

**TIDA-00626 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-00626	Any	Printed Circuit Board	
2	-5V, 3.3V, 8.5V, 8V, ATP1, ATP2, CSB_TP, GND_TP, MUXout_TP, SCK_TP, SDI_TP, Vcc_TP1, Vtune_TP	13	White	5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
3	C1	1	300pF	GRM1555C1E301JA01D	MuRata	CAP, CERM, 300 pF, 25 V, +/- 5%, C0G/NP0, 0402	402
4	C2, C28, C34	3	100pF	GRM1535C1H101JDD5D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	402
5	C3	1	6800pF	GRM155R71H682KA88D	MuRata	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0402	402
6	C4, C6, C23, C25, C29, C31, C33, C36, C39, C47	10	0.1uF	C0402C104K4RACAUTO	Kemet	CAP, CERM, 0.1 μF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
7	C5, C10, C14, C16, C20, C21, C65, C67	8	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 μF, 10 V, +/- 20%, X5R, 0402	402
8	C7, C11, C13, C17, C19, C22, C24, C26, C30, C32, C35, C40	12	1uF	C1005X5R1C105K050BC	TDK	CAP, CERM, 1 μF, 16 V, +/- 10%, X5R, 0402	402
9	C8, C57	2	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	603
10	C9	1	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	805
11	C27, C41, C58, C62, C64, C66, C68	7	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 μF, 25 V, +/- 10%, X7R, 0402	402
12	C37	1	0.047uF	GRM155R71E473KA88D	MuRata	CAP, CERM, 0.047 μF, 25 V, +/- 10%, X7R, 0402	402
13	C38	1	560pF	GRM1555C1E561JA01D	MuRata	CAP, CERM, 560 pF, 25 V, +/- 5%, C0G/NP0, 0402	402
14	C42, C49	2	10uF	TPSC106K025R0500	AVX	CAP, TA, 10 μF, 25 V, +/- 10%, 0.5 ohm, SMD	6032-28
15	C43, C48	2	1uF	12103C105KAT2A	AVX	CAP, CERM, 1 μF, 25 V, +/- 10%, X7R, 1210	1210
16	C44, C59	2	10uF	TPSA106K010R0900	AVX	CAP, TA, 10 μF, 10 V, +/- 10%, 0.9 ohm, SMD	3216-18
17	C45, C60	2	10uF	1206YC106KAT2A	AVX	CAP, CERM, 10 μF, 16 V, +/- 10%, X7R, 1206_190	1206_190
18	C46, C61	2	0.01uF	08055C103KAT2A	AVX	CAP, CERM, 0.01 μF, 50 V, +/- 10%, X7R, 0805	805
19	C50, C51, C52	3	2.2uF	0805YD225KAT2A	AVX	CAP, CERM, 2.2 μF, 16 V, +/- 10%, X5R, 0805	805
20	C53	1	1uF	0805YD105KAT2A	AVX	CAP, CERM, 1 μF, 16 V, +/- 10%, X5R, 0805	805
21	C54	1	10uF	GRM21BR61C106KE15L	MuRata	CAP, CERM, 10 μF, 16 V, +/- 10%, X5R, 0805	805
22	C55	1	4.7uF	C0805C475K8PACTU	Kemet	CAP, CERM, 4.7 μF, 10 V, +/- 10%, X5R, 0805	805
23	C56	1	680pF	CC0805KRX7R9BB681	Yageo America	CAP, CERM, 680 pF, 50 V, +/- 10%, X7R, 0805	805
24	C63	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	603
25	D1, D3	2	Green	SML-LX0603GW-TR	Lumex	LED, Green, SMD	LED, GREEN, 0603
26	D2	1	40V	1N5819HW-7-F	Diodes Inc.	Diode, Schottky, 40 V, 1 A, SOD-123	SOD-123
27	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
28	H1, H2, H3, H4, H5, H6	6		TCBS-6-01	Richco Plastics	HEX STANDOFF SPACER, 9.53 mm	7.9x9.5 mm
29	J1	1		OSTTC022162	On-Shore Technology	Terminal Block, 2-pole, 200mil, TH	THD, 2-Leads, Body 10.16x7.6mm, Pitch 5.08mm

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
30	J2, J3	2		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
31	L1	1	18uH	ME3220-183KLB	Coilcraft	Inductor, Drum Core, Ferrite, 18 uH, 0.7 A, 0.7 ohm, SMD	ME3220
32	L2	1	18nH	LQG15HS18NJ02D	MuRata	Inductor, Multilayer, Air Core, 18 nH, 0.3 A, 0.36 ohm, SMD	0402 polarized
33	L3, L4	2	220 ohm	BLM18SG221TN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2.5 A, 0603	603
34	OSCinM, OSCinP, RFout	3		142-0701-851	Emerson Network Power Con	Connector, SMT, End launch SMA 50 ohm	SMA
35	R1	1	12	CRCW040212R0JNED	Vishay-Dale	RES, 12, 5%, 0.063 W, 0402	402
36	R2, R3, R4, R5, R6, R7, R9, R19, R20, R21, R23, R25, R27, R32, R35, R36, R43, R44, R56, R57, R58, R61, R62, R65, R68	25	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	402
37	R8	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	603
38	R10, R18, R24, R52	4	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	402
39	R11, R13, R15	3	18	CRCW040218R0JNED	Vishay-Dale	RES, 18, 5%, 0.063 W, 0402	402
40	R12, R14, R16, R31, R33, R37, R38, R50, R59, R60	10	12k	CRCW040212K0JNED	Vishay-Dale	RES, 12 k, 5%, 0.063 W, 0402	402
41	R17	1	680	CRCW0402680RJNED	Vishay-Dale	RES, 680, 5%, 0.063 W, 0402	402
42	R28	1	1.00k	MCR01MZPF1001	Rohm	RES, 1.00 k, 1%, 0.063 W, 0402	402
43	R29	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	402
44	R41	1	330	CRCW0402330RJNED	Vishay-Dale	RES, 330, 5%, 0.063 W, 0402	402
45	R42	1	150	CRCW0402150RFKED	Vishay-Dale	RES, 150, 1%, 0.063 W, 0402	402
46	R45, R66	2	120	CRCW0402120RJNED	Vishay-Dale	RES, 120, 5%, 0.063 W, 0402	402
47	R48	1	23.2k	CRCW080523K2FKEA	Vishay-Dale	RES, 23.2 k, 1%, 0.125 W, 0805	805
48	R49	1	13.3k	CRCW080513K3FKEA	Vishay-Dale	RES, 13.3 k, 1%, 0.125 W, 0805	805
49	R53	1	62.0k	RC0603FR-0762KL	Yageo America	RES, 62.0 k, 1%, 0.1 W, 0603	603
50	R54	1	10.5k	CRCW040210K5FKED	Vishay-Dale	RES, 10.5 k, 1%, 0.063 W, 0402	402
51	R55	1	6.81k	CRCW04026K81FKED	Vishay-Dale	RES, 6.81 k, 1%, 0.063 W, 0402	402
52	R63	1	82.5k	CRCW080582K5FKEA	Vishay-Dale	RES, 82.5 k, 1%, 0.125 W, 0805	805
53	R64	1	15.0k	ERJ-6ENF1502V	Panasonic	RES, 15.0 k, 1%, 0.125 W, 0805	805
54	R67	1	511	RT0603BRD07511RL	Yageo America	RES, 511, 0.1%, 0.1 W, 0603	603
55	U1	1		LMX2592	Texas Instruments	Dual output, 2-Phase, Stackable PMBLMX2592 test chip QFN 0.4mm-pitch 40-pin 6x6 PKG	RHA0040B
56	U2	1		MAAD-011021-TR0500	MACOM	Digital Attenuator, 6-Bit, 0.5 dB LSB step DC - 30 GHz, PQFN-16	16-QFN
57	U3	1		NBB-312-T1	RF Micro Devices	Cascadable Broadband GaAs MMIC Amplifier DC to 12GHz, MPGA-9	9-MPGA
58	U4, U8	2		LP38798SD-ADJ/NOPB	Texas Instruments	Ultra Low Noise, 800 mA Linear Voltage Regulator for RF/Analog Circuits, DNT0012B	DNT0012B
59	U5	1		LMK61E2-SIAR	Texas Instruments	Ultra-Low Jitter Programmable Oscillator with Internal EEPROM, SIA0008B	SIA0008B
60	U6	1		LM2776DBVR	Texas Instruments	Switched Capacitor Inverter, DBV0006A	DBV0006A
61	U7	1		TPS61170DRVR	Texas Instruments	1.2A High Voltage Boost Converter in 2x2mm QFN Package, DRV0006A	DRV0006A
62	U9	1	SN74AHCT244DW	SN74AHCT244DW	TI	IC, Octal Buffers/Drivers With 3-State Outputs	SOIC-20
63	uWire	1		52601-S10-8LF	FCI	Header (shrouded), 100mil, 5x2, Gold plated, SMD	SMT Header
64	Y1	1		CWX813-100.0M	Connor-Winfield	OSC 100.0000MHZ 3.3V +-25PPM SMD	7x1.3x5mm
65	Y2	1		CVPD-920-100	Crystek Corporation	VCXO, LVPECL 100.0 MHz, 3.3V, SMD	CVPD-920-6
66	R22, R26, R30, R34, R39, R40	0	12k	CRCW040212K0JNED	Vishay-Dale	RES, 12 k, 5%, 0.063 W, 0402	402

## IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. **TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.** TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, 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 components 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 such information 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 ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have **not** been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.