

Bill of Materials

TI DESIGNS
TIDA-00061

LINE NO.	KS PART NUMBER	CUSTOMER PART #	QTY	VALUE	DESIGNATORS	PKG/ CASE	T.COEFF/ PWR	TOL	VOLT RATED	DESCRIPTION	DISTRIBUTOR	DIST PN	MANUFACTURER	MNFR. PART #
1	12420	B 3/ B 10	1	0.1µF	C14	402	X7R	10	16V	Capacitors	Digi-Key	445-4952-2-ND	TDK Corporation	C1005X7R1C104K
2	11301	C 2/ C 10 /CORNER 2	4	0.1µF	C8, C9, C18, C29	603	X7R	10	50V	Capacitors	Digi-Key	490-1519-2-ND	Murata Electronics North America	GRM188R71H104KA93D
3	11068	C 1/ C 10	1	1.0µF	C13	603	X7R	10	16V	Capacitors	Digi-Key	445-1604-2-ND	TDK Corporation	C1608X7R1C105K
4	11361	C 2/ C 13	2	4.7µF	C7, C27	603	X5R	10	6.3V	Capacitors	Digi-Key	445-5178-2-ND	TDK Corporation	C1608X5R0J475K0.80
5	11147	D 1	1	1000µF	C28	805	C0G	5	100V	Capacitors	Digi-Key	490-1614-2-ND	Murata Electronics North America	GRM2195C2A102JA01D
6	11234	E 1/E 5	1	10µF	C12	1206	X7R	10	16V	Capacitors	Digi-Key	445-4042-2-ND	TDK Corporation	C3216X7R1C106K
7	11025	O 1	11	0.0 (Zero Ohm)	R2, R3, R8, R15, R17, R20, R21, R26, R27, R32, R39	805	1/8W	1		Resistors	Digi-Key	311-0-0ARTR-ND	Yageo America	RC0805JR-070RL
8	11030	O 1	6	10.0K	R41, R42, R43, R44, R45, R46	805	1/8W	1		Resistors	Digi-Key	P10.0KCTR-ND	Panasonic - ECG	ERJ-6ENF1002V
9	15986	O 15	1	3.30K	R47	805	1/8W	1		Resistors	Digi-Key	P3.30KCTR-ND	Panasonic - ECG	ERJ-6ENF3301V
10	13677	O 12	5	330	R6, R14, R19, R30, R38	805	1/8W	1		Resistors	Digi-Key	P330CTR-ND	Panasonic - ECG	ERJ-6ENF3300V
11	24197	O 25	4	4.70K	R1, R16, R25, R40	805	1/8W	1		Resistors	Digi-Key	P4.70KCTR-ND	Panasonic - ECG	ERJ-6ENF4701V
12	11493	P 2	4	0.0 (Zero Ohm)	R7, R11, R31, R35	1206	1/4W	5	250V	Resistors	Digi-Key	P0.0ETR-ND	Panasonic - ECG	ERJ-6GEY0R00V
13	22084	R 5	4	120	R9, R12, R33, R36	2512	1W	1		Resistors	Digi-Key	P1120AFC1-ND	Panasonic - ECG	ERJ-11NF1200U
14	11522	Z 1	1	LED - Green Diffused	D3	805	20mA	11	2V	Optoelectronics	Digi-Key	67-1553-2-ND	Lumex Opto/Components Inc	SML-LXT0805GW-TR
15	25048		2	SN65HVD257D	U1, U5	8-SOIC				Integrated Circuits			Texas Instruments	SN65HVD257D
16	24841	U 162	3	SN74AHC1G08DBVT	U2, U3, U4	SOT-23-5	8mA		2 V - 5.5 V	Integrated Circuits	Texas Instruments	SN74AHC1G08DBVR	Texas Instruments	SN74AHC1G08DBVT
17	22887		1	SN74AHC1G86DBV	U6	SOT-23-5	-40°C - 85°C		2 V - 5.5 V	Integrated Circuits			Texas Instruments	SN74AHC1G86DBV
18	11047	AH 1	6	Test Loop - Black	TP1, TP2, TP3, TP14, TP15, TP16	0.04				Test Equipment	Heilind Electronics	5001	Keystone Electronics	5001
19	12928	AH 3	18	Test Loop - Blue	TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24	0.04				Test Equipment	Digi-Key	5117K-ND	Components Corporation	TP-105-01-06
20	11087-12	AM 2/CORNER 3	1	1 x 12	JMP1	0.1" High Temp*				Connectors	Samtec	HTSW-150-07-G-S	Samtec	HTSW-150-07-G-S
21	11087-3	AM 2/CORNER 3	2	1 x 3	JMP2, JMP8	0.1" High Temp*				Connectors	Samtec	HTSW-150-07-G-S	Samtec	HTSW-150-07-G-S
22	11087-5	AM 2/CORNER 3	2	1 x 5	JMP3, JMP7	0.1" High Temp*				Connectors	Samtec	HTSW-150-07-G-S	Samtec	HTSW-150-07-G-S
23	11087-2	AM 2/CORNER 3	6	1 x 2	JMP4, JMP6, JMP9, JMP11, JMP12, JMP13	0.1" High Temp*				Connectors	Samtec	HTSW-150-07-G-S	Samtec	HTSW-150-07-G-S
24	11087-4	AM 2/CORNER 3	2	1 x 4	JMP5, JMP10	0.1" High Temp*				Connectors	Samtec	HTSW-150-07-G-S	Samtec	HTSW-150-07-G-S
25	11916	AM 16	1	2 Pin Female R/A	TB1	2.54MM		6A	20-26AWG	Connectors	Digi-Key	277-1273-nd	Phoenix Contact	1725656
26	14560	14560	10	Shunt	SH1, SH2, SH3, SH4, SH5, SH6, SH7, SH8, SH9, SH10	0.1 SP*				Hardware	Digi-Key	151-8000-E	Mouser	151-8000-E
27	18336	18336	4	0.25 - Aluminum*	Standoff	4-40 Round - F/F				Hardware	Digi-Key	2025	Digi-key	2025
28	11082	11082	4	0.25 - stainless steel*	screws	4-40 Philips Panhead				Hardware	Pencor	PMSSS 440 0025 PH	Building Fasteners	PMSSS 440 0025 PH
29	DNI	DNI	23	DNI	C1, C3, R4, C4, C6, R10, C10, C11, C15, C16, C17, R18, C19, C20, C21, R22, R23, C23, R24, C24, C26, R28, R34	DNI	DNI	0	DNI	Undefined Category			DNI	DNI
30	DNI-1	DNI	4	DNI	C2, C5, C22, C25	DNI	DNI	0	DNI	Undefined Category			DNI	DNI
31	DNI-2	DNI	4	DNI	D1, D2, D4, D5	DNI	DNI	0	DNI	Undefined Category			DNI	DNI
32	DNI-3	DNI	2	DNI	D6, D7	DNI	DNI	0	DNI	Undefined Category			DNI	DNI
33	DNI-4	DNI	2	DNI	L1, L2	DNI	DNI	0	DNI	Undefined Category			DNI	DNI

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.