

TIDA03026 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA03026	Any	Printed Circuit Board	
2	AA_NEG1, AA_POS1, ENABLE1, LS_VOUT1, RESET1, SCL1, SDA1, SHUTDOWN1	8		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
3	B_OUT1, G_OUT1, LDO_VOUT1, LS_VIN1, PWM_IN1, R_OUT1, SR_OUT1	7		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
4	C3, C5, C7	3	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805
5	C4, C6, C8, C26, C27	5	0.1uF	550L104KCAT	AT Ceramics	CAP, CERM, 0.1 uF, 16 V, +/- 10%, Unknown, 0402	0402
6	C9	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
7	C10, C11	2	2.2uF	C3216X7S2A225K160AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7S, 1206	1206
8	C12, C13	2	47uF	C5750X7R1C476M230KB	TDK	CAP, CERM, 47 uF, 16 V, +/- 20%, X7R,	
9	C14	1	0.022uF	08055C223KAT2A	AVX	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0805	0805
10	C15, C25	2	1uF	B37941K9105K62	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0805	0805
11	C16, C18	2	10uF	EEE-FK1C100R	Panasonic	CAP, AL, 10 uF, 16 V, +/- 20%, 1.35 ohm, AEC-Q200 Grade 2, SMD	SMT Radial B
12	C17	1	100pF	GRM033R71E101JA01D	MuRata	CAP, CERM, 100 pF, 25 V, +/- 5%, C0G/NP0, 0201	0201
13	C19	1	TPA6211A1 DGN	TPA6211A1DGN	TI	IC, 3.1-W Mono Fully Differential Audio Power Amplifier	MSOP-8
14	C20, C21, C24	3	0.22uF	GRM188R61A224KA01D	MuRata	CAP, CERM, 0.22 uF, 10 V, +/- 10%, X5R, 0603	0603
15	C22	1	0.1uF	GRM155R71C104JA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0402	0402
16	C23	1	100pF	GRM033R71C101KA01D	MuRata	CAP, CERM, 100 pF, 16 V, +/- 10%, X7R, 0201	0201
17	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16	16	Rgb	ASMT-YTC2-0AA02	Avago	LED, Rgb, SMD	LED, 3x2x3.6 mm
18	D17, D18, D19, D20	4		TPD1E1B04DPYR	Texas Instruments	1-Channel ESD Protection Diode with Low RDYN for HDMI 2.0 and USB 3.0, DPY0002A	DPY0002A
19	D21	1	40V	SL44-E3/57T	Vishay-Semiconductor	Diode, Schottky, 40 V, 4 A, SMC	SMC
20	D22	1	100V	US1B-13-F	Diodes Inc.	Diode, Ultrafast, 100 V, 1 A, SMA	SMA
21	GND1, GND2, GND3, GND4	4		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
22	IC1, IC2, IC3	3		TLC59116IPWRG4	Texas Instruments	16-Bit Fast-Mode Plus (FM+) I2C Bus Constant-Current LED Sink Driver, 3 to 5.5 V, -40 to 85 degC, 28-pin SOP (PW28), Green (RoHS & no Sb/Br)	PW0028A
23	IC4	1		TPS22918DBVT	Texas Instruments	5.5-V, 2-A, 52mohm On-Resistance Load Switch, DBV0006A	DBV0006A
24	J1, J2	2		SSW-110-23-F-S	Samtec	Connector, Receptacle, 100mil, 10x1, Gold plated, TH	10x1 Receptacle
25	J3	1		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
26	J4	1		0015912080	Molex	Header, 2.54 mm, 4x2, Tin, SMT	Header, 2.54mm, 4x2, SMT
27	L1	1	8.2uH	PIMB065T-8R2MS	Cyntec	Inductor, 8.2 uH, 5.5 A, 0.04 ohm, SMD	7.05x4.8x6.6mm
28	LS1	1	0.3W	CVS-1508	CUI Inc.	Speaker, 8Ohms, 0.3W, 15mm Round, TH	D15Hx17.5mm
29	R1, R2, R3	3	931	CRCW0603931RFKEA	Vishay-Dale	RES, 931, 1%, 0.1 W, 0603	0603
30	R4	1	10kohm	3310Y-001-103L	Bourns	Potentiometer, 10k ohm, 0.25W, TH	9.53x9.53mm
31	R5, R6, R7, R8, R9	5	10k	RNCF0805TKY10K0	Stackpole Electronics Inc	RES, 10 k, 0.01%, 0.125 W, 0805	0805
32	R10	1	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
33	R11	1	66.5k	CRCW040266K5FKED	Vishay-Dale	RES, 66.5 k, 1%, 0.063 W, 0402	0402
34	R12	1	17.6k	RT0603BRD0717K6L	Yageo America	RES, 17.6 k, 0.1%, 0.1 W, 0603	0603
35	R13, R16	2	39.2k	CRCW120639K2FKEA	Vishay-Dale	RES, 39.2 k, 1%, 0.25 W, 1206	1206
36	R14	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
37	R15	1	1.00Meg	CRCW08051M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.125 W, 0805	0805
38	S1, S2, S3	3		B3SL-1022P	Omron Electronic Components	SWITCH TACTILE SPST-NO 0.05A 12V	6.2x5.1x6.5mm
39	SPEAKER_OUT1	1		039544-3002	Molex	Terminal Block, 5.08mm, 2x1, TH	Terminal Block, 5.08mm, 2x1, TH
40	U1	1		LMR14030SDDAR	Texas Instruments	SIMPLE SWITCHER 40 V 3.5 A, 2.2 MHz Step-Down Converter with 40 uA IQ, DDA0008E	DDA0008E
41	U2	1		TLV1117-33IDCY	Texas Instruments	FIXED LOW-DROPOUT VOLTAGE REGULATOR, DCY0004A	DCY0004A
42	U3	1		OPA376AIDCKR	Texas Instruments	Precision, Low Noise, Low Iq Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DCK0005A), Green (RoHS & no Sb/Br)	DCK0005A
43	C1	0	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805
44	C2	0	0.1uF	550L104KCAT	AT Ceramics	CAP, CERM, 0.1 uF, 16 V, +/- 10%, Unknown, 0402	0402
45	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Designer(s)") who are developing systems that incorporate TI products. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.

TI's provision of reference designs and any other technical, applications or design advice, quality characterization, reliability data or other information or services 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 reference designs or other items.

TI reserves the right to make corrections, enhancements, improvements and other changes to its reference designs and other items.

Designer understands and agrees that Designer remains responsible for using its independent analysis, evaluation and judgment in designing Designer's systems and products, and has full and exclusive responsibility to assure the safety of its products and compliance of its products (and of all TI products used in or for such Designer's products) with all applicable regulations, laws and other applicable requirements. Designer represents that, with respect to its applications, it has 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. Designer agrees that prior to using or distributing any systems that include TI products, Designer will thoroughly test such systems and the functionality of such TI products as used in such systems. Designer may not use any TI products in life-critical medical equipment unless authorized officers of the parties have executed a special contract specifically governing such use. Life-critical medical equipment is medical equipment where failure of such equipment would cause serious bodily injury or death (e.g., life support, pacemakers, defibrillators, heart pumps, neurostimulators, and implantables). Such equipment includes, without limitation, all medical devices identified by the U.S. Food and Drug Administration as Class III devices and equivalent classifications outside the U.S.

Designers are authorized to use, copy and modify any individual TI reference design only in connection with the development of end products that include the TI product(s) identified in that reference design. HOWEVER, 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 published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of the reference design or other items described above 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 REFERENCE DESIGNS AND OTHER ITEMS DESCRIBED ABOVE ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, 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 DESIGNERS AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS AS DESCRIBED IN A TI REFERENCE DESIGN 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 THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TI's standard terms of sale for semiconductor products (<http://www.ti.com/sc/docs/stdterms.htm>) apply to the sale of packaged integrated circuit products. Additional terms may apply to the use or sale of other types of TI products and services.

Designer will fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of Designer's non-compliance with the terms and provisions of this Notice.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2016, Texas Instruments Incorporated