

TIDA-01583 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-01583	Any	Printed Circuit Board	
2	C1, C17	2	0.68uF	GRM188R71A684KA61D	MuRata	CAP, CERM, 0.68 uF, 10 V, +/- 10%, X7R, 0603	0603
3	C2, C18	2	0.56uF	GRM188R71A564KA61D	MuRata	CAP, CERM, 0.56 uF, 10 V, +/- 10%, X7R, 0603	0603
4	C3, C4, C5, C6, C7, C8, C10, C11, C19, C20, C21, C22, C23, C24, C26, C27	16	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
5	C9, C12, C14, C16, C25, C28, C35, C37, C39, C40, C43	11	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
6	C13, C15, C36, C38	4	4.7uF	GRM188R61E475KE11D	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X5R, 0603	0603
7	C29, C34, C44	3	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
8	C30, C31, C32, C33, C41, C42	6	2.2uF	EMK107BB7225KA-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
9	D1	1	40V	MBR0540T1G	ON Semiconductor	Diode, Schottky, 40V, 0.5A, SOD-123	SOD-123
10	D2	1	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
11	FID4	1		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
12	J1, J2	2		SSW-110-23-F-S	Samtec, Inc.	Connector, Receptacle, 100mil, 10x1, Gold plated, TH	HEADER, RECEPTACLE, 100mil, 10x1
13	J3, J5, J7, J9	4		142-0711-821	Cinch Connectivity	SMA JACK 50 OHM EDGE MNT, SMT	SMA JACK EDGE MNT, SMT
14	J4, J6, J8, J10	4		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
15	J11	1		039544-3002	Molex	Terminal Block, 5.08mm, 2x1, TH	Terminal Block, 5.08mm, 2x1, TH
16	L1, L2, L3	3	15 ohm	MMZ1608R150ATA00	TDK	Ferrite Bead, 15 ohm @ 100 MHz, 1.5 A, 0603	0603
17	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"H x 0.200"W
18	Q1, Q2	2	50 V	ZXT10N50DE6	Zetex	Transistor, NPN, 50 V, 3 A, SOT-23-6	SOT-23-6
19	R1, R2, R4, R5, R8, R9, R14, R15, R17, R18, R21, R22	12	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, 0402	0402
20	R3, R16	2	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
21	R6, R7, R19, R20	4	47	ERJ-2GEJ470X	Panasonic	RES, 47, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
22	R10, R12, R13, R23, R30, R31, R32, R33, R34, R35	10	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
23	R11, R24	2	10.0k	MCR01MRTF1002	Rohm	RES, 10.0 k, 0.1%, 0.063 W, 0402	0402
24	R25, R26, R29	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
25	R27, R28	2	120	CRCW0402120RJNED	Vishay-Dale	RES, 120, 5%, 0.063 W, 0402	0402
26	TP1, TP2, TP4, TP5, TP6, TP11, TP13	7		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
27	TP3, TP12	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
28	TP7, TP8, TP9, TP10	4		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
29	U1	1		DAC80508ZRTET	Texas Instruments	Octal, 16--Bit, SPI, Voltage Output DAC with Internal Reference, RTE0016D (WQFN-16)	RTE0016D
30	U2, U5	2		OPA2192IDGKR	Texas Instruments	36-V, Precision, Rail-to-Rail Input/Output, Low Offset Voltage, Low Input Bias Current Op Amp with e-trim, DGK0008A (VSSOP-8)	DGK0008A
31	U3	1		TPS71750DSET	Texas Instruments	Single Output High PSRR LDO, 150 mA, Fixed 5 V Output, 2.5 to 6.5 V Input, with Low IQ, 6-pin WSON (DSE), -40 to 125 degC, Green (RoHS & no Sb/Br)	DSE0006A
32	U4	1		TPS71733DSET	Texas Instruments	Single Output High PSRR LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 6.5 V Input, with Low IQ, 6-pin WSON (DSE), -40 to 125 degC, Green (RoHS & no Sb/Br)	DSE0006A
33	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

## 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 © 2018, Texas Instruments Incorporated