

TIDA-01452 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	Package/Reference
1	J11	1		BAT-14LD-001	Line Technologies	Battery Holder, Retainer clip, SMT	22.5x4.2x15.5mm
2	C18, C38, C37, C39, C40, C36, C37, C39, C41, C42, C71, C78, C40, C38, C100, C101	16	0.1uF	GRM1555R1010K401D	Murata	CAP, CERAM, 0.1 uF, 5.0 V, +/- 10%, X7R, 0402	0402
3	C38, C38, C38, C79, C78, C85, C113	7	10uF	GRM188R0100ME47D	Murata	CAP, CERAM, 10 uF, 6.3 V, +/- 20%, X6R, 0603	0603
4	C41, C77, C79, C82	4	4.7uF	C1005GR1A475K050BC	TDK	CAP, CERAM, 4.7 uF, 10 V, +/- 10%, X6R, 0402	0402
5	C42, C43	2	150pF	GRM1555C1H160JA01D	Murata	CAP, CERAM, 16 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
6	C44, C46, C85, C86	4	8.2pF	GRM1555C1H82CA01D	Murata	CAP, CERAM, 8.2 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
7	C45, C47, C48, C49, C50, C51, C58, C59, C111, C112	10	0.1uF	GCM156R71H104KE02D	Murata	CAP, CERAM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
8	C55, C57, C81	3	0.01uF	C0402C103MRAC1U	Kemet	CAP, CERAM, 0.01 uF, 50 V, +/- 5%, X7R, 0402	0402
9	C83, C84	2	90pF	GRM1555C1H90DA01D	Murata	CAP, CERAM, 90pF, 50V, +/- 0.5pF, COG/NP0, 0402	0402
10	C85	1	10uF	GRM1555R1010K401D	Murata	CAP, CERAM, 1 uF, 25 V, +/- 10%, X6R, 0402	0402
11	C91, C92	1	100uF	GRM188R1020ME10D	Murata	CAP, CERAM, 22 uF, 10 V, +/- 20%, X6R, 0603	0603
12	C83	1	100uF	CL16E8R107R100KAC	TK	CAP, CERAM, 100 uF, 10 V, +/- 20%, X6R, 1206, 180	1206, 180
13	C109	1	10uF	GCM156R71H104KE02D	Murata	CAP, CERAM, 10 uF, 10 V, +/- 10%, X7R, 0605	0605
14	C109	1	2.7uF	GRM1555C1H27CA01D	Murata	CAP, CERAM, 2.7 uF, 50 V, +/- 5%, COG/NP0, 0402	0402
15	C110	1	10pF	GRM1555C1H10CA01D	Murata	CAP, CERAM, 1 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
16	C41, C83	1	100uF	GRM188R1020ME10D	Murata	Red LED Lum LED Indication - Dissipate 1.8W 0402 (1005 Metric)	0402
17	C82, C84	2		SML-P1T1MT8E	Rohm Semiconductor	Green 50nm LED Indication - Dissipate 1.9W 0402 (1005 Metric)	
18	C10, C4	2	5V	152312RKA	Teledyne	Resistor, SMD, 0.004, 500-320	SOD-323
19	FL1	1	1000 ohm	BLM18E1252SN1D	Murata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
20	R12	1	2.45 GHz	LPF180245GSGD202	Murata	Filter, Bandpass, 2.45GHz, SMD	1.6x0.8mm
21	J12, J15	2		HDR-30045	Header	Header, 1.27mm, 5x2, 504, SMT	Header, 1.27mm, 5x2, SMT
22	J4	1		U.FL-R-SMT-1	Mouse Electric Co. Ltd.	Connector, Ultra-Mini Coaxial, SMD	Ultra small CO-AX SMD
23	J5	1		PEC025AAN	Sullins Connector Solutions	Header, 100mil, 2x1, 1in, TH	Header, 2 PIN, 100mil, TH
24	J10, J11	2		PEC025AAN	Sullins Connector Solutions	Header, 100mil, 3x1, 1in, TH	Header, 3 PIN, 100mil, TH
25	J17	1		SFM-110-Q2-S-D-A-K-TR	Samtec	Receptacle, 50mil, 10x2, Gold, SMT	10.88x4.7x3.05mm
26	J18	1		SFM-108-Q2-S-D-A	Samtec	Receptacle, 1.27mm, 8x2, Gold, SMT	Receptacle, 1.27mm, 8x2, SMT
27	J11, J130	2		NMM-102-Q1-T-S	Samtec	Header, 2mm, 2x1, 1in, TH	Header, 2mm, 2x1
28	J17, J18, J119	3		NMM-103-Q1-T-S	Samtec	Header, 2mm, 3x1, 1in, TH	Header, 2mm, 3x1
29	J1, J3	2	4.7uH	ML25024A710S1	TDK	Inductor, Multilayer, Ferrite, 4.7 uH, 0.3 A, 0.143 ohm, SMD	2.5x1.1x2mm
30	J4	1	10uH	CKS2125100M1	Yupo Yuden	Inductor, Multilayer, Ferrite, 10 uH, 0.11 A, 0.52 ohm, SMD	0605
31	J5	1	10uH	LPS4078-100MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 10 uH, 1.25 A, 0.2 ohm, SMD	LPS4078
32	J6	1	4.7uH	EPL3015-472MLB	Coilcraft	Inductor, Shielded, Ferrite, 4.7 uH, 1.2 A, 0.14 ohm, SMD	Inductor, 3x1.5x0.3mm
33	J7	1	22uH	744025220	Würth Elektronik eSoc	Inductor, Shielded Drum Core, Ferrite, 22uH, 0.5A, 0.528 ohm, SMD	Inductor, 2.8x2.8x2.2mm
34	J8	1	4.7uH	VL232010MT-487M	TDK	Inductor, Shielded, Ferrite, 4.7uH, 0.5A, 0.25 ohm, SMD	0402 2.5x1.2mm
35	Q6, Q6, Q27	3	20V	CSO7028W101H	Texas Instruments	MOSFET, P-CH, 20 V, +/- 1.6 A	
36	R34, R44, R57	1	100k	CRCW0402100K0KED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
37	R58	1	91.0k	RC1608P-913B-VE	Suhami Co Ltd	RES, 91.0 k, 0.1%, 0.1 W, 0603	0603
38	R35, R34, R39	270		CRCW0402270R0KED	Vishay-Dale	RES, 270, 1%, 0.063W, 30V, 0402	0402
39	R31, R41, R42, R45, R46, R49, R44, R46, R59, R60, R68, R80, R85, R86, R100, R118, R119, R122	18		CRCW040200000KED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
40	R32, R33, R37, R38	4	680	CRCW0402680RJNED	Vishay-Dale	RES, 680, 5%, 0.063 W, 0402	0402
41	R15, R36, R40, R108, R110	5	10.0k	CRCW0402100K0KED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
42	R55, R91, R93, R109	4	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, 0402	0402
43	R61	1	0.60Meg	CRCW0402600M0FKED	Vishay-Dale	RES, 0.60 M, 1%, 0.063 W, 0402	0402
44	R62	1	2.21Meg	CRCW0402221M0FKED	Vishay-Dale	RES, 2.21 M, 1%, 0.063 W, 0402	0402
45	R34, R50	2	0.110Meg	CRCW0402011M0FKED	Vishay-Dale	RES, 0.11 M, 1%, 0.063 W, 0402	0402
46	R64	1	0.18Meg	CRCW0402180M0FKED	Vishay-Dale	RES, 0.18 M, 1%, 0.063 W, 0402	0402
47	R65	1	4.42Meg	CRCW0402442M0FKED	Vishay-Dale	RES, 4.42 M, 1%, 0.063 W, 0402	0402
48	R66	1	0.270Meg	CRCW0402027M0FKED	Vishay-Dale	RES, 0.27 M, 1%, 0.063 W, 0402	0402
49	R69	1	100k	CRCW0402100K0KED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
50	R140	1	402	CRCW0402402R0KED	Vishay-Dale	RES, 402, 1%, 0.063 W, 0402	0402
51	SW1, SW2, SW3	3		B3U-1000P	Omron Electronic Components	SWITCH TACTILE SPSTNO 0.05A 12V	3x1.6x2.5mm
52	J9	1		AMS433P-407R020R	Texas Instruments	Mixed-Signal Microcontroller, Z49000A	Z49000A
53	J4	1		TEC100D00ABR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, DMS000A	DMS000A
54	J8	1		IMP290	Brüel Kjær Energy	Digital Pressure Sensor, LGAB292, 0MM, 0.45	2x2.5mm LGA-B
55	J5	1		IMP007A1VZFR	Texas Instruments	Infrared Thermopile Sensor with Integrated Math Engine, YZF0009AEAE	YZF0009AEAE
56	J1	1		DP10010NPR	Texas Instruments	Ambient Light Sensor, DNP0000A	DNP0000A
57	J3	1		LC2050P-128H0ZUR	Texas Instruments	Simplifica Massandant Wireless MCU, RGD0046A	RGD0046A
58	J10	1		IP6867376VYR	Texas Instruments	Programmable Output Voltage UltraLow Power Buck Converter with up to 50mA / 250 mA Output Current, RGYP014A	RGYP014A
59	J12	1		IP861222X0K8	Texas Instruments	5V WPUF VOLTAGE STEP-UP CONVERTER 8V 6 PIN SC-70 PACKAGE, DCK0006A	DCK0006A
60	J15	1		20C0502RGRR	Texas Instruments	Ultra Low Power Boost Converter with Battery Management for Energy Harvesting Applications, RGR0020A	RGR0020A
61	J21	1		BQ-C256-15N	Microchip	256K 90 CMOS Serial EEPROM	98V-0006A
62	J22	1		MSA31600B1K	Texas Instruments	2-Channel ANALOG SWITCH 4x1/3.3V SINGLE CHANNEL 2:1 MULTIPLEXER/DMULTIPLEXER, DBV0006A	DBV0006A
63	J6	1		IP56106R1D5ER	Texas Instruments	UltraLow Quiescent Current Synchronous Boost with Integrated Load-Load Switch, DSE0006A	DSE0006A
64	J27	1		LS24H12	ST Microelectronics	Ultra-low-power high-performance 3-axis plus accelerometer	
65	J28	1		FX2P-256-48B-K3	Cypress	FX2P-256-48B-K3, 100k, SMD	
66	Y5, Y6	2		PC-135-32-7600K-A-00	Epson	Crystal, 32.768 KHz, 1 pF, SMD	01M0, 2 Leads, Body 3x1.5mm
67	Y4	1		TSX3225 24.0000MFP200-A3	Epson	Crystal, 24 MHz, 9 pF, SMD	01M0, 4 Leads, Body 2.65x3.35mm, Height 0.6mm
68	C1, C6	0	2.2uF	C1005GR1E225K050BC	TDK	CAP, CERAM, 2.2 uF, 25 V, +/- 10%, X6R, 0402	0402
69	C2	0	2200uF	GRM156R71H222KA01D	Murata	CAP, CERAM, 2200 uF, 50 V, +/- 10%, X7R, 0402	0402
70	C3	0	0.47uF	GRM1555C1H47CA01D	Murata	CAP, CERAM, 0.47 uF, 16 V, +/- 10%, X6R, 0402	0402
71	C4, C6, C3, C31, C32	0	1000uF	GRM1555C1H102JA01D	Murata	CAP, CERAM, 1000 uF, 50 V, +/- 5%, COG/NP0, 0402	0402
72	C5, C30, C35	0	0.1uF	GCM156R71H104KE02D	Murata	CAP, CERAM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
73	C10, C14	0	100pF	GRM1555C1H100JA01D	Murata	CAP, CERAM, 16 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
74	C11	0	10uF	C1005GR1A100K401D	Murata	CAP, CERAM, 100 pF, 25 V, +/- 10%, X6R, 0402	0402
75	C12, C13	0	20uF	C1205C-100R-SRAC1U	Kemet	CAP, CERAM, 10 uF, 25 V, +/- 10%, X7R, 1206, 180	1206, 180
76	C15, C29	0	2.2uF	0603C225K4RAC1U	Kemet	CAP, CERAM, 2.2 uF, 16 V, +/- 10%, X7R, 0605	0605
77	C16	0	1000pF	GRM1555C1H102JA01D	Murata	CAP, CERAM, 100 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
78	C17	0	220pF	GRM1555C1H221JA01D	Murata	CAP, CERAM, 220 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
79	C18	0	0.0047uF	GRM1555C1H90DA01D	Murata	CAP, CERAM, 480 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
80	C20, C21	0	0.22uF	8801022065	Wurth Elektronik	CAP, CERAM, 0.22 uF, 16 V, +/- 10%, X7R, 0603	0603
81	C22	0	330pF	C1005GR1E330K050BC	TDK	CAP, CERAM, 0.047 uF, 30 V, +/- 10%, X6R, 0402	0402
82	C15, C24	0	0.01uF	GRM1555C1H100JA01D	Murata	CAP, CERAM, 40 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
83	C25	0	1uF	GRM155R1E100K412D	Murata	CAP, CERAM, 1 uF, 25 V, +/- 10%, X6R, 0402	0402
84	C26	0	330pF	GRM1555C1H330JA01D	Murata	CAP, CERAM, 33 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
85	C27, C34	0	0.022uF	GCM156R71H222KA01D	Murata	CAP, CERAM, 0.022 uF, 50 V, +/- 10%, COG/NP0, 0402	0402
86	C28	0	150pF	GRM1555C1H150JA01D	Murata	CAP, CERAM, 150 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
87	C29	0	0.01uF	C1005GR1E100K401D	Murata	CAP, CERAM, 0.01 uF, 50 V, +/- 10%, COG/NP0, 0402	0402
88	C31	0	30V	BA154W5-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
89	J6	0		ED0555-23	On-Chip Technology	Terminal Block, 6A, 3.5mm Pitch, 2 Pos, TH	7.0x3.2x5.5mm
90	J5	0		NMM-103-Q1-T-S	Samtec	Header, 2mm, 3x1, 1in, TH	Header, 2mm, 3x1
91	J124, J125	0		NMM-102-Q1-T-S	Samtec	Header, 2mm, 2x1, 1in, TH	Header, 2mm, 2x1
92	C1	0	100uF	CL16E8R107R100KAC	Yupo Yuden	Inductor, Multilayer, Ferrite, 100 uH, 0.27 A, 1.4 ohm, SMD	2.5x1.2x2.2mm
93	C21	0	80 V	25B1201T00R	Rohm	Transistor, PNP, 80 V, 1 A, SOT-89	SOT-89
94	C4	0	80 V	BC048B-1T10	On Semiconductor	Transistor, NPN, 80 V, 0.1 A, SOT-23	SOT-23
95	C1	0	1k	R0303P-CF-C01K	Cygnus America	RES, 30.0 k, 0.1%, 0.1 W, 0603	0603
96	R5	0	400k	CRCW0402400K0KED	Vishay-Dale	RES, 400 k, 1%, 0.063 W, 0402	0402
97	R7, R16, R16, R28, R29, R31, R132	0	100k	CRCW0402100K0KED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
98	R9	0	4.02	CRCW0603402R0K0EA	Vishay-Dale	RES, 4.02, 1%, 0.1 W, 0603	0603
99	R9	0	8.25k	CRCW0603825K0K0EA	Vishay-Dale	RES, 8.25 k, 1%, 0.1 W, 0603	0603
100	R10	0	0.11k	CRCW0402011FKED	Vishay-Dale	RES, 0.11 k, 1%, 0.063 W, 0402	0402
101	R11	0	30.1k	CRCW0402301FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, 0402	0402
102	R12	0	1.10k	CRCW0603110FKED	Vishay-Dale	RES, 1.10 k, 1%, 0.1 W, 0603	0603
103	R13, R14, R21, R22	0	30.0k	ERA-3AB330K	Panasonic	RES, 30.0 k, 0.1%, 0.063 W, 0402	0402
104	R17	0	10.0	CRCW0603100FK0EA	Vishay-Dale	RES, 10.0, 0.1%, 0.1 W, 0603	0603
105	R18	0	30.0k	CRCW0402300K0K0ED	Vishay-Dale	RES, 30.0 k, 1%, 0.063 W, 0402	0402
106	R19	0	49.9k	CRCW0402499K0K0ED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
107	R20	0	30.0k	CRCW0402300K0K0ED	Vishay-Dale	RES, 30.0 k, 1%, 0.063 W, 0402	0402
108	R23	0	37.4k	CRCW0402374K0K0ED	Vishay-Dale	RES, 37.4 k, 1%, 0.063 W, 0402	0402
109	R24, R27, R34, R35, R36, R37	0	0	CRCW040200000K0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
110	J1	0		DAC8370	Texas Instruments	DAC8370, DAC830	DAC830
111	J1	0		ABM2B-8.000MHz-10-1-U1	Abrakon	Crystal, 8 MHz, 10 pF, SMD	