

# TIDA-01442 Bill of Materials

3/31/2017

Item	Qty	Designator	Value	Discription	Manufacturer	Part Number	Note
1	2	BALUN1,BALUN2	BALUN, HIGH POWER, SMT	BALUN_320x320_MARKI_0006SMG	MARKI MICROWAVE	BAL-0006SMG	
2	1	C1	0.1uF	0603	AVX	0603YC104JAT2A	
3	1	C2	1uF	0603	TDK	C1608X5R1A105K080AC	
4	15	C3,C4,C14,C42,C45,C47,C15 5,C161,C163,C203,C226,C2 33,C237,C239,C244	.1uF	0402	MURATA	GRM155R71C104KA88D	
5	87	C5-C13,C15,C16,C18- C40,C54-C65,C69-C80,C84- C92,C96,C100,C101,C103,C 104,C106,C107,C109,C113, C130,C133,C135,C138,C142 ,C143,C146,C149,C150,C24 9,C250	.1uF	0201	MURATA	GRM033R61A104KE15D	
6	3	C41,C44,C46	100pF	0402	AVX CORP	04025A101JAT2A	
7	4	C43,C68,C83,C95	10uF	TANT_B	Vishay Sprague	293D106X0010B2TE3	
8	0	C48,C49,C52,C53	4700pF	0402	YAGEO	CC0402KRX7R8BB472	DNI
9	2	C50,C51	4700pF	0402	YAGEO	CC0402KRX7R8BB472	
10	28	C66,C67,C81,C82,C93,C94,C 102,C111,C114,C117,C154, C157- C160,C165,C166,C201,C205 ,C210,C213,C214,C220,C22 4,C227,C235,C240,C246	1uF	0402	TDK	C1005X7S1A105K050BC	
11	4	C99,C105,C108,C110	100pF	0201	MURATA	GRM0335C1E101JA01D	
12	17	C112,C115,C116,C118,C198 ,C200,C202,C208,C217,C21 9,C223,C225,C230,C236,C2 38,C243,C247	10uF	0603	TDK	C1608X5R1A106K080AC	
13	1	C119	560pF	0201	MURATA	GRM033R71E561KA01D	
14	1	C120	.047uF	0201	MURATA	GRM033R61C473KE84D	
15	0	C121	6800pF	0201	MURATA	GRM033R71A682KA01D	DNI
16	1	C122	6800pF	0201	MURATA	GRM033R71A682KA01D	
17	1	C128	.68uF	0402	TDK	C1005X7S0J684K050BC	
18	1	C131	3900pF	0201	AVX	0201ZD392KAT2A	
19	1	C132	47pF	0201	MURATA	GRM0335C1E470JA01D	
20	2	C134,C136	.01uF	0201	MURATA	GRM033R71A103KA01D	

21	0	C137,C144,C145,C151,C153	.1uF	0201	MURATA	GRM033R61A104KE15D	DNI
22	1	C139	100pF	0402	TDK	C1005C0G1H101J050BA	
23	1	C140	2200pF	0402	MURATA	GRM155R71E222KA01D	
24	1	C141	10pF	0402	MURATA	GRM1555C1H100JA01D	
25	1	C152	12pF	0201	TDK	CGA1A2C0G1E120J030BA	
26	2	C156,C162	0.01uF	0402	MURATA	GRM155R71H103KA88D	
27	1	C164	10uF	0603	MURATA	GRM188R60J106ME47D	
28	1	C167	1uF	0402	Samsung	CL05B105KQ5NQNC	
29	3	C168,C170,C179	10uF	0603	MURATA	GRM188R60J106ME47D	
30	10	C169,C171,C176,C181- C183,C186-C189	.1uF	0201	TDK	CGB1T3X5R0J104M022BB	
31	8	C172,C177,C190-C195	0.1uF	0603	AVX	0603YC104KAT2A	
32	3	C173,C175,C180	1uF	0603	AVX	0603YD105KAT2A	
33	2	C174,C178	100uF	1206	KEMET	C1206C107M9PACTU	
34	2	C184,C185	18pF	0402	AVX	04025A180FAT2A	
35	1	C196	47uF	TANT_B	AVX	TPSB476K010R0250	
36	5	C204,C218,C222,C229,C242	33uF	0805	TDK	C2012X5R1A336M125AC	
37	2	C206,C211	22uF	1206	MURATA	GRM31CR71A226KE15L	
38	3	C207,C228,C241	47uF	1206	MURATA	GRM31CR61A476ME15L	
39	2	C209,C215	10uF	0805	MURATA	GRM21BR61E106KA73L	
40	1	C212	2.2uF	0603	MURATA	GRM188R71A225KE15D	
41	1	C216	.47uF	0603	AVX	0603YD474KAT2A	
42	1	C221	1000pF	0603	KEMET	C0603C102K3RACTU	
43	3	C234,C245,C248	.01uF	0201	MURATA	GRM155R71E103KA01D	
44	1	D1	LED RED	LED_0805	LITE ON	LTST-C170KRKT	
45	7	D2-D8	LED GREEN	LED_0805	LITE ON	LTST-C170KGKT	
46	2	D9,D12	1N4148W	DIODE_SM_1N4148W	DIODES INCORP	1N4148W-7-F	
47	2	D10,D11	LED ORANGE	LED_0603	LITE-ON	LTST-C190KFKT	
48	1	D13	MBRB2515L	DIODE_MBRB2515L	ON Semiconductor	MBRB2515LT4G	
49	0	F1	FUSE 10A 63V FAST	1206	TE Connectivity	1206SFF200F/63-2	DNI
50	3	FB1,FB12,FB13	120 OHM @ 100MHz	IND_0603	MURATA	BLM18SG121TN1D	
51	10	FB2-FB11	120 OHM @ 100MHz	IND_0603	MURATA	BLM18AG121SN1D	
52	1	FB14	26 OHM @ 100MHz	IND_0603	MURATA	BLM18SG260TN1D	
53	4	FB16-FB19	27uF	1206_BEAD_NFM31P	Murata	NFM31PC276B0J3	
54	4	FB20-FB23	120 OHM @ 100MHz	1206	MURATA	BLM31PG121SN1L	
55	6	J1,J3,J4,J6,J23,J24	SMA, THVT, SMT CENTER PIN	SMA_THVT_SMT_250x250	Lighthouse Tech	SASF546-P26-X1	
56	5	J2,J5,J14,J15,J18	SMA, JACK, 50 OHM, EDGE MNT	SMA_SMEL_373x312	Johnson Components	142-0701-801	
57	1	J7	HDR, THVT, 8POS, .100, GOLD	HDR_THVT_2x4_100_M	SAMTEC	HTSW-104-07-G-D	
58	4	J8,J9,J26,J27	HDR, THVT, 2POS, .100, GOLD	HDR_THVT_1x2_100_M	SAMTEC	HTSW-102-07-G-S	
59	0	J17,JP8	HDR, THVT, 2POS, .100, GOLD	HDR_THVT_1x2_100_M	SAMTEC	HTSW-102-07-G-S	DNI
60	1	J20	SMP, PCB, SMT	SMP_B120	MOLEX INC.	0853050232	
61	2	J22,J38	SMA_THVT_REC	SMA_THVT_312x312	Johnson Components	142-0701-201	

62	1	J25	CON, SMVT, HS, FIELD ARRAY, FMC, MALE	CON_SMVT_40X14_50_M_MTG	SAMTEC	ASP-184330-01	
63	1	J28	HDR, THVT, 4POS, .100, GOLD	HDR_THVT_1x4_100_M	SAMTEC	HTSW-104-07-G-S	
64	3	J30,JP7,JP9	HDR, THVT, 2POS, .100, GOLD	HDR_THVT_1X2_100_M	SAMTEC	HTSW-102-07-G-S	SHUNT 1-2
65	1	J31	CON, USB, MINI, AB, SMT	CON_SMRT_USBMNE20_F	WURTH ELEKTRONIK	651305142821	
66	1	J37	CONN, JACK, PWR, MINI, R/A, TH	CON_RAPC722_JACK_THVT_3	SWITCHCRAFT	RAPC722X	
67	1	JP5	HDR, THVT, 2POS, .100, GOLD	HDR_THVT_1x2_100_M	SAMTEC	HTSW-102-07-G-S	OPEN
68	1	JP6	HDR, THVT, 3POS, .100, GOLD	HDR_THVT_1x3_100_M	SAMTEC	HTSW-103-07-G-S	SHUNT 1-2
69	2	L3,L4	.47uH	IND_SM_XFL4015	Coilcraft	XFL4015-471MEB	
70	2	MT1,MT2	STANDOFF, FEMALE, 4-40 X 1	MFG125_PLATED	RAF	1648-440-AL	STANDOFF
71	1	PCB	BARE BOARD, ADCXXDJXX00		TTM	ADCXXDJXX00 HSP001 REV A	
72	1	Q1	NPN, MMBT3904	SOT_23_MMBT3904	Fairchild Semi	MMBT3904	
73	1	Q3	CSD18532Q5	SON_Q5B_8	Texas Instruments	CSD18532Q5B	
74	16	R1,R4,R6,R9,R22,R24,R54,R59,R60,R76,R77,R126-R129,R186	0	0201	PANASONIC	ERJ-1GEOR00C	
75	16	R11,R12,R17,R18,R21,R23,R27-R29,R99,R114,R115,R123-R125,R132	10k	0402	PANASONIC	ERJ-2RKF1002X	
76	16	R13-R16,R19,R20,R25,R138-R141,R143-R146,R148	1k	0402	PANASONIC	ERJ-2RKF1001X	
77	1	R26	2.1k	0402	PANASONIC	ERJ-2RKF2101X	
78	1	R30	8.06k	0402	PANASONIC	ERJ-2RKF8061X	
79	4	R31,R150,R164,R184	1M	0402	PANASONIC	ERJ-2RKF1004X	
80	2	R32,R185	1.2k	0402	PANASONIC	ERJ-2RKF1201X	
81	1	R33	1.33k	0402	PANASONIC	ERJ-2RKF1331X	
82	17	R34,R38,R40,R42,R67,R97,R105,R107,R155-R157,R170,R171,R173-R175,R177	0	0402	PANASONIC	ERJ-2GEOR00X	
83	0	R35,R36,R98,R154,R172,R176,R183	0	0402	PANASONIC	ERJ-2GEOR00X	DNI
84	1	R37	750	0402	PANASONIC	ERJ-2RKF7500X	
85	2	R39,R41	1.3k	0402	PANASONIC	ERJ-2RKF1301X	
86	17	R43,R47,R73,R110,R112,R113,R118-R121,R133-R137,R142,R147	100	0402	PANASONIC	ERJ-2RKF1000X	
87	4	R44,R45,R48,R49	49.9	0402	PANASONIC	ERJ-2RKF49R9X	
88	1	R46	12k	0402	PANASONIC	ERJ-2RKF1202X	
89	0	R50	680	0201	PANASONIC	ERJ-1GEF6800C	DNI
90	1	R51	680	0201	PANASONIC	ERJ-1GEF6800C	
91	0	R52,R53,R68,R85	49.9	0201	PANASONIC	ERJ-1GEF49R9C	DNI
92	1	R55	12	0201	PANASONIC	ERJ-1GEF12R0C	

93	1	R56	150	0201	PANASONIC	ERJ-1GEJ151C	
94	0	R57,R58,R61,R62,R64,R65,R89,R90	240	0201	PANASONIC	ERJ-1GEF2400C	DNI
95	1	R63	39k	0201	PANASONIC	ERJ-1GEF3902C	
96	1	R66	620	0201	PANASONIC	ERJ-1GEF6200C	
97	0	R69	0	0603	PANASONIC	ERJ-3GEY0R00V	DNI
98	0	R70	18	0402	PANASONIC	ERJ-2RKF18R0X	DNI
99	1	R71	294	0402	PANASONIC	ERJ-2RKF2940X	
100	0	R72	294	0402	PANASONIC	ERJ-2RKF2940X	DNI
101	4	R74,R75,R78,R79	120	0201	PANASONIC	ERJ-1GEF1200C	
102	0	R80,R81,R83	100	0201	PANASONIC	ERJ-1GEF1000C	DNI
103	0	R82,R88	130	0201	PANASONIC	ERJ-1GEF1300C	DNI
104	0	R84,R92	82	0201	PANASONIC	ERJ-1GEF82ROC	DNI
105	6	R86,R87,R94,R95,R188,R189	240	0201	PANASONIC	ERJ-1GEF2400C	
106	2	R91,R108	100	0201	PANASONIC	ERJ-1GEF1000C	
107	1	R93	49.9	0201	PANASONIC	ERJ-1GEF49R9C	
108	1	R96	2.32k	0402	PANASONIC	ERJ-2RKF2321X	
109	4	R100-R103	750	0603	DALE	CRCW0603750RFKEA	
110	1	R104	4.99k	0402	PANASONIC	ERJ-2RKF4991X	
111	1	R106	100	0603	PANASONIC	ERJ-3EKF1000V	
112	1	R109	270	0402	PANASONIC	ERJ-2RKF2700X	
113	1	R111	0	0603	PANASONIC	ERJ-3GEY0R00V	
114	2	R116,R117	10	0603	PANASONIC	ERJ-3EKF10R0V	
115	1	R122	12k	0603	PANASONIC	ERJ-3EKF1202V	
116	1	R130	1k	0603	PANASONIC	ERJ-3EKF1001V	
117	1	R131	2.2k	0603	PANASONIC	ERJ-3GEYJ222V	
118	1	R149	36.5k	0402	PANASONIC	ERJ-2RKF3652X	
119	0	R151,R162,R179,R180	0	0201	PANASONIC	ERJ-1GE0R00C	DNI
120	1	R152	287k	0402	PANASONIC	ERJ-2RKF2873X	
121	2	R153,R166	162k	0402	PANASONIC	ERJ-2RKF1623X	
122	0	R158,R159	0	0805	PANASONIC	ERJ-6GEY0R00V	DNI
123	1	R160	124k	0402	PANASONIC	ERJ-2RKF1243X	
124	1	R161	2k	0603	PANASONIC	ERJ-3EKF2001V	
125	1	R163	0	0805	PANASONIC	ERJ-6GEY0R00V	
126	1	R165	2.4k	0402	PANASONIC	ERJ-2RKF2401X	
127	1	R167	47k	0603	PANASONIC	ERJ-3EKF4702V	
128	1	R168	4.99k	0603	PANASONIC	ERJ-3EKF4991V	
129	1	R169	4.75k	0402	PANASONIC	ERJ-2RKF4751X	
130	0	R178	100	0402	PANASONIC	ERJ-2RKF1000X	DNI
131	1	R187	51	0201	PANASONIC	ERJ-1GEF51R0C	
132	3	RSHN1-RSHN3	SHUNT RES		PANASONIC	ERJ-2GE0R00X	
133	0	SJP1	SOLDER JUMPER, 0402	SMD_JUMPER_L_0402	DNI	DNI	DNI
134	0	SJP2	SOLDER JUMPER, 0402	SMD_JUMPER_L_0402	DNI	DNI	SHUNT 1-2
135	0	SJP3,SJP4	SOLDER JUMPER, 0402	SMD_JUMPER_L_0402	DNI	DNI	SHUNT 2-3
136	1	T1	TC1-1-13M+	TFMR_5_150x150_50	Mini-Circuits	TC1-1-13M-23+	
137	1	T2	TC1-1-43X+	TFMR_5_150x150_50	Mini-Circuits	TC1-1-43X-2+	

138	6	TP1-TP4,TP25,TP26	ORN	TP_THVT_100_RND	KEYSTONE	5003	
139	0	TP5-TP7,TP10,TP11,TP14,TP17,TP19,TP20,TP22-TP24,TP27,TP31-TP33	PROBE POINT	PROBE_POINT_30PAD	N/A	N/A	
140	1	TP12	RED	TP_THVT_125_RND_063D	KEYSTONE	5010	
141	1	TP13	BLK	TP_THVT_125_RND_063D	KEYSTONE	5011	
142	1	TP15	RED	TP_THVT_100_RND	KEYSTONE	5000	
143	6	TP16,TP18,TP21,TP28-TP30	BLK	TP_THVT_100_RND	KEYSTONE	5001	
144	1	TP36	GRN	TP_THVT_100_RND	KEYSTONE	5116	
145	1	U15	LMC6762	SOIC_8_197x157_50	Texas Instruments	LMC6762AIM/NOPB	
146	1	U1	ADC12DJXX00	BGA_144_10MMx10MM_0p80MM	Texas Instruments	ADC12DJ3200AAV	
147	1	U2	LM95233	WSON_14_4MMx4MM_0p5	Texas Instruments	LM95233CISD/NOPB	
148	1	U3	LMX2582	qfn40_RTA_RT_B_RHA	Texas Instruments	LMX2582RHAT	
149	1	U4	LMK04828	QFN_64_360X360_0P50MM_PWRPAD	Texas Instruments	LMK04828BISQE/NOPB	
150	0	U5	24LC65	SO_8_207x207_50	MICROCHIP TECHNOLOGY_DNI	24C65T-I/SM	DNI
151	1	U6	TLV70233	SOT_5_120x69_37	Texas Instruments	TLV70233DBVT	
152	1	U7	SN74LVC1G125DBVR	SOT_5_120x69_57	Texas Instruments	SN74LVC1G125DBVR	
153	1	U8	FT4232HQ	QFN_64_0p50MM_RGC_FT2232HQ	FTDI Chip	FT4232HQ-REEL	
154	1	U9	93LC46B-I	MSOP_8_118x118_0p65MM	MICROCHIP TECHNOLOGY	93LC46B-I/MS	
155	3	U10-U12	SN74AVC4T774	TSSOP_16_201x177_26	Texas Instruments	SN74AVC4T774PWR	
156	1	U13	TPS2400	DBV5	Texas Instruments	TPS2400DBVT	
157	2	U14,U17	TPS62085	QFN_7_2MMx2MM	Texas Instruments	TPS62085RLTR	
158	1	U16	TPS7A7200	QFN_20_199x199_0p65mm	Texas Instruments	TPS7A7200RGWR	
159	1	U20	TPS74401MRGWREP	QFN_20_197x197_0P65_RGW	Texas Instruments	TPS74401MRGWREP	
160	2	U21,U22	TPS7A4700	QFN_20_199x199_0p65mm	Texas Instruments	TPS7A4700RGWT	
161	1	Y1	100.00MHz	VCXO_6_CUSTOM	Crystek	CVHD-950-100.000	
162	1	Y2	12MHz, 18pF	XTAL_2_SM_126x197	ABRACON	ABM3-12.000MHZ-B2-T	
163	2		SCREW, 4-40 X 3/4", PHIL, SS		BUILDING FASTENERS	PMSSS 440 0075 PH	SCREW FOR STANDOFF
164	4		SHUNT- HEADER		TE CONNECTIVITY	1-382811-6	OR EQUIVALENT

NOTES:

1. USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY.

2. ASSEMBLY MUST BE  
RoHS COMPLIANT AND  
LEAD FREE.

3. INSTALL ITEM 164:  
J30, JP6, JP7 & JP9 SHUNT  
1-2

4. INSTALL ITEM 132:  
SJP2 SHUNT 1-2  
SJP3 & SJP4 SHUNT 2-3

5. DNI MEANS DO NOT  
INSTALL COMPONENT.

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