

**TIDA-01392 REV E2 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01392	Any	Printed Circuit Board	
C1	1	4.7µF	CGA4J1X7R1E475M125AC	TDK Corporation	CAP, CERM, 4.7µF, 25V, +/-20%, X7R, 0805	0805 (2012 Metric)
C2, C13, C16, C18, C21	5	0.1µF	C1005X7R1E104K050BB	TDK Corporation	CAP, CERM, 0.1µF, 25V, +/-10%, X7R, 0402	0402 (1005 Metric)
C3	1	0.1µF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C4	1	4.7µF	CL10B475KQ8NQNC	Samsung	CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X7R, 0603	0603
C5	1	10µF	CL21B106KOQNNNE	Samsung Electro-Mechanics	CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, 0805_140	0805_140
C6, C30	2	22µF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22µF, 10V, +/-10%, X7R, 1206	1206
C7, C8, C9, C10, C11, C14, C17	7	1.0µF	CL05B105KQ5NQNC	Samsung Electro-Mechanics America, Inc	CAP CER 1UF 6.3V 10% X7R 0402	0402 (1005 Metric)
C12, C15, C20, C22, C26	5	4.7µF	CL10B475KQ8NQNC	Samsung Electro-Mechanics America, Inc	CAP CER 4.7UF 6.3V 10% X7R 0603	0603 (1608 Metric)
C19	1	0.47µF	GRM155R60J474KE19D	MuRata	CAP, CERM, 0.47 µF, 6.3 V, +/- 10%, X5R, 0402	0402
C23, C27, C31, C33, C35, C36	6	0.1µF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1µF, 16V, +/-10%, X7R, 0402	0402
C24, C28, C32, C34, C37	5	0.01µF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01µF, 16V, +/-10%, X7R, 0402	0402
C25	1	0.1µF	C1005X7R1H104K050BE	TDK	CAP, CERM, 0.1µF, 50V, +/-10%, C0G/NP0, 0402	0402
C29	1	0.047µF	C1005X7R1H473K050BB	TDK	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0402	0402
H1	1		DSL218	Sunex, Inc	Lens	
L1, L3	2	1000 ohm	BLM18AG102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.4 A, 0603	0603
L2	1	4.7µH	XPL2010-472MLB	Coilcraft	Inductor, Shielded, Composite, 4.7 µH, 0.85 A, 0.34 ohm, SMD	XPL2010
L4	1	4.7µH	CBC3225T4R7MR	Taiyo Yuden	Inductor, Wirewound, 4.7 µH, 1.01 A, 0.1 ohm, SMD	3.2x2.5x2.5mm
L5, L6, L7	3	1000 ohm	BLM15AX102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402	0402
L8, L9	2	600 ohm	BLM18KG601SN1D	MuRata	1.3A Ferrite Bead, 600 ohm @ 100MHz, SMD	0603
L10	1	100µH	CBC3225T101MR	Taiyo Yuden	Inductor, Wirewound, 100 µH, 0.27 A, 1.4 ohm, SMD	3.2x2.5x2.5mm
LH1	1		CMT821	Sunex Inc.	Sunex Lens Holder	
P1	1		59S10H-40ML5-Y	Rosenberger	Straight Plug PCB	SMA
R1, R23	2	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R2, R9, R21	3	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
R3, R4, R8, R10, R11, R12, R13, R17, R18, R19, R20	11	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
R5, R6	2	3.3k	CRCW06033K30JNEA	Vishay-Dale	RES, 3.3k ohm, 5%, 0.1W, 0603	0603
R15	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9 ohm, 1%, 0.063W, 0402	0402
R16	1	33	CRCW040233R0JNED	Vishay-Dale	RES, 33 ohm, 5%, 0.063W, 0402	0402
R22	1	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75k ohm, 1%, 0.063W, 0402	0402
U1	1		TPS62172QDSGRQ1	Texas Instruments	3-V to 17-V 0.5-A Step-Down Converters with DCS-Control™, DSG0008A (WSON-8)	DSG0008A
U2	1		TPS79915QDDCRQ1	Texas Instruments	Single Output High PSRR LDO, 200 mA, Fixed 1.5 V Output, 2.7 to 6.5 V Input, with Low IQ, 5-pin SOT (DDC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DDC0005A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U3	1		TLV70018QDDCRQ1	Texas Instruments	Single Output Automotive LDO, 300 mA, Fixed 1.8 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT (DDC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DDC0005A
U4	1		OV10640-N79Y-1C-Z	OmniVision Technologies	1/2.56" color CMOS 1.3 megapixel HDR HD image sensor, BGA78	78-pin aCSP
U5	1		DS90UB933TRVTQ1	Texas Instruments	10-100MHz 10/12- Bit DC-Balanced FPD-Link III Serializer and Deserializer with Bidirectional Control Channel, RTV0032A (WQFN-32)	RTV0032A
Y1	1		ECS-2018-480-BN	ECS Inc.	XO, 48.000MHz, 1.8V, SMD	2.5x0.9x2.0mm
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R7	0	10.0k	CRCW040210K0DHEDP	Vishay-Dale	RES, 10.0 k, 0.5%, 0.063 W, 0402	0402
R14	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402

## 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