💠 Texas Instruments

Bill of Materials

TI DESIGNS

TIDM-RF430FRLSENSE

ltem						
item	QTY	Reference	Value	Package	MFG PN	Notes
1	1	C7	DNP			DNP
2	1	C14	39pF	C0603	CL10C390JB8NNNC	
3	1	C13	CAP CER 2.2UF 10V 10% X7R 0603	C0603	GRM188R71A225KE15D	
4	2	C17,C11	CAP CER 10000PF 50V 10% X7R 0603	C0603	0603YC103KAT2A	
5	1	C10	CAP CER 100PF 16V 10% X7R 0603	C0603	0603YC101KAT2A	
6	9	C2,C3,C12,C15,C16,C18,C19,C 24,C20	CAP CER 0.1UF 16V 10% X7R 0603	C0603	0603YC104KAT2A	
7	4	C1,C5,C6,C8,C9,C23	CAP CER 1UF 16V 10% X7R 0603	C0603	0603YC105KAT2A	
8	1	D3	DIODE SCHOTTKY 40V 200MA SOT23	SOT-23-3	BAS40-05-7-F	
9	1	IC1	IC REG LDO 1.5V 50MA SOT23-5	SOT-23-5	TPS72215DBVT	
10	1	IC2	TPS77333 ,IC REG LDO 3.3V 0.25A 8VSSOP	8VSSOP	TPS77333DGK	
11	3	IC4,IC5,IC6	VC2G125DCT, IC BUS BUFF TRI-ST DL N-INV S	SM8	SN74LVC2G125DCTR	
12	1	IC8	UC1G04DCK, IC SINGLE INVERTER GATE SC-	SC-70-5	SN74AUC1G04DCKR	
13	11	JMP1,JMP3,JMP4,R12,R16,R17, R18,R28,R27,R31,R35	RES 0.0 OHM 1/10W 0603 SMD	R0603	ERJ-3GEY0R00V	
14	1	JMP1	RES 160K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ164V	
15	1	Q2	MOSFET N-CH 50V 200MA SOT-23	SOT-23	BSS138LT3G	
16	1	R6	RES 10K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ103V	
17	1	R3	THERMISTOR NTC 100K OHM 1% 0603	R0603	ERT-J1VS104FA	
18	5	R1,R2,R33,R4,R8	RES 100K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ104V	
19	1	R5	RES 22K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ223V	
20	1	R7,R15	RES 220 OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ221V	
21	7	R9,R10,R13,R14, R20 ,R25,R32	RES 2.2K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ222V	
22	2	R11	RES 200K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ204V	
23	2	R19,R34	RES 4.7K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ472V	
24	1	R21	RES 33K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ333V	
25	4	R22,R23,R24,R26	RES 100 OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ101V	
26	1	R30	RES 680 OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ681V	
27	1	R29	RES 1.2K OHM 1/10W 5% 0603 SMD	R0603	ERJ-3GEYJ122V	

Item	QTY	Reference	Value	Package	MFG PN	Notes
28	4	S3,S4,S5,S6	SWITCH SLIDE SPDT SMD J-LEAD	SMD J-LEAD	CJS-1200TA	
29	1	S2	SWITCH TACTILE SPST-NO 0.05A 12V		PTS645SH50SMTR92 LFS	
30	1	SV2	CONN HEADR 2.54MM 14POS GOLD R/A		SBH11-PBPC-D07-RA-BK	
31	1	SV7	BERGSTIK II .100" SR STRAIGHT		68001-202HLF	
32	2	SV9,SV10	http://launchpad.mlelectronics.com/		CRD-081413-B-F	
33	1	BAT1	RETAINER COIN CELL 6.8MM SMD	6.8MM SMD	2998	
34	1	U7	LED ORANGE HIGH BRIGHT USS 0603	0603	LNJ826W83RA	
35	1	U2	AMBIENT LIGHT SENSOR 0805 SMD	0805	TEMT6200FX01	
36	1	U3	CONN MINI USB RCPT RA TYPE B SMD		UX60-MB-5ST	
37	1	U5	LED YELLOW GREEN HI BRT USS 0603	0603	LNJ326W83RA	
38	1	U6	IC VOLT-LVL TRANSL BI-DIR US8	US8	TXB0102DCUR	
39	1	U4	IC VOLT LEVEL TRANSLATOR US8	US8	PCA9306DCUR	
40	1	C4	CAP TRIMMER 9-35PF 200V TH		CV31D350	DNP
41	1	R20	RES 0.0 OHM 1/10W 0603 SMD	R0603	ERJ-3GEY0R00V	
42	1	SV16	CONN HEADER 4POS .100 STR 15AU		68001-204HLF	DNP
43	3	JP1,JP2,JP3	BERGSTIK II .100" SR STRAIGHT		68001-202HLF	DNP
44	1	JP10	SHUNT LP W/HANDLE 2 POS 30AU	SV7 pins 1&2	881545-2	

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