Bill of Materials

TI DESIGNS

TIDA-00182

Fitted	Quantity	Designator	Description	PartNumber	Manufacturer	RoHS	PackageReference
Fitted	1	!PCB	Printed Circuit Board	TIDA-00182	Any	O	
Fitted	1	C11	CAP, AL, 220uF, 35V, +/-20%, 0.16 ohm, SMD	EEE-FK1V221P	Panasonic	Y	SMT Radial F
Fitted	1	C16	CAP, CERM, 2.2uF, 50V, +/-10%, X5R, 0805	C2012X5R1H225K125AB	TDK	Y	0805
Fitted	1	C5	CAP, CERM, 3900pF, 100V, +/-10%, X7R, 0805	GRM219R72A392KA01D	MuRata	Y	0805
Fitted	1	CONN1	Terminal Block, 2x1, 5.08mm, TH	282841-2	TE Connectivity	Y	10.16x15.2x9mm
Fitted	1	CONN2	Terminal Block, 4x1, 2.54mm, TH	OSTVN02A150	On Shore Technology Inc	Y	TERM_BLK, 2pos, 2.54mm
Fitted	1	D1	Diode, Schottky, 60V, 2A, SMA	B260A-13-F	Diodes Inc.	Y	SMA
Fitted	1	D12	Diode, Ultrafast, 100V, 0.25A, SOD-323	BAS316,115	NXP Semiconductor	Y	SOD-323
Fitted	1	D5	DIODE SCHOTTKY 100V 5A DO214AB	SK510L-TP	Micro Commercial Co	Y	DO-214AB, (SMC)
Fitted	1	D6	Diode, Zener, 33V, 550mW, SMB	1SMB5937BT3G	ON Semiconductor	Y	SMB
Fitted	1	LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	THT-14-423-10	Brady	Y	PCB Label 0.650"H x 0.200"W
Fitted	1	Q1	MOSFET, N-CH, 100V, 13A, SON 5x6mm	CSD19533Q5A	Texas Instruments	Y	SON 5x6mm
Fitted	1	Q2	Transistor, NPN, 32V, 1A, SOT-89	2DD1664R-13	Diodes Inc.	Y	SOT-89
Fitted	1	R11	RES, 44.8k ohm, 0.1%, 0.125W, 0805	RT0805BRD0744K8L	Yageo America	Y	0805
Fitted	1	R12	RES, 1.00k ohm, 1%, 0.125W, 0805	CRCW08051K00FKEA	Vishay-Dale	Y	0805
Fitted	1	R13	RES, 100 ohm, 1%, 0.125W, 0805	CRCW0805100RFKEA	Vishay-Dale	Y	0805
Fitted	1	R15	RES, 21.0k ohm, 1%, 0.125W, 0805	CRCW080521K0FKEA	Vishay-Dale	Y	0805
Fitted	1	R17	RES, 15.0k ohm, 0.1%, 0.125W, 0805	RG2012P-153-B-T5	Susumu Co Ltd	Y	0805
Fitted	1	R18	RES, 1.60k ohm, 0.5%, 0.1W, 0805	RR1220P-162-D	Susumu Co Ltd	Y	0805
Fitted	1	R2	RES, 1.00 ohm, 1%, 0.25W, 1206	CRCW12061K00FKEA	Vishay-Dale	Y	1206
Fitted	1	R23	RES, 1.00k ohm, 1%, 0.25W, 1206	RC1206FR-071KL	Yageo America	Y	1206
Fitted	1	R5	RES, 10.0k ohm, 1%, 0.25W, 1206	ERJ-8ENF1002V	Panasonic	Y	1206
Fitted	1	R6	RES, 5.1 ohm, 5%, 0.125W, 0805	CRCW08055R10JNEA	Vishay-Dale	Y	0805
Fitted	1	R9	RES, 0.2 ohm, 1%, 0.5W, 1206	CSR1206FKR200	Stackpole Electronics Inc	Y	1206
Fitted	1	T1	Transformer, TH	ETD39/750342424	wurth elektronik	Y	
Fitted	1	U1	IC, Constant Voltage, Constant Current PWM With Primary Side Regulation	UCC28701DBVT	TI	Y	SOT-23-6
Fitted	10	C1, C3, C6, C8, C12, C14, C18, C21, C27, C28	CAP ALUM 68UF 35V 20% SMD	EEH-ZA1V680XP	Panasonic Electronic Components	Y	6.60mm x 6.60mm
Fitted	2	R16, R25	RES, 8.06 ohm, 1%, 0.25W, 1206	CRCW12068R06FKEA	Vishay-Dale	Y	1206
Fitted	2	R4, R24	RES, 0 ohm, 5%, 0.25W, 1206	RC1206JR-070RL	Yageo America	Y	1206
Fitted	2	R7, R14	RES, 10.0k ohm, 0.1%, 0.125W, 0805	RG2012P-103-B-T5	Susumu Co Ltd	Y	0805
Fitted	3	R1, R3, R8	RES, 12.0 ohm, 1%, 0.25W, 1206	RC1206FR-0712RL	NXP Semiconductor	Y	SOD-323
Fitted	1	D6	Diode, Zener, 33V, 550mW, SMB	1SMB5937BT3G	ON Semiconductor	Y	SMB
Fitted	1	D5	DIODE SCHOTTKY 100V 5A DO214AB	SK510L-TP	Micro Commercial Co	Y	DO-214AB, (SMC)
Fitted	4	D4, D9, D13, D16	DIODE ZENER 8.2V 3W DO214AA	3SMBJ5923B-TP	Micro Commercial Co	Y	DO214AA/SMB
Fitted	4	D3, D8, D11, D15	DIODE ZENER 16V 3W DO214AA	3SMBJ5930B-TP	Micro Commercial Co	Y	DO214AA/SMB
Fitted	4	D2, D7, D10, D14	Diode, Schottky, 100V, 3A, SMC	VS-30BQ100TRPBF	Vishay-Semiconductor	Y	SMC
Fitted	1	D1	Diode, Schottky, 60V, 2A, SMA	B260A-13-F	Diodes Inc.	Y	SMA
Fitted	4	CONN3, CONN4, CONN5, CONN6	CONN TERM BLOCK 2.54MM 3POS PCB	OSTVN03A150	On Shore Technology Inc	Y	TERM_BLK, 3pos, 2.54mm
Fitted	1	CONN2	Terminal Block, 4x1, 2.54mm, TH	OSTVN02A150	On Shore Technology Inc	Y	TERM_BLK, 2pos, 2.54mm
Fitted	1	CONN1	Terminal Block, 2x1, 5.08mm, TH	282841-2	TE Connectivity	Y	10.16x15.2x9mm
Fitted	4	C23, C24, C25, C26	CAP, CERM, 10uF, 50V, +/-10%, X5R, 1206_190	CGA5L3X5R1H106K160AB	TDK	Y	1206_190
Not Fitted	0	C19	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0805	C2012X7R1H102K	TDK	Y	0805
Not Fitted	0	C17	CAP, CERM, 0.33uF, 25V, +/-10%, X5R, 0805	08053D334KAT2A	AVX	Y	0805
Fitted	1	C16	CAP, CERM, 2.2uF, 50V, +/-10%, X5R, 0805	C2012X5R1H225K125AB	TDK	Y	0805
Fitted	1	C5	CAP, CERM, 3900pF, 100V, +/-10%, X7R, 0805	GRM219R72A392KA01D	MuRata	Y	0805
Fitted	8	C2, C4, C7, C9, C13, C15, C20, C22	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	08055C104JAT2A	AVX	Y	0805
Fitted	10	C1, C3, C6, C8, C12, C14, C18, C21, C27, C28	CAP ALUM 68UF 35V 20% SMD	EEH-ZA1V680XP	Panasonic Electronic Components	Y	6.60mm x 6.60mm

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.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265