

TIDA-01069 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01069	Any	Printed Circuit Board	
2	BT1	1		2466	Keystone	HOLDER BATTERY AAA, TH	AAA Battery Holder, TH
3	C1, C5	2	1uF	C1005X5R1A105K050BB	TDK	CAP. CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
4	C2, C6	2	100pF	06035A101FAT2A	AVX	CAP. CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
5	C3, C7	2	33uF	C2012X5R1A336M125AC	TDK	CAP. CERM, 33 uF, 10 V, +/- 20%, X5R, 0805	0805
6	C4, C8	2	10uF	GRM188R61A106ME69D	MuRata	CAP. CERM, 10 uF, 10 V, +/- 20%, X5R, 0603	0603
7	C10	1	150pF	GRM1885C1H151JA01D	MuRata	CAP. CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
8	C11, C12	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
9	C13, C15, C36	3	330pF	GRM1555C1H331FA01J	MuRata	CAP. CERM, 330 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
10	C17	1	10uF	GRM188R60J106ME47D	MuRata	CAP. CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
11	C18	1	1uF	GRM155R61A105KE15D	MuRata	CAP. CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
12	C19	1	10uF	GRM155R60G106ME44D	MuRata	CAP. CERM, 10 uF, 4 V, +/- 20%, X5R, 0402	0402
13	C20, C25	2	100uF	C3216X5R1A107M160AC	TDK	CAP. CERM, 100 uF, 10 V, +/- 20%, X5R, 1206_190	1206_190
14	C21, C26	2	1uF	06033C105KAT2A	AVX	CAP. CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
15	C22, C23, C24, C27, C28, C29, C30, C31, C32, C33, C34, C35	12	0.1uF	0402YC104KAT2A	AVX	CAP. CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
16	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
17	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
18	H9	1		IML-0636	MuRata	Fresnel Lens	
19	H10	1		IML-0635	MuRata	Fresnel Lens	
20	J6, J7	2		87898-0204	Molex	Header, 2.54 mm, 2x1, Gold, R/A, SMT	Header, 2.54 mm, 2x1, R/A, SMT
21	J10, J11	2		PEC10DAAN	Sullins Connector Solutions	Header, 100mil, 10x2, TH	Header, 10x2, 2.54mm, TH
22	L1	1	4.7uH	VL302510MT-4R7M	TDK	Inductor, Shielded, Ferrite, 4.7 uH, 0.86 A, 0.168 ohm, SMD	IND_3x1x2.5mm
23	LBL1	1		TH-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
24	PIR1, PIR2	2		IRA-E700ST0	MuRata	Pyroelectric Infrared Sensor, TH	D9_2xH4.7mm
25	Q1	1	-20V	SI2323DS	Vishay-Siliconix	MOSFET, P-CH, -20 V, -3.7 A, SOT-23	SOT-23
26	R1, R7	2	1.30Meg	CRCW04021M30FKED	Vishay-Dale	RES, 1.30 M, 1%, 0.063 W, 0402	0402
27	R2, R8, R16, R23, R25	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
28	R3, R4, R5, R9, R10, R11, R18, R19, R20, R21	10	15Meg	RMCF0805JT15M0	Stackpole Electronics Inc	RES, 15 M, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
29	R6, R12	2	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, 0402	0402
30	R13, R14	2	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, 0402	0402
31	R15	1	10.0Meg	CRCW080510M0FKEA	Vishay-Dale	RES, 10.0 M, 1%, 0.125 W, 0805	0805
32	R17, R22, R24	3	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
33	R26	1	300	CRCW0402300RJNED	Vishay-Dale	RES, 300, 5%, 0.063 W, 0402	0402
34	R27, R28, R29, R30, R31, R32	6	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
35	R33, R34, R35, R36, R37, R38	6	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
36	R39	1	10Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 10 M, 5%, 0.1 W, 0603	0603
37	TP1, TP2	2		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
38	TP3, TP4	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
39	U1, U2	2		OPA349SA/3K	Texas Instruments	1 uA, Rail-to-Rail, CMOS Operational Amplifier, 1.8 to 5.5 V, 0 to 85 degC, 5-pin SOT23 (DCK0005A), Green (RoHS & no Sb/Br)	DCK0005A
40	U3, U6	2		TLV369IDCKR	Texas Instruments	Cost-Optimized, 800-nA, 1.8-V, Rail-to-Rail I/O Operational Amplifier with Zero-Crossover Distortion, DCK0005A (SOT-5)	DCK0005A
41	U4, U5	2		TLV3691IDCKR	Texas Instruments	0.9-V to 6.5-V, Nanopower Comparator, DCK0005A (SOT-5)	DCK0005A
42	U7, U8	2		ADS1114IDGSR	Texas Instruments	Ultra-Small, Low-Power, I2C-Compatible, 860-SPS, 16-Bit ADCs With Internal Reference, Oscillator, and Programmable Comparator, DGS0010A (VSSOP-10)	DGS0010A
43	U9	1		TPS610981DSER	Texas Instruments	Ultra-Low Quiescent Current Synchronous Boost with Integrated LDO/Load Switch, DSE0006A (WSON-6)	DSE0006A
44	U10	1		HDC1010YPAR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, YPA0008AGAE (DSBGA-8)	YPA0008AGAE
45	U11	1		OPT3002DNPR	Texas Instruments	OPT3002 Light to Digital Sensor, DNP0006A (USON-6)	DNP0006A
46	U14, U15, U16, U17, U18, U19, U21, U22	8		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
47	C9, C14, C16	0	0.1uF	C1005X7R1H104K050BB	TDK	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
48	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
49	J1, J2, J3, J4, J5	0		HMTSW-102-07-G-S-240	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
50	R40, R41	0	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402

IMPORTANT NOTICE FOR TI DESIGN INFORMATION AND RESOURCES

Texas Instruments Incorporated ("TI") technical, application or other design advice, services or information, including, but not limited to, reference designs and materials relating to evaluation modules, (collectively, "TI Resources") are intended to assist designers who are developing applications that incorporate TI products; by downloading, accessing or using any particular TI Resource in any way, you (individually or, if you are acting on behalf of a company, your company) agree to use it solely for this purpose and subject to the terms of this Notice.

TI's provision of TI Resources does not expand or otherwise alter TI's applicable published warranties or warranty disclaimers for TI products, and no additional obligations or liabilities arise from TI providing such TI Resources. TI reserves the right to make corrections, enhancements, improvements and other changes to its TI Resources.

You understand and agree that you remain responsible for using your independent analysis, evaluation and judgment in designing your applications and that you have full and exclusive responsibility to assure the safety of your applications and compliance of your applications (and of all TI products used in or for your applications) with all applicable regulations, laws and other applicable requirements. You represent that, with respect to your applications, you have 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. You agree that prior to using or distributing any applications that include TI products, you will thoroughly test such applications and the functionality of such TI products as used in such applications. TI has not conducted any testing other than that specifically described in the published documentation for a particular TI Resource.

You are authorized to use, copy and modify any individual TI Resource only in connection with the development of applications that include the TI product(s) identified in such TI Resource. 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 regarding or referencing third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of TI Resources 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 RESOURCES ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING TI RESOURCES OR USE THEREOF, 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 YOU AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS EVEN IF DESCRIBED IN TI RESOURCES 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 TI RESOURCES OR USE THEREOF, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

You agree to fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of your non-compliance with the terms and provisions of this Notice.

This Notice applies to TI Resources. Additional terms apply to the use and purchase of certain types of materials, TI products and services. These include; without limitation, TI's standard terms for semiconductor products (<http://www.ti.com/sc/docs/stdterms.htm>), [evaluation modules](#), and [samples](http://www.ti.com/sc/docs/sampterm.htm) (<http://www.ti.com/sc/docs/sampterm.htm>).

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2017, Texas Instruments Incorporated