

## TIDA-020002 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC81	1		TIDA-01xxx	Any	Printed Circuit Board	
C1	1	4.7µF	CGA4J1X7R1E475M125AC	TDK Corporation	CAP, CERM, 4.7µF, 25V, +/-20%, X7R, 0805	0805 (2012 Metric)
C2	1	0.1µF	C1005X7R1E104K050BB	TDK Corporation	CAP, CERM, 0.1µF, 25V, +/-10%, X7R, 0402	0402 (1005 Metric)
C3	1	10µF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 µF, 25 V,+/- 20%, X7R, 1206	1206
C4	1	22µF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22µF, 10V, +/-10%, X7R, 1206	1206
C5, C8, C9, C45, C48, C53	6	10µF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 µF, 10 V, +/- 20%, X7R, 0603, CAP, CERM, 10 µF, 10 V, +/- 20%, X7R, 0603, CAP, CERM, 10 µF, 10 V,+/- 20%, X7R, 0603, CAP, CERM, 10 µF, 10 V,+/- 20%, X7R, 0603	0603
C6, C7, C10, C12, C18, C25, C28, C29, C30, C31, C34, C36, C38, C41	14	1.0µF	CL05B105KQ5NQNC	Samsung Electro-Mechanics	CAP CER 1UF 6.3V 10% X7R 0402	0402 (1005 Metric)
C11, C13, C15, C17, C19, C21, C23, C26, C32, C35, C44, C47, C52, C55	14	0.1µF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C14, C16, C20, C22	4	4.7µF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 µF, 16 V,+/- 10%, X7R, 0603	0603
C24, C27	2	0.01µF	GRM155R70J103KA01D	MuRata	CAP, CERM, 0.01 µF, 6.3 V, +/- 10%, X7R, 0402	0402
C33	1	0.22µF	GRM155R71A224KE01D	MuRata	CAP, CERM, 0.22 µF, 10 V, +/- 10%, X7R, 0402	0402
C37, C39, C42, C46, C49, C54	6	0.01µF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01µF, 16V, +/-10%, X7R, 0402	0402
C40	1	0.033µF	CGA2B3X7R1H333K050BB	TDK	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0402	0402
C43	1	0.015µF	CGA2B3X7R1H153K050BB	TDK	CAP, CERM, 0.015 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C50	1	1µF	GRM155R70J105MA12D	MuRata	CAP, CERM, 1 µF, 6.3 V,+/- 20%, X7R, 0402	0402
C51	1	0.022µF	GRM155R70J223KA01D	MuRata	CAP, CERM, 0.022 µF, 6.3 V, +/- 10%, X7R, 0402	0402
C56, C57, C58	3	0.1µF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0402	0402
FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J1	1		59S10H-40ML5-Y	Rosenberger	Straight Plug PCB	SMA
L1	1	3.3µH	XPL2010-332MLB	Coilcraft	Inductor, Shielded, Composite, 3.3 µH, 1.05 A, 0.21 ohm, SMD	XPL2010
L2, L3, L4	3	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
L5	1	10µH	LQH3NPZ100MJRL	MuRata	Inductor, Wirewound, Ferrite, 10 µH, 0.81 A, 0.288 ohm, AEC-Q200 Grade 1, SMD	3x3mm
L6	1	1000 ohm	BLM18AG102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.4 A, 0603	0603
L7, L8	2	2.2µH	LQM2MPN2R2NG0	MuRata	Inductor, Multilayer, Ferrite, 2.2 µH, 1.2 A, 0.11 ohm, SMD	2.0x1.6mm
L9, L10, L11	3	1000 ohm	BLM15AX102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402	0402
LH1	1		CMT821	Sunex Inc.	Sunex Lens Holder	
R1	1	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, 0603	0603
R2, R12	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402, RES, 0, 5%, 0.063 W, 0402	0402
R8, R9	2	1.5k	CRCW04021K50JNED	Vishay-Dale	RES, 1.5 k, 5%, 0.063 W, 0402	0402
R10, R13	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
R11	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9 ohm, 1%, 0.063W, 0402	0402
R14	1	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, 0402	0402

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R15	1	402	CRCW0402402RFKED	Vishay-Dale	RES, 402, 1%, 0.063 W, 0402	0402
R16, R18	2	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R17	1	556k	RT0603BRD07556KL	Yageo America	RES, 556 k, 0.1%, 0.1 W, 0603	0603
R19	1	5.00k	PNM0402E5001BST1	Vishay-Dale	RES, 5.00 k, 0.1%, 0.05 W, 0402	0402
R20	1	86.6k	ERA-2AEB8662X	Panasonic	RES, 86.6 k, 0.1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
U1	1		TPS62162QDSGRQ1	Texas Instruments	3V-17V 1A Automotive Step-Down Converters in 2x2SON, DSG0008A (WS0N-8)	DSG0008A
U2	1		TPS62423QDRCRQ1	Texas Instruments	Automotive 2.5V to 6V, 2.25MHz Fixed Frequency Dual (800mA/800mA) Buck Converter, DRC0010J (VSON-10)	DRC0010J
U3	1		LP5907SNX-2.9/NOPB	Texas Instruments	250-mA Ultra-Low-Noise, Low-IQ LDO, DQN0004A (X2SON-4)	DQN0004A
U4	1		IMX390CQV-W	Sony	Diagonal 6.67mm (Type 1/2.7) CMOS Solid-state Image Sensor with Square Pixel and RRGB Filter Array, BGA-96	BGA-96
U5	1		DS90UB953TRHBRQ1	Texas Instruments	FPD-Link III SerDes with CSI-2 interfaces for 2.3MP/60fps camera, RHB0032P (VQFN-32)	RHB0032P
U6	1		TPS3702CX18QDDCRQ1	Texas Instruments	High-Accuracy, Fixed-Threshold OV/UV Monitor for Automotive, DDC0006A (SOT-23-T-6)	DDC0006A
U7	1		TPS3700QDDCRQ1	Texas Instruments	High-Voltage (18V) Window Comparator with Over- and Undervoltage Detection, DSE0006A (WS0N-6)	DSE0006A
U8	1		TPS3702CX12QDDCRQ1	Texas Instruments	High-Accuracy, Fixed-Threshold OV/UV Monitor for Automotive, DDC0006A (SOT-23-T-6)	DDC0006A

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