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TIDA-01004 REV E3 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01004	Any	Printed Circuit Board	
C1	1	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V,+/- 10%, X7R, 0603	0603
C2, C8, C13, C23, C29, C32	6	0.1µF	C1005X7R1E104K050BB	TDK Corporation	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0402	0402 (1005 Metric)
C4, C10, Cout2	3	4.7µF	CL10B475KQ8NQNC	Samsung Electro-Mechanics America, Inc	CAP CER 4.7UF 6.3V 10% X7R 0603	0603 (1608 Metric)
C5, C11, C17, C19, C21, C27	6	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	0402
C6, C9, C12, C14, C18, C20, C22, C24, C30	9	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	0402
C7	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C15	1	0.047uF	C1005X7R1H473K050BB	TDK	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0402	0402
C16, Cout1	2	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22uF, 10V, +/-10%, X7R, 1206	1206
C26, C31	2	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805
C28	1	1.0µF	CL05B105KQ5NQNC	Samsung Electro-Mechanics America, Inc	CAP CER 1UF 6.3V 10% X7R 0402	0402 (1005 Metric)
Cin1	1	10µF	CL21B106KOQNNNE	Samsung Electro-Mechanics America, Inc	CAP CER 10UF 16V 10% X7R 0805	0805 (2012 Metric)
Cin2, Cin3	2	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603	0603
CN1	1		59S10H-40ML5-Y	Rosenberger	Straight Plug PCB	SMA
FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
H1	1		DSL209	Sunex, Inc	Lens	
H2, H3	2		1PE99	Grainger	Screw, Thd Roll, M1.6x0.35x6mm	M1.6x0.35x6mm
L1, L2, L6, L7	4	1000 ohm	BLM15HD102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.25 A, 0402	0402
L3	1	2.2uH	LQM21PN2R2MC0D	MuRata	Inductor, Multilayer, Ferrite, 2.2uH, 0.6A, 0.34 ohm, SMD	0805
L4	1	4.7uH	CBC3225T4R7MR	Taiyo Yuden	Inductor, Wirewound, 4.7 µH, 1.01 A, 0.1 ohm, SMD	3.2x2.5x2.5mm
L5	1	100uH	CBC3225T101MR	Taiyo Yuden	Inductor, Wirewound, 100 µH, 0.27 A, 1.4 ohm, SMD	3.2x2.5x2.5mm
L8	1	3.3uH	XPL2010-332MLB	Coilcraft	Inductor, Shielded, Composite, 3.3 µH, 1.05 A, 0.21 ohm, SMD	XPL2010
LH1	1		CMT821	Sunex Inc.	Sunex Lens Holder	
R1, R7, R8, R9, R98, R99	6	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
R2, R3	2	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0k ohm, 5%, 0.1W, 0603	0603
R5	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9 ohm, 1%, 0.063W, 0402	0402
R6	1	33	CRCW040233R0JNED	Vishay-Dale	RES, 33 ohm, 5%, 0.063W, 0402	0402
R11	1	2.0	CRCW04022R00JNED	Vishay-Dale	RES, 2.0 ohm, 5%, 0.063W, 0402	0402
R12, R55, R66, R77, Rmode1, Rtest1, Rtest2, Rvdd, Rvddio	9	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
R13	1	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75k ohm, 1%, 0.063W, 0402	0402
R14	1	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0 ohm, 5%, 0.063W, 0402	0402

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R15	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10 ohm, 5%, 0.063W, 0402	0402
R16	1	5.1	CRCW04025R10JNED	Vishay-Dale	RES, 5.1 ohm, 5%, 0.063W, 0402	0402
Rfb	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
Rfbt	1	261k	CRCW0402261KFKED	Vishay-Dale	RES, 261k ohm, 1%, 0.063W, 0402	0402
Rpu1, Rpu2	2	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3k ohm, 5%, 0.063W, 0402	0402
U1	1		TPS62170QDSGRQ1	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 0.9 to 6 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/Br)	DSG0008A
U2	1		TPS62231TDRYRQ1	Texas Instruments	Buck Step Down Regulator with 2.05 to 6 V Input and 1.8 V Output, -40 to 85 degC, 6-Pin SON (DRY), Green (RoHS & no Sb/Br)	DRY0006A
U3	1		DS90UB933QSQE/NOPB	Texas Instruments	10-100MHz 10/12- Bit DC-Balanced FPD-Link III Serializer and Deserializer with Bidirectional Control Channel, RTV0032A (WQFN-32)	RTV0032A
U4	1		AR0140AT3C00XUEA0	Aptina Imaging	1/4-Inch Digital Image Sensor, iBGA_9x9_63	BGA, 9x9mm, 63 ball
U5	1		TPS3808G01QDBVRQ1	Texas Instruments	LOW-QUIESCENT-CURRENT PROGRAMMABLE-DELAY SUPERVISORY CIRCUIT, DBV0006A (SOT-6)	DBV0006A
Y1	1		ECS-2018-480-BN	ECS Inc.	XO, 48.000MHz, 1.8V, SMD	2.5x0.9x2.0mm

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