

## TIDA-01351 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
PCB1	1		TIDA-01351	Any	Printed Circuit Board	
C33, C34, C35, C36	4	3.3uF	0805ZD335KAT2A	AVX	CAP, CERM, 3.3 μF, 10 V, +/- 10%, X5R, 0805	0805
C52, C54, C61, C69, C70, C84, C85, C100, C101	9	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 μF, 25 V, +/- 10%, X7R, 0603	0603
C55, C56, C57, C58	4	56pF	06035A560JAT2A	AVX	CAP, CERM, 56 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C62, C63, C68	3	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
C65	1	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
C66, C67, C98, C99	4	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 μF, 16 V, +/- 10%, X7R, 0402	0402
C75, C86, C87	3	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
C76, C77	2	2000pF	GRM2165C1H202JA01D	MuRata	CAP, CERM, 2000 pF, 50 V, +/- 5%, C0G/NP0, 0805	0805
C78, C79, C80, C81	4	1uF	885012206076	Wurth Elektronik	CAP, CERM, 1 μF, 25 V, +/- 10%, X7R, 0603	0603
C82, C83	2	22uF	C2012X7S1A226M125AC	TDK	CAP, CERM, 22 µF, 10 V, +/- 20%, X7S, 0805	0805
C88, C89, C90, C91, C94, C95, C96, C97	8	10uF	GRM188R61A106ME69D	MuRata	CAP, CERM, 10 μF, 10 V, +/- 20%, X5R, 0603	0603
C92, C93	2	0.01uF	GRM188R71C103KA01D	MuRata	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0603	0603
H1, H2, H5, H6	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H3, H4	2		9774050360R	Wurth Elektronik	ROUND STANDOFF M3 STEEL 5MM	ROUND STANDOFF M3 STEEL 5MM
H7, H8, H13, H14	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18	16		GRPB031VWVN-RC	Sullins Connector Solutions	Header, 50mil, 3x1, Gold, TH	Header, 3x1, 50mil, TH
J19, J20, J21, J22, J25	5		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J23	1		OSTVN02A150	On-Shore Technology	Terminal Block, 2.54mm, 2x1, Brass, TH	Terminal Block, 2.54mm, 2-pole, Brass, TH
J24	1		QTH-030-01-L-D-A	Samtec	Header(Shrouded), 19.7mil, 30x2, Gold, SMT	Header (Shrouded), 19.7mil, 30x2, SMT
L2, L3, L6, L7	4	1000 ohm	MPZ2012S102AT000	TDK Corporation	FERRITE BEAD 1 KOHM 0805 1LN	0805
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19	19	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R20, R21, R22,	13	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R23, R24, R25,						
R26, R27, R28,						
R29, R30, R31,						
R32						
R67, R68, R69,	4	887	CRCW0603887RFKEA	Vishay-Dale	RES, 887, 1%, 0.1 W, 0603	0603
R70						
R71, R72, R73,	80	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R74, R75, R80,						
R92, R93, R94,						
R95, R96, R97,						
R98, R99, R117,						
R118, R119,						
R120, R121,						
R122, R123,						
R124, R125,						
R126, R127,						
R128, R129,						
R130, R131,						
R132, R133,						
R136, R137,						
R138, R139,						
R140, R141,						
R145, R146,						
R147, R148,						
R149, R150,						
R151, R152,						
R153, R154,						
R155, R156,						
R157, R158,						
R159, R160,						
R161, R162,						
R163, R164,						
R165, R166,						
R167, R168,						
R169, R170,						
R171, R172,						
R173, R174,						
R175, R176,						
R76, R77, R78,	7	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R79, R142, R143,						
R144						
R81	1	499	RG1608P-4990-B-T5	Susumu Co Ltd	RES, 499, 0.1%, 0.1 W, 0603	0603
R82, R87, R88	3	20.0k	RG1608P-203-B-T5	Susumu Co Ltd	RES, 20.0 k, 0.1%, 0.1 W, 0603	0603
R100	1	0.22	ERJ-3RQFR22V	Panasonic	RES, 0.22, 1%, 0.1 W, 0603	0603
R101, R102,	4	5.1	CRCW06035R10JNEA	Vishay-Dale	RES, 5.1, 5%, 0.1 W, 0603	0603
R103, R104						
R105, R106	2	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
R107, R108	2	1.00	RC0603FR-071RL	Yageo America	RES, 1.00, 1%, 0.1 W, 0603	0603
R111, R112,	4	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
R134, R135						
R113	1	10.7k	CRCW060310K7FKEA	Vishay-Dale	RES, 10.7 k, 1%, 0.1 W, 0603	0603
R114	1	33.2k	CRCW060333K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.1 W, 0603	0603
R115	1	53.6k	CRCW060353K6FKEA	Vishay-Dale	RES, 53.6 k, 1%, 0.1 W, 0603	0603
R116	1	9.53k	CRCW06039K53FKEA	Vishay-Dale Page 2 of	IRES, 9.53 к, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP2, TP3, TP4,	14		5007	Keystone	Test Point, Compact, White, TH	White Compact
TP5, TP6, TP7,						Testpoint
TP8, TP9, TP10,						
TP11, TP12,						
TP13, TP14, TP15						
U4	1		OPA376AIDBVR	Texas Instruments	Precision, Low Noise, Low Iq Operational Amplifier, 2.2 to 5.5 V, -40 to 125	DBV0005A
					degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	
U5, U6	2		THS4551IRGTR	Texas Instruments	Low Power, Precision, 160MHz, Fully Differential Amplifier, RGT0016A	RGT0016A
					(VQFN-16)	
U7	1		REF5050IDGKR	Texas Instruments	Low Noise, Very Low Drift, Precision Voltage Reference, -40 to 125 degC,	DGK0008A
					8-pin VSSOP (DGK), Green (RoHS & no Sb/Br)	
U8, U9	2		ADS8900BRGET	Texas Instruments	20-Bit, 1-MSPS SAR ADC with Integrated Reference Buffer, LDO, and	RGE0024H
					Enhanced Serial Interface, RGE0024H (VQFN-24)	
U10	1		TPS7A8801RTJR	Texas Instruments	Dual, 1-A, 6-uVRMS, RF, LDO Voltage Regulator, RTJ0020D (WQFN-20)	RTJ0020D
U11	1		BR24G32FVT-3AGE2	Rohm	I2C BUS EEPROM (2-Wire), TSSOP-B8	TSSOP-8
R83 R84 R85 R86	4	10 Ohm	CRCW060310R0JNFA	Vishav-Dale	RES. 10, 5%, 0,1 W, 0603	0603
	•					
C1 C2 C3 C4	0	2 2uF	08053C225KAT2A		CAP_CERM_2.2 µF_25 \/_+/- 10%_X7R_0805	0805
$C_{5}$ $C_{6}$ $C_{7}$ $C_{8}$	Ũ	2.20				
C9 $C10$ $C11$						
$C_{12}$ $C_{13}$ $C_{14}$						
$C_{12}, C_{13}, C_{14}, C_{15}, C_{16}, C_{17}$						
C13, C10, C17, C19, C10, C20						
C10, C19, C20,						
C21, C22, C23, C24, C25, C26, C26, C26, C26, C26, C26, C26, C26						
C24, C25, C26, C27, C20, C20, C20, C20, C20, C20, C20, C20						
C27, C28, C29, C29, C29, C21, C28, C29, C21, C28, C29, C24, C24, C24, C24, C24, C24, C24, C24						
C30, C31, C32		4.0.5			040 050M 40 - 5 50 V - 1 40% 000/ND0 0000	0000
C37, C38, C59,	0	1.2pF	CL10C1R2BB8NNNC	Samsung Electro-Mechanics	CAP, CERM, 1.2 pF, 50 V, +/- 10%, CUG/NP0, 0603	0603
		100 5				0000
C39, C40, C41,	0	100pF	C0603C101J5GACTU	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C42		10 5		701/		
C43, C44, C48,	0	10uF	C1608X5R1E106M080AC	IDK	CAP, CERM, 10 μF, 25 V, +/- 20%, X5R, 0603	0603
C49, C53, C64	-					
C45, C46	0	0.1u⊦	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C47	0	1u⊦	885012206076	Wurth Elektronik	CAP, CERM, 1 μF, 25 V, +/- 10%, X7R, 0603	0603
C50, C51	0	0.015uF	C0603C153J3GACTU	Kemet	CAP, CERM, 0.015 μF, 25 V, +/- 5%, C0G/NP0, 0603	0603
C71, C72, C73,	0	470p⊦	C0603C471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
C74	-					
D1, D2, D3, D4	0	15V	1PS10SB82,315	NXP Semiconductor	Diode, Schottky, 15 V, 0.03 A, SOD882	SOD882
FID1, FID2, FID3,	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
FID4, FID5, FID6						
J1, J2	0		ISW-112-07-G-D	Samtec	Header, 100mil, 12x2, Gold, TH	12x2 Header
L1, L4, L5	0	1000 ohm	MPZ2012S102AT000	TDK Corporation	FERRITE BEAD 1 KOHM 0805 1LN	0805
R33, R36, R37,	0	22.0k	RC0603FR-0722KL	Yageo America	RES, 22.0 k, 1%, 0.1 W, 0603	0603
R40						
R34, R35, R38,	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R39, R53, R54,						
R55, R56, R57,						
R58, R59, R60,						
R61, R62, R63,						
R64, R65, R66,						
R89, R90, R91						

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R41, R42, R43,	0	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R44						
R45, R46, R47,	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R48						
R49, R50, R51,	0	3.32k	CRCW06033K32FKEA	Vishay-Dale	RES, 3.32 k, 1%, 0.1 W, 0603	0603
R52				-		
R109, R110	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
TP1	0		5007	Keystone	Test Point, Compact, White, TH	White Compact
						Testpoint
U1, U2	0		THS4551IRGTR	Texas Instruments	Low Power, Precision, 160MHz, Fully Differential Amplifier, RGT0016A	RGT0016A
					(VQFN-16)	
U3	0		LM7705MM	Texas Instruments	Negative Bias Generator, DGK0008A	DGK0008A

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