

TIDA-010944 REV E5 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC6	1		TIDA-010944	Any	Printed Circuit Board	
2	C1, C3	2	1µF	GMC04X7R105K10NT	Cal-Chip Electronics	1µF ±10% 10V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
3	C2, C5, C7, C21	4	100pF	8.85012E+11	Würth Elektronik	CAP. CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
4	C4, C11, C15	3	0.1µF	C1608X7R1H104K080AA	TDK	CAP. CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
5	C6, C13, C14, C16	4	1000pF	C0603C102K5RACTU	Kemet	CAP. CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
6	C8	1	0.47µF	GRM155R61C474KE01	MuRata	CAP. CERM, 0.47 µF, 16 V, +/- 10%, X5R, 0402	0402
7	C9	1	10µF	GRM188R61A106KAALD	MuRata	CAP. CERM, 10 µF, 10 V, +/- 10%, X5R, 0603	0603
8	C10, C19, C62	3	1µF	C0603C105K3RACTU	Kemet	CAP. CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
9	C12	1	0.01µF	C1005X7R1C103K050BA	TDK	CAP. CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
10	C20, C53	2	4700pF	C0603C472J1GAC7867	Kemet	CAP. CERM, 4700 pF, 100 V, +/- 5%, COG/NP0, 0603	0603
11	C22, C58	2	2.2µF	GRT188R61H225KE13D	MuRata	CAP. CERM, 2.2 µF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
12	C23, C25, C32, C60, C61	5	0.1µF	CGA3E2X8R1E104K080AA	TDK	CAP. CERM, 0.1 µF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
13	C26	1	0.1µF	GRM155R71E104KE14D	MuRata	CAP. CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0402	0402
14	C27, C28	2	18pF	GJM1555C1H180JB01D	MuRata	CAP. CERM, 18 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
15	C29, C30, C34, C38, C54	5	0.033µF	GRM188R71C333KA01D	MuRata	CAP. CERM, 0.033 µF, 16 V, +/- 10%, X7R, 0603	0603
16	C31	1	0.1µF	06035C104KA12A	AVX	CAP. CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
17	C35, C36	2	0.1µF	C0603X104K3RACTU	Kemet	CAP. CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	0603
18	C51	1	1µF	GRM155R61A105KE15D	MuRata	CAP. CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
19	C57	1	0.22µF	CL05B224K05NNNC	Samsung Electro-Mechanics	CAP. CERM, 0.22 µF, 16 V, +/- 10%, X7R, 0402	0402
20	C59	1	1µF	CGA3E1X7R1E105M080AC	TDK	CAP. CERM, 1 µF, 25 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0603	0603
21	D1	1	Green	150060VS75000	Würth Elektronik	LED, Green, SMD	LED_0603
22	D2	1	Yellow	150060YS75000	Würth Elektronik	LED, Yellow, SMD	LED_0603
23	D3, D5, D13	3	30V	BATS4HT1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
24	D19, D20	2	75V	1N4148WT	Fairchild Semiconductor	Diode, Switching, 75 V, 0.3 A, SOD-523F	SOD-523F
25	FB1, FB2, FB7, FB8	4		BLM21HE472SH1L	Murata	4.7 kOhms @ 100 MHz 1 Signal Line Ferrite Bead 0805 (2012 Metric)	0805
26	FB3, FB4, FB5, FB6	4		74269244182	Würth Electronics	1.8 kOhms @ 100MHz 1 Power, Signal Line Ferrite Bead 0402 (1005 Metric) 210mA 2.1Ohm	0402
27	FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
28	H1, H2, H3, H4	4		5MM HOLE	Any	5 mm PCB Hole	3x1 5.08 mm
29	J1	1		ED120/3DS	On-Shore Technology	Terminal Block, 5.08 mm, 3x1, Brass, TH	Terminal Block
30	J2	1		6.91217E+11	Würth Electronics	2 Position Wire to Board Terminal Block Horizontal with Board 0.400" (10.16mm) Through Hole	TERM_BLK_2
31	J4, J7, J8	3		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
32	J9	1		FTSH-105-01-F-DV-K	Samtec	Header (Shrouded), 1.27mm, 5x2, Gold, SMT	Header(Shrouded), 1.27mm, 5x2, SMT
33	J10, J13, J16	3		TMS-101-02-T-S	Samtec	Header, 1x1, Tin, TH	Header, 1x1, 50mil, TH
34	J12	1		GRP021VWVN-RC	Sullins Connector Solutions	Header, 50mil, 2x1, Gold, TH	2x1 Header
35	J14	1		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
36	LBL1	1		TH1-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
37	R1, R18	2	0	CR160000F	Meritek Electronics	0 Ohms ±1% Chip Resistor 0603 (1608 Metric) Thick Film	0603
38	R2	1	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
39	R3	1		B72214S2461K101	TDK	Var MOV 460VAC/615VDC 5000A 750V Thru-Hole Radial Bulk	RADIAL
40	R4, R8	2	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	R5	1	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
42	R10, R11	2	820	RC0402FR-07820RL	Yageo America	RES, 820, 1%, 0.063 W, 0402	0402
43	R12, R20, R21	3	2.00k	ERJ-2RKF2001X	Panasonic	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
44	R22, R23, R55	3	47.0k	RC0402FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.0625 W, 0402	0402
45	R24, R25, R26, R27	4	33	RC0402FR-0733RL	Yageo America	RES, 33.0, 1%, 0.062 W, 0402	0402
46	R28, R29, R30, R31	4	330k	TNPV1206330KBEEN	Vishay Draloric	RES, 330 k, 0.1%, 1 W, 1206	1206
47	R32, R33, R34, R35	4	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
48	R74, R81	2	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
49	RS1	1		2-5747706-0	TE Connectivity	Receptacle, D-SUB-9, 2.74mm, Gold, TH	Receptacle, D-SUB-9, 2.74mm, TH
50	TP1	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
51	TP4	1		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
52	U1	1		TPS70933DBVR	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DBV0005A (SOT-23-5)	DBV0005A
53	U2	1		AMC131M03DFM	Texas Instruments	3-Channel, Simultaneously-Sampling, 24-Bit, Reinforced Isolated DeltaSigma ADC With Integrated DC/DC Converter	SOIC20
54	U3	1		MSPM0G1106TRHBR	Texas Instruments	Mixed-Signal Microcontrollers VQFN32 ARM 32-bit Cortex-M0+ 80MHz 28 I/O's 64KB Flash 32KB SRAM	VQFN32
55	U4	1		TMAG5273A2QDBVR	Texas Instruments	3-Axis Linear Hall Effect Sensor With I2C Interface SOT23-6	SOT23-6
56	U5	1				3-V to 5.5-V Multichannel RS-232 Line Driver / Receiver with ±15-kV IEC ESD Protection, 0 to 70 degC, 16-Pin TSSOP (PW), Green (RoHS & no Sb/Br)	PW0016A
57	U6	1			Texas Instruments	24-bit, 32-kSPS, 2-channel, simultaneous-sampling, delta-sigma ADC 20-WQFN -40 to 125	WQFN20
58	U7	1		ISO6731DWR	Texas Instruments		SOIC16
59	Y1	1		FA-238 16.3840MB-K	Epson	Crystal, 16.384 MHz, 50 ppm, 10 pF, SMD	3.2x2.5mm
60	C17, C18, C22	0	1000pF	C1206C102KGRACAUTO	Kemet	CAP. CERM, 1000 pF, 2000 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
61	J3	0		TMS-101-02-T-S	Samtec	Header, 1x1, Tin, TH	Header, 1x1, 50mil, TH

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