Variant: None
Generated: 12/4/2017 4:02:24 PM
TID #: TIDA-01492

TIDA-01492 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-01492	Any	Printed Circuit Board	
2	0.9V, 1.2V, 1.8V, 5V, GND1, GND2, GND3, GND4	8	Double	1503-2	Keystone	Terminal, Turret, TH, Double	Keystone1503-2
3	C0_2, C1_2, C2_2, C3_2	4	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
4	C0_3, C1_3, C2_3, C3_3	4	3300pF	GRM155R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
5	C1, C2, C3, C8, Cbias1	5	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
6	C4, C5, C6, C7	4	10uF	GCM21BR71A106KE22L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
7	C9, C10	2	4700pF	C0603C472J1GAC7867	Kemet	CAP, CERM, 4700 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
8	C11	1	2.2uF	C2012X5R1H225K125AB	TDK	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X5R, 0805	0805
9	C16, C17, C24, C25	4	390pF	GRM155R71H391KA01D	MuRata	CAP, CERM, 390 pF, 50 V, +/- 10%, X7R, 0402	0402
10	C18, C21, C26, C29	4	6800pF	GRM155R71H682KA88D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0402	0402
11	C19, C22, C27, C30	4	10uF	GRM21BR60J106KE19L	MuRata	CAP, CERM, 10 µF, 6.3 V, +/- 10%, X5R, 0805	0805
12	C20, C23, C28, C31, C34, C35, C38, C39, C44, C49, C51	11	0.1uF	GRM155R71C104JA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0402	0402
13	C32, C33, C36, C37, C40, C41, C42, C43, C48, C50	10	10uF	GCM31CR71A106KA64L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
14	C45, C47	2	2.2uF	GRM188R61A225KE34D	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X5R, 0603	0603
15	C46	1	1uF	C0603C105K8PACTU	Kemet	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0603	0603
16	C52, C58	2	2200pF	C0603C222K5RACTU	Kemet	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	0603
17	C53	1	0.47uF	GRM188R71A474KA61D	MuRata	CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603	0603
18	C54, C55, C56, C57	4	22uF	GCM31CR71A226KE02	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
19	CB	1	0.47uF	GRM188R61E474KA12D	MuRata	CAP, CERM, 0.47uF, 25V, +/-10%, X5R, 0603	0603
20	Cbulk1	1	100uF	HHXB500ARA101MJA0G	Chemi-Con	CAP, Aluminum Polymer, 100 µF, 50 V, +/- 20%, 0.025 ohm, AEC-Q200 Grade 2, D10xL10mm SMD	D10xL10mm
21	CF1, CF2	2	4.7uF	CGA6P3X7R1H475M250AB	TDK	CAP, CERM, 4.7 µF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
22	CFF	1	4.7pF	06035A4R7CAT2A	AVX	CAP, CERM, 4.7 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
23	CI1, CO	2	0.47uF	GRM21BR71H474KA88L	MuRata	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, 0805	0805
24	CI2, CI3	2	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
25	CO1, CO2, CO3, CO4, CO5	5	22uF	GRM32ER71C226KE18L	MuRata	CAP, CERM, 22 µF, 16 V, +/- 10%, X7R, 1210	1210
26	CSS	1	0.01uF	06031C103MAT2A	AVX	CAP, CERM, 0.01 µF, 100 V, +/- 20%, X7R, 0603	0603
27	CVCC	1	2.2uF	GRM188C81A225KE34D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X6S, 0603	0603
28	D1	1	28V	SMBJ28CA-13-F	Diodes Inc.	Diode, TVS, Bi, 28 V, 45.4 Vc, SMB	SMB
29	FB1	1	800 ohm	HR2220V801R-10	Laird-Signal Integrity Products	Ferrite Bead, 800 ohm @ 100 MHz, 8 A, 2220	2220
30	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
31	GND_	1		6092	Keystone	Standard Banana Jack, Insulated, Black	6092
32	IN	1		6091	Keystone	Standard Banana Jack, Insulated, Red	6091
33	L1	1	2.2uH	XAL7030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 12.9 A, 0.0137 ohm, SMD	XAL7030
34	L2, L3, L4, L5	4	30 ohm	BLM21PG300SH1D	MuRata	Ferrite Bead, 30 ohm @ 100 MHz, 4 A, 0805	0805
35	L6, L7, L8, L9	4	470nH	DFE252012F-R47M=P2	MuRata Toko	Inductor, Powdered Iron, 470 nH, 5.8 A, 0.017 ohm, SMD	2.5x1.2x2mm
36	L10, L11	2	1.2uH	XAL5030-122MEB	Coilcraft	Inductor, Shielded, Composite, 1.2 µH, 11.1 A, 0.01 ohm, SMD	5.3x31.x5.5mm
37	LF1	1	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 9.2 A, 0.01 ohm, SMD	5.3x31.x5.5mm
38	Q1	1	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
39	R1, R2, R3, R4	4	3.9	CRCW08053R90JNEA	Vishay-Dale	RES, 3.9, 5%, 0.125 W, 0805	0805
40	R5, R6, R7, R8	4	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
41	R9	1	4.99	RC0805FR-074R99L	Yageo America	RES, 4.99 ohm, 1%, 0.125W, 0805	0805
42	R10, R16	2	4.7	CRCW08054R70JNEA	Vishay-Dale	RES, 4.7 ohm, 5%, 0.125W, 0805	0805
43	R11, R13	2	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9k ohm, 1%, 0.1W, 0603	0603
44	R12	1	12.4k	CRCW060312K4FKEA	Vishay-Dale	RES, 12.4k ohm, 1%, 0.1W, 0603	0603
45	R14	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
46	R15, R17	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10k ohm, 5%, 0.1W, 0603	0603
47	Rbias1	1	3.0	CRCW04023R00JNED	Vishay-Dale	RES, 3.0, 5%, 0.063 W, 0402	0402
48	RFBB	1	432k	CRCW0603432KFKEA	Vishay-Dale	RES, 432 k, 1%, 0.1 W, 0603	0603
49	RFBT	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
50	RPG	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
51	RT	1	17.4k	CRCW060317K4FKEA	Vishay-Dale	RES, 17.4 k, 1%, 0.1 W, 0603	0603
52	U1	1		LM74700QDBVTQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DDC0006A (SOT-6)	DDC0006A
53	U2	1		LM73605QRNPRQ1	Texas Instruments	3.5V to 36V 5A Synchronous Step-Down Voltage Regulator, RNP0030A (WQFN-30)	RNP0030A
54	U3	1		LP87561IRNFRQ1	Texas Instruments	Four-Phase Buck Converter, RNF0026C (VQFN-HR-26)	RNF0026C
55	U4	1		LM2775DSGR	Texas Instruments	Switched Capacitor 5 V Boost Converter, DSG0008A (WSON-8)	DSG0008A
56	U5	1		LM26420Q1XSQ/NOPB	Texas Instruments	Dual 2-A, High Frequency Synchronous Buck Regulator, RUM0016A (WQFN-16)	RUM0016A

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