

TIDA-01476 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	A1	1	3.6mVp-p	IRS-B210S10T1-R1	MuRata	Pyroelectric Infrared Sensors for Rework Soldering, 3.6mVp-p, SMD	4.7x4.7mm
2	B11	1		BS-7	Memory Protection Devices	Battery Holder, CR2032, Retainer clip, TH	CR2032 holder
3	C1, C55	2	100uF	C3216X5R1A107M160AC	TDK	CAP, CERM, 100 uF, 10 V, +/- 20%, X5R, 1206_190	1206_190
4	C2	1	10uF	C1608X5R0J106M	TDK	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
5	C3	1	10uF	GRM155R60J106ME44D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0402	0402
6	C4, C25	2	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
7	C5	1	1uF	C1005X5R1A105K050BB	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
8	C6, C7	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
9	C8, C9, C26	3	0.01uF	C1005X7R1C103K	TDK	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
10	C10, C11, C27, C53, C56, C57	6	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
11	C12, C28	2	100pF	C0402C101J3GACTU	Kemet	CAP, CERM, 100 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
12	C13	1	33uF	C2012X5R1A336M125AC	TDK	CAP, CERM, 33 uF, 10 V, +/- 20%, X5R, 0805	0805
13	C14, C16, C18, C19, C20, C22, C23	7	0.1uF	C1005X7R1H104K	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
14	C15	1	0.01uF	C1005X7R1E103K	TDK	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0402	0402
15	C17	1	3.3uF	C1005X5R1A335K050BC	TDK	CAP, CERM, 3.3 uF, 10 V, +/- 10%, X5R, 0402	0402
16	C21	1	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
17	C24, C30	2	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
18	C31, C33, C34, C35, C36, C39	6	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
19	C32, C37	2	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0603	0603
20	C40	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X7R, 0603	0603
21	C41, C42	2	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
22	C43, C47	2	3.6pF	GRM1555C1H3R6CA01D	MuRata	CAP, CERM, 3.6 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
23	C44, C51	2	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
24	C48	1	2.7pF	GRM1555C1H2R7CA01D	MuRata	CAP, CERM, 2.7 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
25	C49	1	6.2pF	GRM1555C1H6R2CA01D	MuRata	CAP, CERM, 6.2 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
26	C50	1	3.3pF	GRM1555C1H3R3CA01D	MuRata	CAP, CERM, 3.3 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
27	C52	1	0.6pF	GJM1555C1HR60BB01D	Murata	CAP, CERM, 0.6 pF, 50V, NP0/C0G, +0.1pF, 0402	0402
28	D2, D3	2	75V	1N4148X-TP	Micro Commercial Components	Diode, Switching, 75 V, 0.3 A, SOD-523	SOD-523
29	E1	1		ANTENNA_HELICAL	N/A	PCB Antenna. There is nothing to buy or mount.	Antenna
30	H1, H4, H6, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Phillips panhead	Screw
31	H2, H3, H5, H7	4		1902C	Keystone	Standoff, Hex, 0.5" L #4-40 Nylon	Standoff
32	H9	1		IML-0669	MuRata	Lens, Ceiling Mount, TH	D12xH8.508mm
33	J1, J6	2		87898-0204	Molex	Header, 2.54 mm, 2x1, Gold, R/A, SMT	Header, 2.54 mm, 2x1, R/A, SMT
34	J2	1		GRP0652VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
35	J3	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
36	L1	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
37	L2	1	6.8uH	MLZ2012N6R8L7000	TDK	Inductor, Multilayer, Ferrite, 6.8 uH, 0.11 A, 0.25 ohm, SMD	0805
38	L3, L5	2	7.5nH	LOW15AN7N5G00D	MuRata	Inductor, Wirewound, 7.5 nH, 0.57 A, 0.13 ohm, SMD	1x.5x.5mm
39	L4	1	18nH	LOW15AN18NJ00D	MuRata	Inductor, Wirewound, 18 nH, 0.37 A, 0.27 ohm, SMD	1x.5x.5mm
40	L6, L7	2	6.8nH	LOW15AN6N8G00D	MuRata	Inductor, Wirewound, 6.8 nH, 0.7 A, 0.09 ohm, SMD	1x.5x.5mm
41	L8	1	11nH	LOW15AN11NG00D	MuRata	Inductor, Wirewound, 11 nH, 0.5 A, 0.14 ohm, SMD	1x.5x.5mm
42	Q1	1	-20V	SI2323DS	Vishay-Siliconix	MOSFET, P-CH, -20 V, -3.7 A, SOT-23	SOT-23
43	R1	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
44	R2	1	619k	CRCW0402619KFED	Vishay-Dale	RES, 619 k, 1%, 0.063 W, 0402	0402
45	R3	1	6.81k	CRCW04026K81FKED	Vishay-Dale	RES, 6.81 k, 1%, 0.063 W, 0402	0402
46	R4	1	1.30Meg	CRCW04021M30FKED	Vishay-Dale	RES, 1.30 M, 1%, 0.063 W, 0402	0402
47	R5	1	1.50Meg	CRCW04021M50FKED	Vishay-Dale	RES, 1.50 M, 1%, 0.063 W, 0402	0402
48	R6	1	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, 0402	0402
49	R7, R8, R9, R10, R11	5	15Meg	RMCF0805JT15M0	Stackpole Electronics Inc	RES, 15 M, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
50	R12, R13	2	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
51	R14, R16, R18, R19, R20	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
52	R15	1	100k	CRCW0402100KFED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
53	S1, S2	2		B3U-1000P	Omron Electronic Components	SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm
54	SH-J1, SH-J3, SH-J6	3	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
55	TP1, TP2	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
56	TP6, TP7	2	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
57	TP8, TP9, TP13	3	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
58	U2	1		LPV802DGKR	Texas Instruments	350 nA Rail-to-Rail I/O Nanopower Operational Amplifier Family, DGK0008A	DGK0008A
59	U3, U4	2		TLV3691IDCK	Texas Instruments	0.9-V to 6.5-V, Nanopower Comparator, DCK0005A	DCK0005A
60	U5, U6, U7, U8	4		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
61	U9	1		CC1310F128RGZR	Texas Instruments	Sub-1 GHz and 2.4 GHz Multi-standard RF IC Family, RGZ0048A	RGZ0048A
62	Y1	1		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x.6x1.2mm
63	Y2	1		TSX-3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
64	C29	0	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0603	0603
65	C38	0	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
66	C45, C46	0	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
67	C54	0	1pF	GRM1555C1H1R0CA01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
68	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
69	J4	0		TSW-106-07-G-S	Samtec	Header, 100mil, 6x1, Gold, TH	6x1 Header
70	J5	0		CON5MA001-SMD-G	Linx Technologies	Jack, SMA, PCB, Gold, SMT	SMA Jack
71	R17	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 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