

**TIDA-01398 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-01398	Any	Printed Circuit Board	
2	A1	1	3.6mVp-p	IRS-B210ST01-R1	MuRata	Pyroelectric Infrared Sensors for Reflow Soldering, 3.6mVp-p, SMD	4.7x4.7mm
3	BT1	1		BS-7	Battery Protection Devices	Battery Holder, CR2032, Retainer clip, TH	CR2032 holder
4	C4, C11	2	10uF	GRM188R60J106ME47D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
5	C5, C6	2	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, COG/NP0, 0402	0402
6	C7, C8, C9, C10	4	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
7	C13	1	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
8	C14	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
9	C15, C16	2	1.2pF	GRM1555C1H1R2BA01D	MuRata	CAP, CERM, 1.2 pF, 50 V, +/- 8.3%, COG/NP0, 0402	0402
10	C17	1	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
11	C18, C20	2	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
12	C21, C22	2	100uF	C3216X5R1A107M160AC	TDK	CAP, CERM, 100 uF, 10 V, +/- 20%, X5R, 1206_190	1206_190
13	C23	1	10uF	C1608X5R0J106M	TDK	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
14	C24	1	10uF	GRM155R60J106ME44D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0402	0402
15	C25	1	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
16	C26	1	1uF	C1005X5R1A105K050BB	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
17	C27, C28	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
18	C29, C30	2	0.01uF	C1005X7R1C103K050BA	TDK	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
19	C31, C37	2	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
20	C32	1	100pF	C0402C101J3GACTU	Kemet	CAP, CERM, 100 pF, 25 V, +/- 5%, COG/NP0, 0402	0402
21	C33	1	33uF	C2012X5R1A336M125AC	TDK	CAP, CERM, 33 uF, 10 V, +/- 20%, X5R, 0805	0805
22	C34	1	0.01uF	C1005X7R1E103K	TDK	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0402	0402
23	C35, C38, C46, C47	4	0.1uF	C1005X7R1H104K	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
24	C36	1	3.3uF	C1005X5R1A335K050BC	TDK	CAP, CERM, 3.3 uF, 10 V, +/- 10%, X5R, 0402	0402
25	C41	1	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, COG/NP0, 0402	0402
26	D1, D2	2	75V	1N4148X-TP	Micro Commercial Components	Diode, Switching, 75 V, 0.3 A, SOD-523	SOD-523
27	E1	1		ANTENNA_DN007A	N/A	2.4GHz PCB Antenna. There is nothing to buy or mount.	SMD, 3-Leads
28	H1, H3, H5, H7	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
29	H2, H4, H6, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
30	H9	1		IML-0669	MuRata	Lens, Ceiling Mount, TH	D12xH8.508mm
31	J1	1		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
32	J3	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
33	J5, J6	2		87898-0204	Molex	Header, 2.54 mm, 2x1, Gold, R/A, SMT	Header, 2.54 mm, 2x1, R/A, SMT
34	L1	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
35	L2	1	10uH	CKS2125100M-T	Taiyo Yuden	Inductor, Multilayer, Ferrite, 10uH, 0.11A, 0.52 ohm, SMD	0805
36	L3	1	15nH	LOG15HS15NJ02D	MuRata	Inductor, Multilayer, Air Core, 15 nH, 0.3 A, 0.32 ohm, SMD	0402 polarized
37	L4	1	2nH	LOG15HS2N0S02D	MuRata	Inductor, Multilayer, Air Core, 2 nH, 0.3 A, 0.1 ohm, SMD	0402 polarized
38	Q1, Q2	2	-20V	SI2323DS	Vishay-Siliconix	MOSFET, P-CH, -20 V, -3.7 A, SOT-23	SOT-23
39	R1, R5, R6, R10, R16, R17	6	0	CRCW0402000020ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
40	R2	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
41	R3, R7	2	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
42	R9	1	619k	CRCW0402619KFKED	Vishay-Dale	RES, 619 k, 1%, 0.063 W, 0402	0402
43	R11	1	6.81k	CRCW0402681KFKED	Vishay-Dale	RES, 6.81 k, 1%, 0.063 W, 0402	0402
44	R12	1	1.30Meg	CRCW04021M30FKED	Vishay-Dale	RES, 1.30 M, 1%, 0.063 W, 0402	0402
45	R13	1	1.50Meg	CRCW04021M50FKED	Vishay-Dale	RES, 1.50 M, 1%, 0.063 W, 0402	0402
46	R14	1	68.1k	CRCW040268K1FKED	Vishay-Dale	RES, 68.1 k, 1%, 0.063 W, 0402	0402
47	R15, R18, R19, R20, R21	5	15Meg	RMCF0805JT15M0	Stackpole Electronics Inc	RES, 15 M, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
48	S1, S2	2		B3U-1000P	Omnron Electronic Components	SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm
49	SH-J1, SH-J2, SH-J3	3	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
50	TP1, TP2, TP5	3	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
51	TP3, TP4	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
52	TP6, TP7	2	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
53	U1	1		CC2650F128RSMR	Texas Instruments	Ultra low-power ARM Cortex M3 2.4 GHz Radio MCU, RSM0032B	RSM0032B
54	U2, U3, U4, U5	4		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
55	U6	1		TLV8544PWR	Texas Instruments	500 nA RRIO Nanopower Operational Amplifier, PW0014A (TSSOP-14)	PW0014A
56	Y1	1		TSX-3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
57	Y2	1		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x.6x1.2mm
58	C1, C2	0	12pF	GRM1555C1E120JA01D	MuRata	CAP, CERM, 12 pF, 25 V, +/- 5%, COG/NP0, 0402	0402
59	C3	0		Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	0603
60	C12, C19, C48	0		Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	0402
61	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
62	J2	0		TSW-106-07-G-S	Samtec	Header, 100mil, 6x1, Gold, TH	6x1 Header
63	J4	0		CONSMSA001-SMD-G	Linx Technologies	Jack, SMA, PCB, Gold, SMT	SMA Jack
64	R4	0	0	CRCW0402000020ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

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