

Variant: 001  
 Generated: 1/6/2017 1:30:30 PM  
 TID #: TIDA-01330



TIDA-01330 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB?	1		TIDA-01330	Any	Printed Circuit Board	
2	C1, C12, C19	3	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
3	C2, C3	2	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805
4	C4, C5	2	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
5	C6, C7, C8, C11	4	330uF	EEE-FT1H331AP	Panasonic	CAP, AL, 330 uF, 50 V, +/- 20%, 0.3 ohm, SMD	SMT Radial G
6	C9, C10	2	0.01uF	C1608X7R1H103K080AA	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
7	C13, C15	2	0.047uF	C0603C473K1RACTU	Kemet	CAP, CERM, 0.047uF, 100V, +/-10%, X7R, 0603	0603
8	C14, C16, C18, C26	4	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
9	C17	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
10	C20, C21, C25	3	1000pF	GRM188R71C102KA01D	MuRata	CAP, CERM, 1000pF, 16V, +/-10%, X7R, 0603	0603
11	C22, C23, C24	3	2200pF	GRM188R71C222KA01D	MuRata	CAP, CERM, 2200pF, 16V, +/-10%, X7R, 0603	0603
12	C27	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
13	D1	1	90V	CD0603-S0180	Bourns	Diode, Switching, 90V, 0.1A, 0603 Diode	0603 Diode
14	D2	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	Red 0805 LED
15	D3	1	Green	LTST-C170GKGT	Lite-On	LED, Green, SMD	LED_0805
16	D4	1	30V	BAT54CDW-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-363	SOT-363
17	J1	1		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
18	J2	1		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
19	J3, J4	2		SSW-110-01-T-S	Samtec	Receptacle, 2.54mm, 10x1, Tin, TH	Receptacle, 2.54mm, 10x1, TH
20	J5	1		1729160	Phoenix Contact	Terminal Block, 6x1, 5.08mm, Th	Terminal Block, 6x1, 5.08mm, TH
21	L1	1	2.2uH	XAL1010-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 32 A, 0.00255 ohm, SMD	Inductor, 11.3x10x10mm
22	Q1, Q5	2	0.7V	BC846BLT1G	ON Semiconductor	Transistor, NPN, 65V, 0.1A, SOT-23	SOT-23
23	Q2, Q4, Q6, Q7, Q8, Q9	6	40V	SQJ858AEP	Vishay-Siliconix	MOSFET, N-CH, 40 V, 58 A, PowerPAK_SO-8L	PowerPAK_SO-8L
24	Q3	1	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
25	R1, R2, R11, R12	4	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
26	R3	1	330	CRCW1206330RJNEA	Vishay-Dale	RES, 330, 5%, 0.25 W, 1206	1206
27	R4	1	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, 0402	0402
28	R5	1	330	CRCW0402330RJNED	Vishay-Dale	RES, 330, 5%, 0.063 W, 0402	0402
29	R6, R9, R17	3	0.015	CRA2512-FZ-R015ELF	Bourns	RES, 0.015, 1%, 3 W, 2512	2512
30	R7, R14, R15, R16	4	56	CRCW040256R0JNED	Vishay-Dale	RES, 56, 5%, 0.063 W, 0402	0402
31	R8	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
32	R10, R13	2	470	CRCW0402470RJNED	Vishay-Dale	RES, 470, 5%, 0.063 W, 0402	0402
33	S1, S2, S3	3		7105J3V3QE2	C&K Components	Switch, SPDT, Momm-Off-Momm, 3 Pos, 5 A, 28 VDC, TH	15.75x8.13mm
34	TP1	1	Red	5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
35	TP2, TP3	2	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
36	U1	1		DRV83053EPHPRQ1	Texas Instruments	Three Phase Automotive Gate Driver with Three Integrated Current Shunt Amplifiers and Voltage Regulator, PHP0048G	PHP0048G
37	U2	1		SN74AHC1G00DCKR	Texas Instruments	SINGLE 2-INPUT POSITIVE-NAND GATE, DCK0005A (SOT-5)	DCK0005A
38	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