

TIDA-01430 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-01430	Any	Printed Circuit Board	
C1, C16, C30	3	10pF	C0603C100J5GACTU	Kemet	CAP, CERAM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C2, C3, C18, C19, C65	5	10uF	293D106X9016B2TE3	Vishay-Sprague	CAP, TA, 10 uF, 16 V, +/- 10%, 2 ohm, SMD	3528-21
C4, C5, C8, C17, C21, C22	6	1uF	C0603C105Z9VACTU	Kemet	CAP, CERAM, 1 uF, 6.3 V, +80/-20%, Y5V, 0603	0603
C6, C7, C9, C10, C11, C20, C23, C24, C25, C26, C66, C71, C73, C74, C82, C84, C86	17	0.1uF	0603YC104JAT2A	AVX	CAP, CERAM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
C12, C15	2	470pF	08055A471FAT2A	AVX	CAP, CERAM, 470 pF, 50 V, +/- 1%, C0G/NP0, 0805	0805
C13	1	1500pF	B37947K9152J60	TDK	CAP, CERAM, 1500 pF, 16 V, +/- 5%, C0G/NP0, 0805	0805
C14	1	22pF	C0603C220J5GACTU	Kemet	CAP, CERAM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C27, C29	2	2700pF	08051C272JAT2A	AVX	CAP, CERAM, 2700 pF, 100 V, +/- 5%, X7R, 0805	0805
C28	1	5600pF	08055C562KAT2A	AVX	CAP, CERAM, 5600 pF, 50 V, +/- 10%, X7R, 0805	0805
C31, C32, C61, C63	4	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERAM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
C67, C78	2	3.3uF	GRM188R61A335KE15D	MuRata	CAP, CERAM, 3.3 uF, 10 V, +/- 10%, X5R, 0603	0603
C68, C80	2	1uF	GRM155R61A105KE15D	MuRata	CAP, CERAM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
D1, D2, D4, D5	4	3.813V	PTZTE253.6B	Rohm	Diode, Zener, 3.813 V, 1 W, SMA	SMA
D3, D6, D7	3	70V	DESD1P0RFW-7	Diodes Inc.	Diode, TVS, Uni, 70 V, SOT-323	SOT-323
D14, D15	2	Green	LG M67K-G1J2-24-Z	OSRAM	LED, Green, SMD	2x1.4mm
FID1, FID2, FID3, FID4	4		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1	1		ED120/3DS	On-Shore Technology	Terminal Block, 5.08 mm, 3x1, Brass, TH	3x1 5.08 mm Terminal Block
J6	1		61301021121	Würth Elektronik	Header, 2.54 mm, 5x2, Gold, TH	Header, 2.54mm, 5x2, TH
L1, L2	2	120 ohm	74279202	Würth Elektronik	Ferrite Bead, 120 ohm @ 100 MHz, 0.5 A, 0805	0805
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
Q1, Q2	2	30V	CSD17571Q2	Texas Instruments	MOSFET, N-CH, 30 V, 22 A, DQK0006C (WSON-6)	DQK0006C
R1, R6, R10, R11, R17	5	150k	RC0603FR-07150KL	Yageo America	RES, 150 k, 1%, 0.1 W, 0603	0603
R2, R3, R4, R5	4	560k	RC1206FR-07560KL	Yageo America	RES, 560 k, 1%, 0.25 W, 1206	1206
R7, R8	2	68	ERJ-6GEYJ680V	Panasonic	RES, 68, 5%, 0.125 W, 0805	0805
R9, R12, R15	3	7.50k	RC0603FR-077K5L	Yageo America	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R13	1	0.002	CSS2H-2512K-2L00FCT-ND	Bourns	RES, 0.002, 1%, 2 W, 2512	2512
R14, R16	2	360	CRCW0805360RJNEA	Vishay-Dale	RES, 360, 5%, 0.125 W, 0805	0805
R18, R20, R44, R45, R46, R63, R64, R67, R69, R71, R75, R76, R78, R80, R82, R83	16	0	RMCF06032TOR00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R19, R21, R59, R60	4	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
R38, R53	2	1.00k	RT0603BRD071KL	Yageo America	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603
R40, R55	2	10.0k	RT0603BRD0710KL	Yageo America	RES, 10.0 k, 0.1%, 0.1 W, 0603	0603
R42, R57	2	30.1k	RG1608P-3012-B-T5	Susumu Co Ltd	RES, 30.1 k, 0.1%, 0.1 W, 0603	0603
R47	1	143k	CRCW0603143KFKEA	Vishay-Dale	RES, 143 k, 1%, 0.1 W, 0603	0603
R84, R85	2	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603
T1, T2	2		CXS70-14-C	Panduit	Terminal 70A Lug	LUG, 32.3x14.5x11.7
U1, U5	2		ISOW7841DWER	Texas Instruments	ISOW7841DW, DW0016B (SOIC-16)	DW0016B
U2	1		ADS7043IRUGR	Texas Instruments	12-Bit, 1-MSPS, Ultra-Low-Power & Ultra-Small-Size SAR ADC with SPI Interface, RUG0008A (X2QFN-8)	RUG0008A
U3	1		TLV316IDBVR	Texas Instruments	10-MHz, Rail-to-Rail Input/Output, Low-Voltage, 1.8-V CMOS Operational Amplifier, DBV0005A (SOT-5)	DBV0005A
U4	1		TLV2316IDGKR	Texas Instruments	10-MHz, Rail-to-Rail Input/Output, Low-Voltage, 1.8-V CMOS Operational Amplifier, DGK0008A (VSSOP-8)	DGK0008A
U6	1		ADS7044IRUGR	Texas Instruments	12-Bit, 1-MSPS, Ultra-Low-Power & Ultra-Small-Size SAR ADC with SPI Interface, RUG0008A (X2QFN-8)	RUG0008A
U7, U8	2		SN74LVC1G17DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A (SOT-SC70-5)	DCK0005A
U13, U15	2		TLV431ACDBZR	Texas Instruments	Low Voltage Adjustable Precision Shunt Regulator, 39 ppm / degC, 15 mA, 0 to 70 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U17, U22	2		LP5907MFX-3.0/NOPB	Texas Instruments	250-mA Ultra-Low-Noise, Low-IQ LDO, DBV0005A (SOT-23-5)	DBV0005A
U19, U24	2		REF1930AIDDCR	Texas Instruments	Dual Output Vref and Vref/2 Voltage Reference, DDC0005A (SOT-5)	DDC0005A

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