🜵 Texas Instruments

Bill of Materials

TI DESIGNS

TIDA-00551

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
1	1	C30	0.1uF	CAP CER 0.1UF 10V 10% X5R 0402	Murata	GRM155R61A104KA01D
2	2	C28-29	12pF	CAP CER 12PF 50V 5% NP0 0402	Murata	GRM1535C1H120JDD5D
3	9	C1 to 9	2.2uF	CAP CER 2.2UF 6.3V 20% X5R 0402D	Taiyo Yuden	JMK105BJ225MV-F
4	1	C13	330pF	CAP CER 330PF 50V 10% X7R 0402	Yageo	CC0402KRX7R9BB331
5	7	C22 to C26 C32 C33	4.7uF	CAP CER 4.7UF 6.3V 10% X5R 0402	TDK	C1005X5R0J475K050BC
6	1	C15	22uF	CAP CER 22UF 6.3V 20% X5R 0603	Murata	GRM188R60J226MEA0
7	6	C16 to C20	10uF	CAP CER 10UF 6.3V 10% X5R 0603	TDK	C1608X5R0J106K080AB
8	1	C21	1uF	CAP CER 1UF 10V 10% X5R 0603	TDK	C1608X5R1A105K080AC
9	2	C12 C31	0.1uF	CAP CER 0.1UF 25V 10% X7R 0805	TDK	CGJ4J2X7R1E104K125AA
10	2	C10 - C11	10uF	CAP CER 10UF 25V 10% X5R 0805	TDK	C2012X5R1E106K085AC
11	1	C27	0.2fF	CAP SUPER 0.2F 3.3V COIN SMDr, Electric Double Layer. DO NOT INSTALL	Panasonic	EECEN0F204AK
12	1	C14	330uF	CAP ALUM 330UF 2V 20% SMD ESR 9mohm	Panasonic	EEF-SX0D331R
13	1	J29		Connector, Male Right Angle 2x5 pin, 100mil spacing, 4 Wall	ЗM	2510-5002UB
14	1	Y1	32.768kHz	CRYSTAL 32.768KHZ 12.5PF SMD	EPSON	FC-135 32.7680KA-A3
15	10	J10 to J12 J19 J28 J34 J36 to J39		CONN HEADER .100 SINGL STR 1POS	Sullins	PEC01SAAN
16	10	J1 to J9 J35		CONN HEADER .100 SINGL STR 2POS	Sullins	PEC02SAAN
17	11	J20-21 J26 J27 J30 to 32 J40 to J43		CONN HEADER .100 SINGL STR 3POS	Sullins	PEC03SAAN
18	9	J13 J14 J16 to J18 J22 to J25		TERMINAL BLOCK 3.5MM 4POS PCB	On Shore Technology Inc	ED555/4DS
19	1	J33		CONN HEADER .100 DUAL STR 18POS	Sullins	PEC09DAAN
20	3	L2 to L4	2.2uH	INDUCTOR POWER 2.2UH 2.6A SMD	TDK	VLCF5020T-2R2N2R6-3

ltem	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
21	1	L1	2.2uH	INDUCTOR, PWR, 2.2UH, 10A, 20%,30MHZ Farnell Part # XAL6030-222MEC	COILCRAFT	XAL6030-222MEC
22	8	R1 R2 R4 R5 R17 to R20	0	RES 0.0 OHM 1/10W JUMP 0402 SMD	Panasonic	ERJ-2GE0R00X
23	1	R3	39k	RES 39K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ393X
24	4	R21 to R24	1.2k	RES 1.2K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ122V
25	11	R6-16	10k	Resistor 10K , 1/10W , 5% , 0603,	Panasonic	ERJ-3GEYJ103V
26	1	S1		SWITCH TACTILE SPST-NO 0.02A 15V	Panasonic	EVQ-PLHA15
27	1	U2		IC, Integrated Power Management Unit Top Specification	Texas Instruments	TPS65911XZRC
28	4	Q3 to Q6	470uF	MOSFET N-CH 50V 220MA SOT- 23	Fairchild Semiconductor	BSS138
29	1	U1	68uF	IC REG LDO 1.8V 0.15A SOT23-5	Texas Instruments	TPS76318DBVT
30	2	Q1-Q2		MOSFET N-CH 30V 20A 8-PQFN	Fairchild Semiconductor	FDMC7660

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