0JNEA	Vishay-Dale	RES, 51 ohm, 5%, 0.25W, 1206	1206
T1	1	7T : 13T : 11T	PA6296-AL	Coilcraft	EP17 Power Transformer	
T2	1		PA1005.100NL	Pulse Engineering	SMT Current Sense Transformer	P82XX
TP1, TP3	2	Red	5010	Keystone	Test Point, TH, Multipurpose, Red	Keystone5010

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP2, TP4, TP6	3	Black	5011	Keystone	Test Point, TH, Multipurpose, Black	Keystone5011
TP5	1	White	5012	Keystone	Test Point, TH, Multipurpose, White	Keystone5012
U1	1		LM5026MT	Texas Instruments	Active Clamp Current Mode PWM Controller, 16-pin TSSOP	MTC16
U2	1	FODA817A	FOD817ASD	Fairchild Optoelectronics Grou	IC, Optocoupler, 5000V, 80-160% CTR	
		SD				
U3	1		LMV431AIMF/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 3-pin SOT-23,	MF03A
					Pb-Free	
C3, C4, C5	0	1500uF	EEV-FK1C152Q	Panasonic	CAP, AL, 1500uF, 16V, +/-20%, 0.06 ohm, SMD	SMT Radial H13
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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.