

TSW1400 RevD BOM					COMPONENTS AND ASSEMBLY SHALL BE RoHS COMPLIANT	DNI = DO NOT INSTALL	THESE ARE UPDATES THAT WERE DONE TO THE PREVIOUS RevD BOARDS AND SHOULD MATCH KRYPTON'S RevD PRODUCTION BOM
Item	Qty	Part Reference	Value	PCB Footprint	Mfr. Name	Mfr. Part Number	Note
1	28	C1,C5,C13,C14,C15,C16,C17,C18,C19,C46,C49,C51,C53,C59,C61,C64,C65,C75,C82,C84,C86,C97,C99,C338,C339,C340,C341,C342	0.1uF	0603	Murata	GRM188R71C104KA01D	
2	5	C2,C6,C36,C73,C109	4.7uF	0603	Kemet	C0603C475K8PACTU	
3	23	C3,C8,C52,C55,C56,C67,C68,C79,C96,C102,C117,C124,C139,C149,C150,C151,C152,C153,C154,C155,C163,C295,C336	10uF	0603	Murata	GRM188R60J106ME47D	
4	2	C4,C7	100uF	1206	Kemet	C1206C107M9PACTU	
5	1	C9	4.7uF	TANT_A	AVX	TAJA475K006RNJ	
6	1	C10	0.01uF	0402	Murata	GRM155R71E103KA01D	
7	0	C11,C12	22pF	0603	Murata	GRM1885C2A220JA01D_DNI	DNI
8	2	C20,C21	27pF	0603	Murata	ERB1885C2E270JDX5D	
9	23	C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C41,C45,C95,C227,C264,C291,C292,C293,C349,C350	0.1uF	0402	Murata	GRM155R61A104KA01D	
10	6	C35,C88,C145,C146,C147,C148	100uF	1210	Murata	GRM32ER60J107ME20L	
11	4	C37,C94,C134,C156	2.2uF	0603	Yageo	CC0603KRX5R6BB225	
12	8	C38,C40,C199,C200,C201,C202,C203,C204	1uF	0402	Murata	GRM155R61A105KE15D	
13	5	C39,C115,C116,C197,C198	0.47uF	0402	Murata	GRM155F51A474ZE01D	
14	10	C47,C48,C50,C60,C76,C83,C98,C294,C334,C335	1uF	0603	Murata	GRM188R60J105KA01D	
15	2	C54,C66	470uF	TANT_E	Kemet	B45197A2477K509	
16	2	C57,C69	330pF	0603	Murata	GRM188R72A331KA01D	
17	3	C58,C70,C91	0.018uF	0603	Murata	GRM188R71H183KA01D	
18	9	C62,C71,C72,C85,C92,C100,C331,C332,C333	22uF	0603	Taiyo Yuden	AMK107BJ226MA-T	
19	2	C63,C74	1500pF	0603	Murata	GRM188R71H152KA01D	
20	1	C77	47uF	CAP_SMD_8MM	Panasonic	EEE-HA1V470UP	
21	1	C78	680uF	CAP_SMD_12_5MM	Panasonic	EEV-FK1V681Q	
22	2	C80,C81	10uF	1210	Murata	GRM32DR71C106KA01L	
23	0	C87	0.1uF	0603	Murata	GRM188R71C104KA01D_DNI	DNI
24	1	C90	1200pF	0603	AVX	06035C122KAT2A	
26	1	C93	.022uF	0603	AVX	0603YC223KAT2A	
27	2	C101,C114	22uF	1210	Murata	GRM32ER61A226KE20L	
28	96	C103,C104,C105,C106,C107,C108,C110,C111,C112,C113,C118,C119,C120,C121,C122,C123,C125,C126,C127,C128,C129,C130,C131,C132,C133,C135,C136,C137,C138,C140,C141,C143,C157,C158,C159,C160,C161,C162,C164,C165,C186,C189,C218,C224,C233,C234,C235,C236,C237,C238,C239,C240,C241,C242,C243,C244,C245,C246,C247,C248,C249,C250,C251,C252,C253,C254,C255,C257,C258,C259,C265,C266,C267,C268,C269,C270,C271,C272,C273,C274,C275,C276,C277,C278,C279,C280,C281,C282,C283,C284,C285,C286,C287,C288,C289,C290	0.1uF	0201	Murata	GRM033R60J104KE19D	
29	1	C144	330uF	TANT_D	Kemet	T520D337M006ATE015	
30	5	C166,C167,C168,C169,C170	0.1uF	C-0603_X2Y	Johanson Dielectrics Inc	100X14W104MV4T	
31	2	C171,C172	0.22uF	C-0603_X2Y	Johanson Dielectrics Inc	160X14X224MV4T	
32	6	C173,C174,C175,C176,C177,C178	10nF	C-0603_X2Y	Johanson Dielectrics Inc	500X14W103MV4T	
33	45	C179,C180,C181,C182,C183,C184,C185,C187,C188,C190,C191,C192,C193,C194,C195,C196,C205,C206,C207,C208,C209,C210,C211,C212,C213,C214,C215,C216,C217,C219,C220,C221,C222,C223,C225,C226,C228,C229,C230,C231,C232,C260,C261,C262,C263	22nF	0201	Murata	GRM033R60J223KE01D	
34	1	C296	.027uF	0603	AVX	06035C273KAT2A	
35	3	C328,C329,C330	2.2uF	0402	Taiyo Yuden	JMK105BJ225MV-F	
36	0	C337	270pF	0603	Murata	GRM1885C1H271JA01D_DNI	DNI
37	4	C351,C352,C353,C354	10pF	0402	Murata	GRM1555C1H100JZ01D	
38	1	C355	4.7pF	0603	Murata	GRM1555C1H47CZ01D	
39	4	CN1,CN4,CN7,CN10	0.1uF x4	CA-AVE-0603-8	AVX	W3A4YC104KAT2A	
40	9	D1,D2,D3,D4,D5,D6,D7,D8,D9	GREEN	LED_0805	Liteon	LTST-C170KGKT	
41	1	D10	LED GREEN	LED_0805	Panasonic	LNJ306G5UUX	
42	1	D11	SS3P6L, 3A, 60V	DIODE_SM_SS3P6L	Vishay	SS3P6L-M3/86A	
43	1	D14	B540C-13-F	DO-214AB_RECTRON	Diodes Inc.	B540C-13-F	
44	2	DN1, DN2	BAT54CW	SOT_323	Diodes Inc.	BAT54CW-7-F	
45	1	F1	4 AMP FUSE	FUSE_SM_NANO	Littelfuse	154004	
46	0	F2	2 AMP FUSE	FUSE_SM_NANO	Littelfuse	0154002.DR_DNI	DNI
47	5	FB1,FB2,FB4,FB5,FB6	68 OHM @ 100MHz	1206	Panasonic	EXC-ML32A680J	
48	1	J1	SSQ-144-01-G-D	HDR_THVT_2x44_100_F	Samtec	SSQ-144-01-G-D	
49	1	J2	QSH-030-01-L-D-A	CON_SMVT_60POS_QSH_SAMTEC	Samtec	QSH-030-01-L-D-A	
50	1	J3	QSH-060-01-L-D-A-RT1	CON_SMVT_120POS_QSH_SAMTEC_RT1	Samtec	QSH-060-01-L-D-A-RT1	
51	1	J4	QSH-090-01-L-D-A-RT1	CON_SMVT_180POS_QSH_SAMTEC_RT1	Samtec	QSH-090-01-L-D-A-RT1	
52	1	J5	USB_MINI_AB_MNE20-5G5P10	CON_SMRT_USBMNE20_F	ACON	MNE20-5G5P10	

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53	1	J6	SOCKET-SO-DIMM200	SOCKET-SO-DIMM200	Tyco	1473005-4	PURCHASE AND INSTALL MEMORY CARD	
54	6	J7,J11,J14,J15,J16,J17	SMB_THVT_REC	SMA_THVT_312x312	Johnson Components	142-0701-201		
55	2	J8,J10	BANANA JACK_RED	CON_THVT_BANANA JACK_250DIA	Allied Electronics	ST-351A		NEW P/N
56	1	J9	BANANA JACK_BLK	CON_THVT_BANANA JACK_250DIA	Allied Electronics	ST-351B		NEW P/N
57	1	J12	CONN JACK PWR	CON_THRT_POWERJACK_RAPC722	Switchcraft	RAPC722		
58	1	J13	102153-1	CON_THVT_2x5_100_M	Tyco	102153-1		
59	1	J18	22-11-2032	HDR_THVT_1x3_100_M_KEYED				
60	3	JP3,JP4,JP8	HEADER_1x3_100_430L	HDR_THVT_1x3_100_M	Samtec	HMTSW-103-07-G-S-.240	(SHUNT PINS 2-3 USING ITEM 140)	
61	3	JP5,JP6,JP7	HEADER_1X2_100	HDR_THVT_1X2_100_M	Samtec	HMTSW-102-07-G-S-.240	(SHUNT PINS 1-2 USING ITEM 140)	
62	1	L3	1K @ 100MHZ	0805	Murata	BLM21AG102SN1D		
63	1	L4	1.5A/330	IND_0805	TDK	MPZ2012S331A		
64	2	L6,L8	1.5uH	IND_SM_MSS1048	Coilcraft	MSS1048-152NL		
65	4	L7,L9,L10,L11	2.2uH	IND_SM_7447789002	Würth	7447789002		
66	1	L12	10uH	IND_SM_MSS1048	Coilcraft	MSS1038-103NL		
67	1	R1	10	0603	Yageo	RC0603FR-0710RL		
68	1	R2	10	0603	Yageo	RC0603FR-0733RL		
69	1	R3	1K	0603	Panasonic	ERJ-3EKF1001V		
70	1	R4	12K	0603	Panasonic	ERJ-3EKF1202V		
71	11	R5,R6,R7,R9,R10,R45,R50,R51,R53,R91,R92	10K	0402	Panasonic	ERJ-2RKF1002X		REMOVED R133
72	1	R8	2.2K	0402	Panasonic	ERJ-2RKF2201X		
73	2	R15,R16	100	0603	Panasonic	ERJ-3EKF1000V		
74	2	R17,R18	50	0402	Susumu Co Ltd	RG1005P-49R9-B-T5		
75	14	R19,R22,R25,R26,R28,R35,R37,R42,R47,R113,R114,R125,R146,R147	10K	0603	Panasonic	ERJ-3EKF1002V		
76	4	R20,R23,R31,R39	100K	0603	Panasonic	ERJ-3EKF1003V		
77	1	R21	26.7K	0603	Panasonic	ERJ-3EKF2672V		
78	1	R24	1.24K	0603	Panasonic	ERJ-3EKF1241V		
79	2	R27,R34	2.49K	0603	Panasonic	ERJ-3EKF2491V		
81	0	R29,R33	196K	0603	Panasonic	ERJ-3EKF1963V_DNI	DNI	
82	0	R30,R36	56.2K	0603	Panasonic	ERJ-3EKF5622V_DNI	DNI	
83	1	R32	12.4K	0603	Panasonic	ERJ-3EKF1242V		
85	1	R38	34K	0603	Panasonic	ERJ-3EKF3402V		
86	1	R40	21.5K	0603	Panasonic	ERJ-3EKF2152V		
87	1	R41	1.54K	0603	Panasonic	ERJ-3EKF1541V		
88	0	R43	200K	0603	Panasonic	ERJ-3EKF2003V_DNI	DNI	
89	0	R44	57.6K	0603	Panasonic	ERJ-3EKF5762V_DNI	DNI	
90	1	R46	4.7K	0402	Panasonic	ERJ-2RKF4701X		
91	1	R48	30.1K	0603	Panasonic	ERJ-3EKF3012V		
92	1	R49	680	0402	Panasonic	ERA-W27J681X		
93	14	R52,R55,R65,R80,R81,R82,R83,R85,R86,R87,R103,R133,R144,R158	1K	0402	Panasonic	ERJ-2RKF1001X		ADDED R133
94	4	R54,R56,R104,R105	100	0201	Panasonic	ERJ-1GEF1000C		
95	20	R61,R62,R63,R64,R67,R89,R90,R95,R99,R100,R101,R102,R137,R140,R142,R143,R149,R150,R151,R152	0	0402	Panasonic	ERJ-2GE0R00X		ADDED 6 RESISTORS
96	8	R68,R69,R70,R71,R72,R73,R74,R75	165	0603	Panasonic	ERJ-3EKF1650V		
97	1	R76	100	0402	Panasonic	ERJ-2RKF1000X		
98	2	R77,R79	4.75K	0402	Panasonic	ERJ-2RKF4751X		
99	0	R84,R88	1K	0402	Panasonic	ERJ-2RKF1001X_DNI	DNI	
100	2	R93,R94	2K	0402	Panasonic	ERJ-2RKF2001X		
101	0	R96	10K	0603	Panasonic	ERJ-3EKF1002V_DNI	DNI	
102	1	R97	3.57K	0603	Panasonic	ERJ-3EKF3571V		
103	1	R98	1.27K	0603	Panasonic	ERJ-3EKF1271V		
104	0	R57,R58,R59,R60,R66,R126,R127,R128,R129,R130,R131,R132,R138,R139,R141,R153,R156	0	0402	Panasonic	ERJ-2GE0R00X_DNI	DNI	ADDED 11 RESISTORS
105	10	R115,R116,R117,R118,R119,R121,R122,R123,R124,R154	0	0603	Panasonic	ERJ-3GEY0R00V		
106	1	R120	4.75K	0603	Panasonic	ERJ-3EKF4751V		
107	1	R134	24.9	0402	Panasonic	ERJ-2RKF249X		
108	0	R135,R136	0	0201	Panasonic	ERJ-1GE0R00C_DNI	DNI	
109	1	R145	38.3K	0603	Panasonic	ERJ-3EKF3832V		
110	1	R148	80.6K	0603	Panasonic	ERJ-3EKF8062V		
111	0	R155,R157	0	0603	Panasonic	ERJ-3GEY0R00V_DNI	DNI	
112	7	RN8,RN9,RN12,RN13,RN18,RN19,RN24	56	RA-VEX-0402-8	Yageo	YC124-JR-0756R		
113	0	SJP1,SJP2	SOLDER JUMPER, 0603	SMD_JUMPER_1x3	DNI	DNI	(SHUNT PINS 2-3 USING ITEM 141)	
114	0	SJP3	SOLDER JUMPER, 0603	SMD_JUMPER_1x3	DNI	DNI	(SHUNT PINS 1-2 USING ITEM 141)	
115	1	SW1	TDA04H0SB1R	SW-SMD-8	CK Components	TDA04H0SB1R		
116	1	SW2	KT11P3JM	SW_SMVT_SPST_4	ITT Industries	KT11P3JM		INSTALL
117	4	SW3,SW4,SW5,SW6	KT11P3JM	SW_SMVT_SPST_4	ITT Industries	KT11P3JM		
118	1	SW7	SLIDE-4P2T	SW_THVT_4PDT_SLIDE_12	E-SWITCH	EG4208A		
119	15	TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP28,TP29	HMTSW-101-07-G-S-.240	HDR_THVT_1x1	Samtec	HMTSW-101-07-G-S-.240		
120	7	TP14,TP16,TP17,TP18,TP19,TP20,TP21	Testloop_Red	TP_THVT_060_RND	Components Corporation	TP-105-01-02		TP14(SILKSCREEN) SHOULD BE BLACK
121	1	TP15	Testloop_White	TP_THVT_060_RND	Components Corporation	TP-105-01-09		

Item	Qty	Part Reference	Value	PCB Footprint	Mfr Name	Mfr Part Number	Note	
122	6	TP22,TP23,TP24,TP25,TP26,TP27	Testloop_Black	TP_THVT_060_RND	Components Corporation	TP-105-01-00		TP23(SILKSCREEN) SHOULD BE RED
123	2	U1,U14	SN74LVC3G07	VSSOP_8_83X94_0P5MM	Texas Instruments	SN74LVC3G07DCU		
124	1	U2	TPS76933DBVT	SOT_5_118x67_57	Texas Instruments	TPS76933DBVT		
125	1	U3	FT4232H	LQFP_64_402x402_20	FTDI	FT4232H		
126	1	U4	93LC46B-I/SN	SOIC-8	Microchip	93LC46B-I/SN		
127	1	U6	SN65LVDS1DBVR	SOP_5_118x67_37	Texas Instruments	SN65LVDS1DBVR		
128	1	U7	TPS74401RGW	QFN_20_203x203_26_pwrpad	Texas Instruments	TPS74401RGW		
129	3	U8,U10,U13	TPS54620RGY	QFN_14_144x144_pwrpad	Texas Instruments	TPS54620RGY		
130	3	U9,U12,U15	TPS54325PWP	HTSSOP_14_201x177_26_pwrpad	Texas Instruments	TPS54325PWP		
131	1	U11	TPS51100DGQ	SOIC_10_122x122_50_pwrpad	Texas Instruments	TPS51100DGQ		
132	2	U16,U17	TXB0108PWR	TSSOP_20_260x177_26	Texas Instruments	TXB0108PWR		
133	1	U18	TPS74701DRCR	SON_10_124x124_pwrpad	Texas Instruments	TPS74701DRCR		
134	1	U19	EPCS64	SOIC_16_410X299_50	Altera	EPCS64S16N		
135	1	U20	TPS61175	HTSSOP_14_201X177_26_PWRPAD	Texas Instruments	TPS61175PWP		
136	1	U5	EP4SGX70	BGA_1152_39	Altera	EP4SGX70HF35C3N		I HAVE 12 UNITS, KRYPTON WILL NEED TO PURCHASE 8 MORE
137	1	Y1	12MHz w/ 10pF	XTAL_4_SM_130x102	Abrakon	ABM8G-12.000MHZ-B4Y-T		
138	1	Y2	SM5545TEV-100.0MHZ	OSC-3X5mm	Pietronics	SM5545TEV-100.0M		
139	0	Z_FANHEATSINK	FAN HEATSINK FOR FPGA		RADIAN HEATSINKS	FB3L3_DNI	DNI	
140	6	Z_SH-H1,Z_SH-H2,Z_SH-H3,Z_SH-H4,Z_SH-H5,Z_SH-H6	SHUNT-HEADER		Keltron	MJ-5.97-G or equivalent	SHUNT FOR HEADER	
141	3	Z_SH-J1,Z_SH-J2,Z_SH-J3	SHUNT-JUMPER-0603		Panasonic	ERJ-3GEY0R00V	SHUNT FOR JUMPER	
142	4	Z_STANDOFF SCREW1,Z_STANDOFF SCREW2,Z_STANDOFF SCREW3,Z_STANDOFF SCREW4	PANHEAD SCREW 4-40 x 3/8		Building Fasteners	PMSSS 440 0038 PH	SCREW FOR STANDOFF	
143	4	Z_STANDOFF1,Z_STANDOFF2,Z_STANDOFF3,Z_STANDOFF4	STANDOFF ALUM HEX 4-40 x .750"		Keystone	2204	STANDOFF	NEW P/N FOR .750"

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