

BILL OF MATERIALS

TIDA-00684

Item	Qty	Part Reference	Value	PCB Footprint	Mfr_Name	Mfr_Part_Number	Note
1	0	C1,C8,C12,C16,C69-C73	.01uF	0402	MURATA	GRM155R71H103KA88D_DNI	DNI
2	34	C231,C233,C246,C259,C276,C278,C391,C393,C395,C397,C399,	.01uF	0402	MURATA	GRM155R71H103KA88D	
3	10	C3,C6,C10,C11,C15,C17,C18,C20-C22	10uF	0603	TDK CORP	C1608X5R1C106M080AB	
4	50	,C5,C7,C9,C13,C14,C23-C28,C31-C40,C169-C171,C174-C197,C4	.1uF	0201	MURATA	GRM033R61A104KE15D	
5	13	,C84,C209,C211,C214,C216,C230,C232,C234,C424,C427,C429,C	2200pF	0402	KEMET	C0402C222J3GACTU	
6	19	C130,C139,C143,C144,C146,C225,C226,C229,C243,C244,C249,C	10uF	0805	MURATA	GRM21BR71A106KE51L	
7	9	C41,C104,C105,C117,C119,C129,C138,C149,C199	.01uF	0603	KEMET	C0603C103K5RACTU	
8	2	C42,C55	27pF	0402	MURATA	GRM155C1H270GA01D	
9	2	C43,C49	100uF	1206	KEMET	C1206C107M9PACTU	
10	2	C44,C46	4.7uF	0603	Kemet	C0603C475K8PACTU	
11	53	C91,C93,C97,C103,C108,C121,C122,C152-C167,C198,C200,C20	.1uF	0402	MURATA	GRM155R71C104KA88D	
12	1	C47	4.7uF	TANT_B	AVX	TAJB475K010RNJ	
13	0	C50,C92,C439	.1uF	0402	MURATA	GRM155R71C104KA88D_DNI	DNI
14	0	C51,C52	22pF	0402	AVX	04025A220KAT2A_DNI	DNI
15	0	C53	.001uF	0402	AVX	04025C102JAT2A_DNI	DNI
16	2	C54,C56	10uF	1206	MURATA	GRM31CR61E106KA12L	
17	11	C57,C66,C277,C340,C341,C392,C394,C396,C405,C409,C411	1uF	0402	MURATA	GRM155R61A105KE15D	
18	1	C61	.68uF	0402	MURATA	GRM155R61A684KE15D	
19	1	C62	3900pF	0402	MURATA	GRM155R71H392KA01D	
20	1	C63	47pF	0402	MURATA	GRM1555C1H470JA01D	
21	1	C77	.01uF	0402	MURATA	GRM155R71H103KA88D	
22	2	C81,C120	100pF	0603	AVX CORP	06031A101GAT2A	
23	1	C85	10pF	0402	KEMET	GRM1555C1H100JA01D	
24	1	C87	10uF	0603	TDK CORP	C1608X5R1C106M080AB	
25	21	C128,C134,C137,C150,C235,C238,C240,C242,C245,C248,C251,C	1uF	0603	Yageo	CC0603KRX7R7BB105	
26	4	C99,C110,C241,C254	47uF	1206	MURATA	GRM31CR61A476ME15L	
27	0	C100,C113	4.7uF	TANT_B	AVX	TAJB475K010RNJ_DNI	DNI
28	1	C101	33uF	TANT_B	AVX	TPSB336K016R0350	
29	8	C115,C118,C131,C132,C141,C142,C201,C423	1uF	0402	MURATA	GRM155R61A105KE15D	

30	3	C123,C247,C260	47uF	1210	Kemet	C1210C476M4PACTU	
31	3	C124,C227,C228	22uF	1210	TDK CORP	C3225X5R1A226M230AA	
32	1	C125	10uF	0805	MURATA	GRM21BR61E106KA73L	
33	2	C126,C135	2.2uF	0603	MURATA	GRM188R71A225KE15D	
34	2	C133,C136	.015uF	0402	MURATA	GRM155R71C153KA01D	
35	2	C145,C147	22uF	1206	Murata	GRM31CR60J226KE19L	
36	1	C148	33pF	0402	KEMET	C0402C330J3GACTU	
37	1	C168	.001uF	0402	AVX	04025C102JAT2A	
38	2	C172,C173	.01uF	0201	TDK	C0603X5R1A103K030BA	
39	5	C202,C204,C218,C222,C420	3.2pF	0402	MURATA	GRM1555C1H3R2BA01D	
40	3	C203,C421,C436	4.5pF	0402	MURATA	GJM1555C1H4R5BB01D	
41	1	C205	27pF	0402	AVX	04025A270JAT2A	
42	31	R90,R91,R93-R95,R97,R102,R108,R109,R132,R134,R136,R139,R	0	0402	PANASONIC	ERJ-2GE0R00X	
43	1	C212	8.2pF	0402	YAGEO	CC0402DRNP09BN8R2	
44	0	C220,C223	1.8pF	0402	KEMET	C0402C189C5GACTU_DNI	DNI
45	1	C221	3pF	0402	MURATA	GRM1555C1H3R0WB01D	
46	1	C224	8pF	0402	MURATA	GJM1555C1H8R0WB01D	
47	4	C263,C264,C267,C268	6.8uF	0805	TDK CORP	C2012X5R1V685K125AC	
48	4	C265,C266,C269,C270	0.1uF	0603	TAIYO YUDEN	GMK107B7104KAHT	
49	0	C419	200pF	0402	MURATA	GRM1555C1H201JA01D_DNI	DNI
50	1	C432	51pF	0402	MURATA	GRM1555C1H510JZ01D	
51	1	C433	18pF	0402	AVX	04025A180FAT2A	
52	1	C434	0	0402	PANASONIC	ERJ-2GE0R00X	OR EQUIVALENT
53	1	C437	100pF	0402	TDK CORP	CGJ2B2C0G1H101J050BA	HIGH RELIABILITY
54	1	C438	36pF	0402	MURATA	GRM1555C1H360GA01D	
55	4	D1-D3,D9	LED BLUE	LED_0805	LITE ON	LTST-C170TBKT	
56	4	D4-D7	LED GREEN	LED_1206	LITE ON	LTST-C150KGKT	
57	1	D8	LED AMBER	LED_1206	LITE ON	LTST-C150AKT	
58	1	D10	MBRB2515L	DIODE_MBRB2515L	ON Semiconductor	MBRB2515LT4G	
59	1	D11	MBRA120E	DIODE_SM_MBRA120E	ON SEMICONDUCTOR	MBRA120ET3G	
60	0	F1	FUSE 2.0A 63V FAST	1206	TE Connectivity	1206SFF200F/63-2_DNI	DNI
61	4	FB1,FB12-FB14	27uF	1206_BEAD_NFM31P	MURATA	NFM31PC276B0J3	
62	13	FB2-FB11,FB15-FB17	120 OHM @ 100MHz	1206	MURATA	BLM31PG121SN1L	
63	7	FB18,FB19,FB21,FB25,FB29,FB32,FB33	120 OHM @ 100MHz	IND_0402	MURATA	BLM15AG121SN1	
64	4	FB20,FB22,FB23,FB26	1K OHM @ 100MHz	IND_0805	MURATA	BLM21AG102SN1D	
65	1	FB24	50 OHM @ 100MHz	1206	MURATA	BLM31PG500SN1	
66	2	FB30,FB31	27uF	1206_BEAD_NFM31P	MURATA	NFM31PC276B0J3B	
67	1	FB34	1K	1810	Taiyo Yuden	FBMH4525HM102NT	
68	0	FB36	1K @ 100MHz	0603	TAIYO YUDEN	BLM21AG102SN1D_DNI	DNI
69	9	J1,J3,J5,J7,J13,J17-J20	SMP_PCB_SMT	SMP_B120	MOLEX INC.	0853050232	
70	1	J16	CON,SMVT,40x10,SEAM	CON_SMVT_40x10_SEAM_MTG	SAMTEC	SEAM-40-02.0-S-10-2-A-K-TR	
71	5	J2,J4,J8,J11,J22	SMA END LAUNCH	SMA_SMEL_DUAL_PSF-S01_250x215	Johnson Components	142-0701-851	
72	1	J6	CONN JACK PWR	CON_RAPC722_JACK_THVT_3	Switchcraft	RAPC722X	

73	0	J9,J10	HDR, THVT, 2X10, .100	HDR_THVT_2x10_100_M	SAMTEC	TSW-110-07-G-D_DNI	DNI
74	0	J12	SMP_PCB_SMT	smp_b120	MOLEX INC.	0853050232_DNI	DNI
75	1	J14	USB_MINI_AB	CON_SMRT_USBMINI_AB_WURTH	WURTH ELEKTRONIK	651305142821	
76	1	J15	HDR, THVT, 2X5, .100	HDR_THVT_2x5_100_M	SAMTEC	TSW-105-07-G-D	
77	1	J21	HDR, THVT, 2X4, .100	HDR_THVT_2x4_100_M	SAMTEC	TSW-104-07-G-D	
78	5	JP1,JP6-JP9	HDR, THVT, 3POS	HDR_THVT_1x3_100_M	SAMTEC	HTSW-103-07-G-S	SHUNT 1-2
79	1	JP2	HDR, THVT, 2POS	HDR_THVT_1X2_100_M	SAMTEC	HTSW-102-08-G-S	SHUNT 1-2
80	5	JP3-JP5,JP10,JP11	HDR, THVT, 3POS	HDR_THVT_1x3_100_M	SAMTEC	HTSW-103-07-G-S	SHUNT 2-3
81	2	L1,L2	2.2uH	LPS3015	Coilcraft	LPS3015-222MR	
82	2	L3,L4	15nH	0402	COILCRAFT	0402HP-15NXGLU	
83	4	L5,L6,L8,L9	30nH	0402	COILCRAFT	0402HP-30NXGLU	
84	1	L7	56nH	IND_0603	COILCRAFT	0603CS-56NXGE	
85	1	L10	120nH	IND_0603	COILCRAFT	0603CS-R12XGE	
86	1	L11	2.2uH	IND_SM_118X144	VISHAY	IHLP1212BZER2R2M11	
87	1	L12	240nH	ind_0603	COILCRAFT	0603LS-241XGLU	
88	2	MT1,MT2	DOFF, FEMALE, 4-40 x 1	MFG125_PLATED	RAF ELECTRONIC	1648-440-AL	STANDOFF
89	0	PP1-PP10	PROBE POINT	PROBE_POINT_22PAD	N/A	N/A	
90	1	Q1	CSD18532Q5	SON_Q5B_8	Texas Instruments	CSD18532Q5B	
91	3	Q2-Q4	DTC114EET1G	SOT_416_3_63x31	ON Semiconductor	DTC114EET1G	
92	1	R1	0	0805	PANASONIC	ERJ-6GEY0R00V	
93	0	R3,R11,R12,R14	49.9	0402	PANASONIC	ERJ-2RKF49R9X_DNI	DNI
94	0	R25,R27,R50,R92,R96,R129-R131,R133,R137,R140,R279,R283,R284	0	0402	PANASONIC	ERJ-2GE0R00X_DNI	DNI
95	0	R6,R10,R13,R112	49.9	0201	PANASONIC	ERJ-1GEF49R9C_DNI	DNI
96	8	R8,R9,R30,R32,R39,R43,R235,R237	49.9	0201	PANASONIC	ERJ-1GEF49R9C	
97	14	R1,R33,R34,R37,R40,R44,R77,R99,R100,R104,R236,R238,R241,R242	49.9	0402	PANASONIC	ERJ-2RKF49R9X	
98	5	R35,R41,R45,R242,R254	150	0402	PANASONIC	ERJ-2RKF1500X	
99	2	R38,R239	95.3	0402	ROHM SEMI	TRR01MZPF95R3	
100	2	R42,R46	40.2	0402	PANASONIC	ERJ-2RKF40R2X	
101	1	R47	309k	0603	PANASONIC	ERJ-3EKF3093V	
102	1	R48	102k	0603	PANASONIC	ERJ-3EKF1023V	
103	7	R51,R119-R121,R226,R228,R229	0	0603	PANASONIC	ERJ-3GEY0R00V	
104	1	R52	12k	0402	PANASONIC	ERJ-2RKF1202X	
105	1	R53	4.7k	0402	PANASONIC	ERJ-2RKF4701X	
106	5	R54,R57,R63,R101,R110	1k	0402	PANASONIC	ERJ-2RKF1001X	
107	2	R55,R56	10	0402	PANASONIC	ERJ-2RKF10R0X	
108	6	R58,R60,R61,R64,R107,R111	10k	0402	PANASONIC	ERJ-2RKF1002X	
109	1	R59	2.2k	0402	Yageo	RC0402FR-072K2L	
110	0	R62	1k	0402	PANASONIC	ERJ-2RKF1001X_DNI	DNI
111	1	R65	620	0402	PANASONIC	ERJ-2GEJ621X	
112	1	R66	39k	0402	PANASONIC	ERJ-2GEJ393X	
113	0	R67-R70,R79,R80	240	0402	PANASONIC	ERJ-2RKF2400X_DNI	DNI
114	2	R71,R72	121	0402	PANASONIC	ERJ-2RKF1210X	
115	0	R73,R78	130	0603	DALE	CRCW0603130RFKEA_DNI	DNI

116	0	R74,R87	82	0603	DALE	CRCW060382R0FKEA_DNI	DNI
117	4	R75,R76,R83,R84	240	0402	PANASONIC	ERJ-2RKF2400X	
118	4	R81,R82,R85,R86	750	0603	DALE	CRCW0603750RFKEA	
119	6	R88,R105,R106,R115,R116,R138	100	0402	PANASONIC	ERJ-2RKF1000X	
120	2	R89,R98	200	0402	PANASONIC	ERJ-2RKF2000X	
121	0	R113,R114	121	0402	PANASONIC	ERJ-2RKF1210X_DNI	DNI
122	5	R126-R128,R143,R154	10k	0603	PANASONIC	ERJ-3EKF1002V	
123	1	R135	1.91k	0201	PANASONIC	ERJ-1GEF1911C	
124	1	R141	162k	0603	PANASONIC	ERJ-3EKF1623V	
125	1	R142	143k	0603	PANASONIC	ERJ-3EKF1433V	
126	1	R148	475k	0402	PANASONIC	ERJ-2RKF4753X	
127	1	R150	95.3k	0402	PANASONIC	ERJ-2RKF9532X	
128	1	R151	150k	0402	Yageo	RC0402FR-07150KL	
129	1	R152	52.3k	0603	PANASONIC	ERJ-3EKF5232V	
130	1	R153	182k	0402	Vishay/Dale	CRCW0402182KFKED	
131	1	R173	2.87k	0603	PANASONIC	ERJ-3EKF2871V	
132	1	R174	3.65k	0603	PANASONIC	ERJ-3EKF3651V	
133	1	R175	4.99k	0603	PANASONIC	ERJ-3EKF4991V	
134	1	R176	634	0603	PANASONIC	ERJ-3EKF6340V	
135	2	R234,R240	220	0402	ROHM SEMI	TRR01MZPF2200	
136	2	R244,R248	20	0402	PANASONIC	ERJ-2RKF20R0X	
137	2	R245,R249	215	0402	PANASONIC	ERJ-2RKF2150X	
138	2	R246,R250	976	0402	SAMSUNG	RC1005F9760CS	
139	2	R247,R251	20	1210	PANASONIC	ERA-14HD200U	
140	1	R253	40.2	1210	PANASONIC	ERJ-14NF40R2U	
141	0	SJP1	JUMPER_L_0603_SMT	JUMPER_SMD_L_0603	DNI	DNI	
142	0	SJP2	JUMPER_L_0603_SMT	JUMPER_SMD_L_0603	DNI	DNI	SHUNT 2-3
143	0	SJP3	JUMPER_L_0603_SMT	JUMPER_SMD_L_0603	DNI	DNI	SHUNT 1-2
144	2	SW1,SW2	SW, TACTILE SPST-NO	SW_SMVT_SPST_4	C&K	KT11P3JM34LFS	
145	1	T1	ADT2-1T+	TFMR_6_RF_DUAL_FOOTPRINT	Mini-Circuits	ADT2-1T+	
146	0	T2	MABA-007159-000000	TFMR_6_RF_DUAL_FOOTPRINT	AMP M/A-COM	MABA-007159-000000_DNI	DNI
147	3	TP1,TP2,TP29	RED	TP_THVT_100_RND	KEYSTONE	5000	
148	20	TP3-TP11,TP22,TP27,TP30,TP35-TP37,TP41,TP44,TP46-TP48	BLK	TP_THVT_100_RND_GND	KEYSTONE	5001	
149	7	TP13,TP21,TP26,TP28,TP34,TP39,TP40	GRN	TP_THVT_100_RND	KEYSTONE	5116	
150	14	TP14-TP20,TP23-TP25,TP31-TP33,TP38	BLU	TP_THVT_100_RND	KEYSTONE	5117	
151	2	TP43,TP45	ORN	TP_THVT_100_RND	KEYSTONE	5003	
152	1	U1	5M80ZT100	tqfp_100_551x551_20	ALTERA	5M80ZT100C5N	
153	1	U3	FT2232HL	LQFP_64_402x402_20	FTDI	FT2232HL-TRAY	
154	1	U4	93LC46B-I/MS	MSOP_8_118X118_26	Microchip	93LC46B-I/MS	
155	1	U5	LMK04828	QFN_64_360X360_0P50MM_PWRPAD	Texas Instruments	LMK04828BISQ/NOPB	
156	4	U6,U8,U20,U21	TPS7A4700	qfn20_rgw_p65pitch	Texas Instruments	TPS7A4700RGWT	
157	1	U7	TPS62420	SON_DRC_10	Texas Instruments	TPS62420DRCR	

158	2	U9,U11	TPS74201	qfn20_rgw_p65pitch	Texas Instruments	TPS74201RGWR	
159	1	U10	TPS2400	DBV5	Texas Instruments	TPS2400DBVT	
160	1	U12	TLV70233DBV	SOT_5_118X67_57	Texas Instruments	TLV70233DBVR	
161	1	U13	LMH5401	QFN_14_98x98_0P50MM	Texas Instruments	LMH5401IRMS	
162	2	U14,U17	THS3217	PVQFN_16_163x163_0p65MM	Texas Instruments	THS3217	
163	1	U15	SN74AUP1T14DCK	SOP_5_85X55_26	Texas Instruments	SN74AUP1T14DCKR	
164	1	U16	TPS62160	SON_DSG_8	Texas Instruments	TPS62160DSG	
165	2	U18,U19	THS3091DDA	SOIC_8_DDA	Texas Instruments	THS3091DDA	
166	2	U22,U23	TPS7A3301	QFN20_RGW_P65PITCH	Texas Instruments	TPS7A3301RGW	
167	1	U2	DAC38J84	BGA_144_10MMx10MM_0P80MM	Texas Instruments	DAC38J84IAAV	
168	1	Y1	122.88MHz	VCXO_6_CUSTOM	Crystek	CVHD-950-122.880	
169	1	Y2	12MHz w/ 10pF	XTAL_4_SM_130X102	Abracon	ABM8G-12.000MHZ-B4Y-T	
170	1		BARE BOARD, TSW3080		TTM	TSW3080 REV E2	
171	2		CREW, PHIL, 4-40x3/4", 5		BUILDING FASTENERS	PMSSS 440 0075 PH	OR EQUIVALENT
172	11		SHUNT-HEADER		TE CONNECTIVITY	1-382811-6	SHUNT FOR HEADER
173	2		SHUNT-JUMPER-0603		PANASONIC	ERJ-3GEY0R00V	SHUNT FOR JUMPER

NOTES:

1. DNI - DO NOT INSTALL THIS COMPONENT.
2. ASSEMBLY MUST BE LEAD FREE AND RoHS COMPLIANT.
3. USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY.

4. INSTALL ITEM 172:

JP1, JP2, JP6 - JP9 PINS 1-2
 JP3-JP5, JP10, JP11 PINS 2-3

5. INSTALL ITEM 173:

SJP2 PINS 2-3
 SJP3 PINS 1-2

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