

## TEXAS INSTRUMENTS

## TIDA-00854 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDA-00854	Any	Printed Circuit Board	
C1, CINT	2	0.1uF	C0805C104K4RACTU	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0805	0805
C2, C5, C8, C10	4	0.1uF	C0603C104K8RACTU	Kemet	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0603	0603
C3, C4, C7, C9, CF	5	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10 μF, 10 V, +/- 10%, X5R, 0805	0805
C6	1	1uF	C0603C105K8PACTU	Kemet	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0603	0603
GAS_SENSOR	1		2112B2005	City Technology	CityTech 4CF+ Carbon Monoxide Sensor	
J1, J2, J3	3		450-3326-01-03-00	Wearnes Cambion Ltd	Socket, Single Cage Jack, TH	Socket, Single pin solder mount
JA, JB, JC, JD	4		SSW-110-23-F-S	Samtec	Connector, Receptacle, 100mil, 10x1, Gold plated, TH	10x1 Receptacle
JP1	1		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
JP2, R2, R4, R5, R8, R11	6	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
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 x 0.200 inch
Q1	1	-30V	MMBFJ177	Fairchild Semiconductor	JFET, P-CH, -30 V, -0.002 A, SOT-23	SOT-23
R3	1	1.0Meg	CRCW06031M00JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.1 W, 0603	0603
R6	1	22Meg	RMCF0603JT22M0	Stackpole Electronics Inc	RES, 22 M, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R7	1	2.74Meg	CRCW06032M74FKEA	Vishay-Dale	RES, 2.74 M, 1%, 0.1 W, 0603	0603
R9, R12, RC, RE	4	10k	RC0603JR-0710KL	Yageo America	RES, 10 k, 5%, 0.1 W, 0603	0603
R10, RO	2	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
RF	1	110k	RT0603BRD07110KL	Yageo America	RES, 110 k, 0.1%, 0.1 W, 0603	0603
RL	1	10.0	RT0603BRD0710RL	Yageo America	RES, 10.0, 0.1%, 0.1 W, 0603	0603
SH-J1	1	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
TP1	1		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
U1	1		LPV802DGKR	Texas Instruments	350 nA Rail-to-Rail I/O Nanopower Operational Amplifier Family, DGK0008A	DGK0008A
U2	1		HDC1080DMBR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, DMB0006A	DMB0006A
U3, U4	2	_	REF1112AIDBZR	Texas Instruments	1 uA Shunt Voltage Reference, 1.25 V, 10 ppm / degC, 5 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

## IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ('TI") reference designs are solely intended to assist designers ("Designer(s)") who are developing systems that incorporate TI products. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.

Tl's provision of reference designs and any other technical, applications or design advice, quality characterization, reliability data or other information or services does not expand or otherwise alter Tl's applicable published warranties or warranty disclaimers for Tl products, and no additional obligations or liabilities arise from Tl providing such reference designs or other items.

TI reserves the right to make corrections, enhancements, improvements and other changes to its reference designs and other items.

Designer understands and agrees that Designer remains responsible for using its independent analysis, evaluation and judgment in designing Designer's systems and products, and has full and exclusive responsibility to assure the safety of its products and compliance of its products (and of all TI products used in or for such Designer's products) with all applicable regulations, laws and other applicable requirements. Designer represents that, with respect to its applications, it has all the necessary expertise to create and implement safeguards that (1) anticipate dangerous consequences of failures, (2) monitor failures and their consequences, and (3) lessen the likelihood of failures that might cause harm and take appropriate actions. Designer agrees that prior to using or distributing any systems that include TI products, Designer will thoroughly test such systems and the functionality of such TI products as used in such systems. Designer may not use any TI products in life-critical medical equipment unless authorized officers of the parties have executed a special contract specifically governing such use. Life-critical medical equipment is medical equipment where failure of such equipment would cause serious bodily injury or death (e.g., life support, pacemakers, defibrillators, heart pumps, neurostimulators, and implantables). Such equipment includes, without limitation, all medical devices identified by the U.S. Food and Drug Administration as Class III devices and equivalent classifications outside the U.S.

Designers are authorized to use, copy and modify any individual TI reference design only in connection with the development of end products that include the TI product(s) identified in that reference design. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT OF TI OR ANY THIRD PARTY 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 products 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 the reference design or other items described above 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 AND OTHER ITEMS DESCRIBED ABOVE ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, INCLUDING BUT NOT LIMITED TO ACCURACY OR COMPLETENESS, TITLE, ANY EPIDEMIC FAILURE WARRANTY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY DESIGNERS AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS AS DESCRIBED IN A TI REFERENCE DESIGN OR OTHERWISE. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, DIRECT, SPECIAL, COLLATERAL, INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Tl's standard terms of sale for semiconductor products (<a href="http://www.ti.com/sc/docs/stdterms.htm">http://www.ti.com/sc/docs/stdterms.htm</a>) apply to the sale of packaged integrated circuit products. Additional terms may apply to the use or sale of other types of TI products and services.

Designer will fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of Designer's non-compliance with the terms and provisions of this Notice.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2016, Texas Instruments Incorporated