Variant: 001
Generated: 9/12/2017 11:41:25 AM
TID #: 01456

TIDA-01456 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		TIDA-01456	Any	Printed Circuit Board	
2	C1, C2, C10, C14, C16, C21, C25, C31, C34, C42, C44, C50, C57, C58, C62	15	1uF	C0805C105K5RACTU	Kemet	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
3	C3, C4	2	1500pF	C0603C152K5RACTU	Kemet	CAP, CERM, 1500 pF, 50 V,+/- 10%, X7R, 0603	0603
4	C5, C6, C7, C8, C9, C11, C12, C15, C22, C23, C24, C30, C32, C33, C39, C43, C47, C48, C49, C52, C53, C54, C55, C56, C59, C60, C61	27	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
5	C13	1	2uF	B32774D0205K000	TDK	CAP, Film, 2 µF, 1100 V,+/- 10%, 0.011 ohm, TH	31.5x21.5x12.5mm
6	C18, C20, C27, C29, C35, C38	6	22pF	C0603C220J5GACTU	Kemet	CAP, CERM, 22 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
7	C40, C46	2	150pF	C0603C151J5GACTU	Kemet	CAP, CERM, 150 pF, 50 V,+/- 5%, C0G/NP0, 0603	0603
8	C41	1	0.1uF	GRM55DR73A104KW01L	MuRata	CAP, CERM, 0.1 µF, 1000 V,+/- 10%, X7R, 2220	2220
9	C45	1	0.01uF	C0603C103K5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V,+/- 10%, X7R, 0603	0603
10	C51	1	4.7uF	CL10B475KQ8NQND	Samsung Electro-Mechanics	CAP, CERM, 4.7 µF, 6.3 V,+/- 10%, X7R, 0603	0603
11	D1, D2, D3	3	1200V	STTH112RL	STMicroelectronics	Diode, Ultrafast, 1200 V, 1 A, TH	DO-41
12	D4	1	Red	LTST-C150CKT	Lite-On	LED, Red, SMD	1206
13	D5, D6, D7	3	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
14	J1	1		SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions	Header (shrouded), 100 mil, 7x2, Gold, TH	7x2 Shrouded Header
15	J2	1		HSEC8-130-01-L-DV-A	Samtec	C2000 controlCARD-180HSEC (60-pin addon) connector, SMT	C2000 pin numbering
16	J3	1		HSEC8-160-01-L-DV-A-BL	Samtec	C2000 controlCARD-120HSEC connector, SMT	C2000 pin numbering
17	J5	1		61300411121	Wurth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
18	J6	1		61300311121	Wurth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
19	J7	1		1902547	Phoenix Contact	Terminal Block, 9.52mm, 2x1, R/A, TH	Terminal Block, 2x1, Pitch 9.52mm
20	J8	1		1904150	Phoenix Contact	Terminal Block, 9.52mm, 3x1, R/A, TH	Terminal Block, 3x1, Pitch 9.52mm
21	J9	1		61301011121	Wurth Elektronik	Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm, 10x1, TH
22	R1, R2, R3, R4, R5, R6, R10, R14, R19, R23, R27, R32, R34, R36, R38, R51	16	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
23	R7, R16, R25	3	1.0	CRCW12061R00JNEA	Vishay-Dale	RES, 1.0, 5%, 0.25 W, 1206	1206

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
24	R8, R11, R17, R20, R26, R28	6	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
25	R9, R12, R18, R21, R29, R30	6	2.00	CRCW12062R00FKEA	Vishay-Dale	RES, 2.00, 1%, 0.25 W, 1206	1206
26	R13, R15, R22, R24, R31, R33, R55, R59, R61, R62	10	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
27	R35, R37, R40, R42, R44, R48	6	100k	CRCW1206100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.25 W, 1206	1206
28	R39	1	37.4k	CRCW060337K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.1 W, 0603	0603
29	R41, R63	2	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
30	R43, R45, R47, R57	4	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, 0603	0603
31	R46, R49	2	0.004	CSNL2512FT4L00	Stackpole Electronics Inc	RES, 0.004, 1%, 2 W, 2512	2512
32	R50	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
33	R52, R56	2	2.15k	CRCW06032K15FKEA	Vishay-Dale	RES, 2.15 k, 1%, 0.1 W, 0603	0603
34	R54	1	3.30k	RC0603FR-073K3L	Yageo America	RES, 3.30 k, 1%, 0.1 W, 0603	0603
35	T1	1	340uH	750313638	Wurth Elektronik	Transformer, 340 uH, SMT	8x9.14mm
36	U1	1		TLV9062IDR	Texas Instruments	Dual Operational Amplifier, D0008A (SOIC-8)	D0008A
37	U2, U15	2		ISO7741DWR	Texas Instruments	High-Speed, Low-Power, Robust EMC Quad-Channel Digital Isolator, DW0016B (SOIC-16)	DW0016B
38	U3, U5, U7	3		UCC27531DBVR	Texas Instruments	2.5-A, 5-A, 35-VMAX VDD FET and IGBT Single Gate Driver, DBV0006A (SOT-23-6)	DBV0006A
39	U4, U6, U8	3		UCC5320SCD	Texas Instruments	Isolated Gate Drivers with High CMTI and Scalable Drive Strength, D0008B (SOIC-8)	D0008B
40	U9	1		SK35GD126ET	SEMIKRON	IGBT Module, N Channel, SEMITOP 3, TH	31x55mm
41	U10	1		TLV6001IDBVR	Texas Instruments	1-MHz, Low-Power Operational Amplifier for Cost-Sensitive Systems, DBV0005A (SOT-23-5)	DBV0005A
42	U11	1		TL331IDBVR	Texas Instruments	SINGLE DIFFERENTIAL COMPARATOR, DBV0005A (SOT-23-5)	DBV0005A
43	U12	1		TLV431IDBVRA	Texas Instruments	Low Voltage Adjustable Precision Shunt Regulator, 39 ppm / degC, 15 mA, -40 to 85 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0005A
44	U16	1		SN6501DBVR	Texas Instruments	Low-Noise 350 mA, 410 kHz Transformer Driver, DBV0005A (SOT-23-5)	DBV0005A
45	U17	1		TLV70233DBVR	Texas Instruments	Single Output LDO, 300 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
46	C17, C19, C26, C28, C36, C37	0	0.01uF	C0603C103K5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V,+/- 10%, X7R, 0603	0603
47	C63, C64, C65, C66	0	1500pF	C0603C152K5RACTU	Kemet	CAP, CERM, 1500 pF, 50 V,+/- 10%, X7R, 0603	0603
48	R53, R58, R60	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
49	R64	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603

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/sampterms.htm).

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2017, Texas Instruments Incorporated