

TIDA-01411 REV A Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA01411	Any	Printed Circuit Board	
2	C1	1	0.01uF	0603C103KA12A	AVX	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	0603
3	C2, C56, C57	3	22uF	EEE-FK1K220P	Panasonic	CAP, AL, 22 uF, 80 V, +/- 20%, 1.3 ohm, SMD	SMT Radial F
4	C3, C5, C23, C33, C43, C53	6	0.1uF	C2012X7R2A104K	TDK	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805
5	C4, C10, C11, C12, C13, C14, C16, C18, C20, C24, C26, C28, C30, C34, C36, C38, C40, C44, C46, C48, C50	21	0.1uF	0603C104KA12A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
6	C6	1	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	1206
7	C7, C9	2	1uF	0805ZC105KA12A	AVX	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0805	0805
8	C8	1	4.7uF	06032D475KA12A	AVX	CAP, CERM, 4.7uF, 10V, +/-10%, X6R, 0603	0603
9	C15, C17, C19, C21, C25, C27, C29, C31, C35, C37, C39, C41, C45, C47, C49, C51	16	0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	0603
10	C22, C32, C42, C52	4	1000pF	1812GC102KA1	AVX	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1812	1812
11	C54, C55	2	2200pF	C4532V7R3D222K	TDK	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1812	1812
12	D1	1	58V	SMLJ58A	Diodes Inc.	Diode, TVS, Uni, 58 V, 1500 W, SMC	SMC
13	D2, D3, D4, D5, D6, D9, D10, D11, D14, D15, D16, D17, D20, D21, D22, D23	16	5V	CDSOD323-105C	Bourns	Diode, TVS, Bi, 5 V, 350 W, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
14	D6, D12, D18	3	58V	SMLJ58A	Bourns	Diode, TVS, Uni, 58 V, 3000 W, SMC	SMC
15	D7, D13, D19	3	0.68V	10MQ100NTRPBF	International Rectifier	Diode, Schottky, 100V, 1.5A, SMA	SMA
16	D24	1	7V	CD143A-SR70	Bourns	ESD Suppressor Diode Arrays, 7V, SMD	3.04X1.22X1.4
17	F1, F2	2		B1250T	Bourns	Fuse, 1.25 A, 600 VAC, SMD	9.65x3.05mm
18	F3, F4	2		C1S 1.5	Bel Fuse	Fuse, 1.5A, 63V, SMD	1206
19	H1, H2, H3, H4, H5, H6	6		4820	Keystone	Standoff, Hex, 1" L #6-32 Nylon, M-F	1" Nylon Hex Standoff
20	J1	1		ED656/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
21	J2	1		N2510-6002-RB	3M	Header (shrouded), 100mil, 5x2, High-Temperature, Gold, TH	5x2 Shrouded header
22	J3, J6, J9, J12	4		1-406541-1	AMP	RJ45, Right Angle, No LED, tab up	16.26x14.54x15.75
23	J4, J7, J10, J11	4		TSW-109-07-G-S	Samtec	Header, 100mil, 8x1, Gold, TH	8x1 Header
24	J5, J8	2	15A	7693	Keystone	Terminal screw, vertical, snap-in	7693
25	L1	1	180uH	SDR0604-181K1	Bourns	Inductor, Drum Core, Ferrite, 180uH, 0.38A, 1.38 ohm, SMD	5.8x4.8x5.8mm
26	L2, L3, L4, L5	4	uH	ACM7060-301-2PL-TL	TDK	Coupled inductor, 5A, 0.01 ohm, SMD	8x3.5x7 mm
27	Q1, Q2, Q3, Q4	4	130V	FDMC3612	Fairchild Semiconductor	MOSFET, N-CH, 100V, 3.3A, 3.3xTx3.3mm	3.3x1x3.3mm
28	R1, R7, R9, R12	4	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47 ohm, 5%, 0.1W, 0603	0603
29	R2	1	47.5k	CRCW060347K5FKEA	Vishay-Dale	RES, 47.5k ohm, 1%, 0.1W, 0603	0603
30	R3	1	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200k ohm, 1%, 0.1W, 0603	0603
31	R4, R8, R11, R14	4	22.1	CRCW060322R1FKEA	Vishay-Dale	RES, 22.1 ohm, 1%, 0.1W, 0603	0603
32	R5, R15, R16, R17, R19	5	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
33	R6	1	4.99	CRCW0603499FKEA	Vishay-Dale	RES, 4.99 ohm, 1%, 0.1W, 0603	0603
34	R10	1	13.3k	CRCW060313K3FKEA	Vishay-Dale	RES, 13.3k ohm, 1%, 0.1W, 0603	0603
35	R13	1	6.04k	CRCW0603604FKEA	Vishay-Dale	RES, 6.04k ohm, 1%, 0.1W, 0603	0603
36	R18, R20, R80	3	4.7k	CRCW060347K0JNEA	Vishay-Dale	RES, 4.7k ohm, 5%, 0.1W, 0603	0603
37	R21, R22, R23, R24, R29, R30, R31, R32, R35, R36, R37, R38, R43, R44, R45, R46, R49, R50, R51, R52, R57, R58, R59, R60, R63, R64, R65, R66, R71, R72, R73, R74	32	49.9	CRCW080549R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.125 W, 0805	0805
38	R25, R26, R27, R28, R39, R40, R41, R42, R53, R54, R55, R56, R67, R68, R69, R70	16	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0 ohm, 1%, 0.1W, 0603	0603
39	R33, R34, R47, R48, R61, R62, R75, R76	8	0.51	CRM0805-FX-R510ELF	Bourns	RES, 0.51 ohm, 1%, 0.25W, 0805	0805
40	R77	1	0	CRCW20100000Z0DEF	Vishay-Dale	RES, 0, 5%, 0.75 W, 2010	2010
41	RV1, RV2, RV3, RV4	4	324 - 396 V	V14E230P	Littelfuse	Varistor, 324V, 6KA, Disc, 14mm, TH	D17mm
42	RV5, RV6, RV7, RV8	4	324 - 396 V	V10E230P	Littelfuse	Varistor, 324V, 3.5KA, Disc, 10mm, TH	D12.5mm
43	RV9, RV10, RV11, RV12, RV13, RV14	6	324 - 396 V	V07E230P	Littelfuse	Varistor, 324V, 1.75KA, Disc, 7mm, TH	D9mm
44	T1, T2, T3, T4	4	0.35 mH	PT61020EL	Bourns	Transformer, 0.35 mH, SMT	SMD, 17.62x12.2mm
45	TP1, TP2, TP21	3	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
46	TP3, TP5, TP8, TP10, TP12, TP14, TP17, TP19	8	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
47	TP4, TP9, TP13, TP18	4	Orange	5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
48	TP7, TP16	2	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
49	U1	1		LM5019MRXNOPB	Texas Instruments	100V, 100mA Constant On-Time Synchronous Buck Regulator, DDA0008B	DDA0008B
50	U2	1		TPS23861PW	Texas Instruments	QUAD IEEE 802.3at POWER-OVER-ETHERNET PSE CONTROLLER, PW0028A	PW0028A
51	U3	1		FOD817DS	Fairchild Semiconductor	Optocoupler, 5kV RMS, SMT	DIP-4L Gullwing
52	U4	1		ISO7221BD	Texas Instruments	5 Mbps Dual Channels, 1 / 1, Digital Isolator, 3.3 V / 5 V, -40 to +125 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A
53	U5	1		ISO1541D	Texas Instruments	Low-Power Bidirectional I2C Isolators, D0008A	D0008A
54	U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17	12		TCS-DL004-250-WH	Bourns	TCS™ Dual Transient Current Suppressor, TCS-DL004-250	SMD, 4x2.5mm

## 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