

Boxer-6914

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 18117.566136 ppm MTBF: 55,195 Hours
---------	--

Issue date	Approval	Test Engineer
04/13/2015	KJ Wang	Louie Lee

Reliability Prediction (MTBF)

I . Model Name: Boxer-6914

II . Prediction Date: April. 13, 2015

III . Prediction Site: AAEON Q.E. Dept.

IV . Predicted by: Louie Lee

V . Equipment: Windchill Quality Solutions 10.1

VI. Simulation Environment:

- Temperature: 30 degrees C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The Failure rate multiplier is 1000000000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:

Boxer-6914 (9697CV000A-D ; 9697T30205-D ; 9697T33500-D ; 9697T31002-D):

- Failure Rate: 18117.566136 ppm

- MTBF: 55,195 Hours

**AAEON Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 18117.566136
MTBF (hrs): 55,195
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
Boxer-6914	System		1	18117.566136	55,195
COM-CVB	9697CV000A-D		1	7388.601667	135,344
PER-T302	9697T30205-D		1	10688.707838	93,557
PER-T310	9697T31002-D		1	588.419648	1,699,467
PER-T335	9697T33500-D		1	125.647199	7,958,793

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050501004	Resistor	R195		2.547039	1	282340674.079668
1050501234	Resistor	R92		2.547039	1	282340674.079668
1050501834	Resistor	R580		2.547039	1	282340674.079668
1050502004	Resistor	R203		2.547039	1	282340674.079668
1050502204	Resistor	R517		2.547039	1	282340674.079668
1050504724	Resistor	R534		2.547039	1	282340674.079668
1050504764	Resistor	R132,R301		2.547039	2	154078778.388085
1050505124	Resistor	R411		2.547039	1	282340674.079668
1050505633	Resistor	R585		2.547039	1	282340674.079668
1050507524	Resistor	R140,R477		2.547039	2	154078778.388085
1050507530	Resistor	R121,R329,R96		2.547039	3	107020754.986850
1050510034	Resistor	R162,R202,R258,R356,R395,R461,R485,R537,R626,R632,R635,R750		2.547039	12	29507083.749401
1050511009	Resistor	R247		2.547039	1	282340674.079668
1050512104	Resistor	R130,R367		2.547039	2	154078778.388085
1050513034	Resistor	R143,R300,R573		2.547039	3	107020754.986850
1050518034	Resistor	R574		2.547039	1	282340674.079668
1050520004	Resistor	R388		2.547039	1	282340674.079668
1050522114	Resistor	R564		2.547039	1	282340674.079668
1050524904	Resistor	R122		2.547039	1	282340674.079668
1050524924	Resistor	R749		2.547039	1	282340674.079668
1050560434	Resistor	R495		2.547039	1	282340674.079668
1050561934	Resistor	R548		2.547039	1	282340674.079668
1050569824	Resistor	R339		2.547039	1	282340674.079668
1050590964	Resistor	R230,R254,R263,R433		2.547039	4	82309758.689546
1050703334	Resistor	R563		2.547039	1	282340674.079668
1059700001	Resistor	R107		2.547039	1	282340674.079668
105A500139	Resistor	R105,R106,R120,R3,R354,R355,R363,R364,R47,R493,R524,R55		2.547039	12	29507083.749401
105A500239	Resistor	R289,R376,R577		2.547039	3	107020754.986850
105A500333	Resistor	R384		2.547039	1	282340674.079668

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A501039	Resistor	R110,R125,R296, R306,R365,R387, R409,R436,R489, R546,R557,R558, R566,R570,R571, R579,R581,R583, R624,R650,R660		2.547039	21	17274945.076062
105A501529	Resistor	R576		2.547039	1	282340674.079668
105A501539	Resistor	R90		2.547039	1	282340674.079668
105A501623	Resistor	R236		2.547039	1	282340674.079668
105A502039	Resistor	R4,R68		2.547039	2	154078778.388085
105A503309	Resistor	R238,R245,R257, R265,R270,R271, R272,R283,R284, R428,R467		2.547039	11	32049696.385471
105A505109	Resistor	R158,R197,R198, R199,R200,R201		2.547039	6	56573956.677649
105A505163	Resistor	R358		2.547039	1	282340674.079668
105A505629	Resistor	R545,R575,R582		2.547039	3	107020754.986850
105A507509	Resistor	R555		2.547039	1	282340674.079668
105A510009	Resistor	R133,R246,R316, R372,R373,R374, R375,R39,R427,R504, R512,R514,R531, R547,R57		2.547039	15	23852782.943395
105A513009	Resistor	R552		2.547039	1	282340674.079668
105A515009	Resistor	R248,R249,R250		2.547039	3	107020754.986850
105A522669	Resistor	R118,R204		2.547039	2	154078778.388085
105A527403	Resistor	R112		2.547039	1	282340674.079668
105A528723	Resistor	R415		2.547039	1	282340674.079668
105A531613	Resistor	R131		2.547039	1	282340674.079668
105A533269	Resistor	R117		2.547039	1	282340674.079668

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A549919	Resistor	R510,R515,R520		2.547039	3	107020754.986850
105A549969	Resistor	R464,R465		2.547039	2	154078778.388085
105A551119	Resistor	R565		2.547039	1	282340674.079668
105A560469	Resistor	R171,R208		2.547039	2	154078778.388085
105A561909	Resistor	R297		2.547039	1	282340674.079668
105A561924	Resistor	R549		2.547039	1	282340674.079668
105A561933	Resistor	R351		2.547039	1	282340674.079668
105A562034	Resistor	R505		2.547039	1	282340674.079668
105A568103	Resistor	R266		2.547039	1	282340674.079668
105A573223	Resistor	R392		2.547039	1	282340674.079668
105A700003	Resistor	C83,R108,R129,R362,R393,R420,R498,R513,R536,R654,R656,R658		2.547039	12	29507083.749401
105A700009	Resistor	C501,C510,C73,R10,R109,R124,R127,R13,R134,R135,R136,R137,R138,R139,R141,R142,R145,R146,R148,R149,R151,R155,R161,R163,R167,R169,R180,R186,R189,R196,R2,R206,R207,R212,R219,R220,R221,R222,R223,R224,R226,R227,R235,R244,R253,R26,R276,R278,R279, R		2.547039	126	3014741.579367

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700139	Resistor	R114,R119,R166, R168,R178,R211, R214,R215,R232, R234,R242,R282, R291,R303,R326, R330,R332,R337, R338,R346,R438, R457,R459,R46, R460,R491,R499, R518, R521,R56,R609, R91, R93,R98		2.547039	34	10846303.620910
105A701003	Resistor	R394,R594		2.547039	2	154078778.388085
105A701039	Resistor	R100,R101,R102, R103,R111,R116, R12,R172,R177, R183, R184,R188,R190, R191,R192,R193, R210,R228,R229, R255,R264,R268, R285,R286,R308, R309,R314,R318, R331,R334,R335, R348,R353,R357, R361,R38,R382, R383, R389,R390,R391, R397,R406,R407, R41, R419,R426,R434, R44,		2.547039	99	3821035.116675

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A701059	Resistor	R176,R252,R378, R379,R380,R381, R487,R492,R623, R625,R633		2.547039	11	32049696.385471
105A701069	Resistor	R156,R439		2.547039	2	154078778.388085
105A702229	Resistor	R147,R175,R181, R216,R237,R239, R269,R34,R35,R36, R408,R412,R445, R448,R458,R481, R482,R94		2.547039	18	20032117.836120
105A702263	Resistor	R1,R313,R350		2.547039	3	107020754.986850
105A703363	Resistor	R404		2.547039	1	282340674.079668
105A704709	Resistor	R128,R243,R423, R424		2.547039	4	82309758.689546
105A704723	Resistor	R366		2.547039	1	282340674.079668
105A704729	Resistor	R104,R123,R144, R150,R154,R194, R256,R290,R304, R320,R328,R340, R352,R430,R431, R550,R590,R591, R659		2.547039	19	19019185.781770
105A704733	Resistor	R21,R22,R23,R24, R25		2.547039	5	67008142.102588
105A704739	Resistor	R317,R342,R532		2.547039	3	107020754.986850
105A704763	Resistor	R586,R587		2.547039	2	154078778.388085
105A705129	Resistor	R746		2.547039	1	282340674.079668
105A705139	Resistor	R187,R40,R496,R511, R572,R8		2.547039	6	56573956.677649
105A706829	Resistor	R617,R619,R620, R628,R629		2.547039	5	67008142.102588
105A707509	Resistor	R231		2.547039	1	282340674.079668

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A708229	Resistor	R173,R213,R359, R422,R429,R455,R60, R61,R62,R63,R64, R65,R66,R67,R75, R76,R77,R78,R79, R80,R81,R82,R83, R84,R85,R86,R87		2.547039	27	13557741.157915
105A710039	Resistor	R275,R292,R293, R307,R490,R533		2.547039	6	56573956.677649
105A733009	Resistor	R185,R315		2.547039	2	154078778.388085
105A739039	Resistor	R164		2.547039	1	282340674.079668
106B501032	Resistor	RT1,RT2,RT4,RT5		7.724580	4	21923287.146155
1121501680	Capacitor	C176,C186,C192		1.128806	3	257514172.353070
1121501690	Capacitor	C339,C346,C347, C349,C350,C361, C371,C435,C440, C441,C442,C443, C444,C445,C446		1.128806	15	55479656.844874

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1121501691	Capacitor	C104,C105,C109, C110,C111,C112, C113,C114,C115, C116,C117,C118, C119,C121,C124, C125,C127,C128, C129,C130,C134, C158,C159,C160, C166,C167,C169, C170,C171,C179, C180,C181,C189,C19, C193,C195,C198, C199,C20,C201,C202, C203,C205,C23,C235, C24,C242,C250,C252,		1.128806	180	4831624.536724
1124412080	Capacitor	C360,C373		1.128806	2	375289731.076049
1124418090	Capacitor	C93,C94		1.128806	2	375289731.076049
1124427090	Capacitor	C303,C304		1.128806	2	375289731.076049
1124427091	Capacitor	C284,C287,C51		1.128806	3	257514172.353070
1124468090	Capacitor	C294,C366		1.128806	2	375289731.076049
1124522190	Capacitor	C292,C356		1.128806	2	375289731.076049
1129610051	Capacitor	C305,C308,C315, C326,C332,C439		1.128806	6	133979725.056342
1129622690	Capacitor	C161,C165,C213,C39, C40,C41,C42,C78,C95		1.128806	9	90863428.080946

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1129701790	Capacitor	C342,C343,C344, C345,C351,C355, C357,C358,C359, C364,C365,C436, C437		1.128806	13	63728475.410842
1129701791	Capacitor	C139,C140,C141, C142,C148,C149, C150,C151,C163,C22, C243,C262,C32,C33, C47,C49,C58,C86		1.128806	18	46478509.590073
1129710091	Capacitor	C244,C251,C255,C67, C68		1.128806	5	159367490.199266
1129710391	Capacitor	C162,C28,C352,C353		1.128806	4	196873384.410843
1129722091	Capacitor	C426,C434		1.128806	2	375289731.076049
1182622080	Capacitor	TC16,TC17,TC7		4.744484	3	59399119.141203
1189615151	Capacitor	TC10,TC11,TC4		4.744484	3	59399119.141203
1189622150	Capacitor	TC2		4.744484	1	159663026.715137
1189627150	Capacitor	TC13,TC14,TC15, TC18		4.744484	4	45505862.704531
1189633163	Capacitor	TC1,TC12,TC3,TC8, TC9		4.744484	5	36944177.000623
1189633193	Capacitor	TC5,TC6		4.744484	2	86049450.747498
1189647180	Capacitor	EC11		4.744484	1	159663026.715137
11A4433180	Capacitor	C45		1.128806	1	704977644.692287
11C2501790	Capacitor	C191,C194,C314, C336		1.128806	4	196873384.410843
11C2510480	Capacitor	C122,C126,C136, C137		1.128806	4	196873384.410843
11C4501790	Capacitor	C71		1.128806	1	704977644.692287
11C4547290	Capacitor	C21,C48		1.128806	2	375289731.076049
11E1510050	Capacitor	C188		1.128806	1	704977644.692287
11E1522680	Capacitor	C375,C376		1.128806	2	375289731.076049
11E2510060	Capacitor	C168,C172,C183, C184,C197,C204, C293		1.128806	7	115633865.771428
11E2647650	Capacitor	C100,C101,C102, C133,C135		1.128806	5	159367490.199266

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9501090	Capacitor	C11,C131,C16,C173,C177,C190		1.128806	6	133979725.056342
11E9501091	Capacitor	BC33,C10,C138,C144,C152,C174,C185,C200,C206,C207,C208,C211,C214,C218,C220,C221,C222,C224,C225,C227,C228,C231,C232,C233,C234,C236,C240,C241,C245,C248,C249,C25,C263,C264,C267,C268,C275,C348,C370,C389,C392,C415,C61,C69,C77,C8,C80,C81,C84,C87		1.128806	50	17113035.871263
11E9510051	Capacitor	C1,C103,C132,C15,C153,C154,C155,C156,C157,C164,C175,C182,C2,C209,C246,C266,C27,C285,C29,C3,C4,C5,C6,C7,C85,C96,C98,C99		1.128806	28	30212160.975569
11E9547680	Capacitor	C187,C311,C334		1.128806	3	257514172.353070
11E9610080	Capacitor	C212,C397,C398,C407,C416,C417,C425		1.128806	7	115633865.771428

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9622050	Capacitor	C210,C215,C216, C217,C219,C265, C307,C318,C337,C38		1.128806	10	82101057.548118
11E9622080	Capacitor	C388		1.128806	1	704977644.692287
11E9647680	Capacitor	C106,C107,C108,C74		1.128806	4	196873384.410843
1211100113	Inductor	L10,L11,L13,L8		4.944252	4	43912872.424775
121110106G	Inductor	L6		4.944252	1	154760964.143460
121110106M	Inductor	L14		4.944252	1	154760964.143460
121110156K	Inductor	L1,L2,L9		4.944252	3	57363284.375370
121110336L	Inductor	L12		4.944252	1	154760964.143460
1212306030	Inductor	FB1,FB10,FB13,FB14, FB2,FB25,FB26,FB27, FB28,FB29,F B3,FB4, FB6,FB8,FB9		4.944252	15	12521115.446963
1212308054	Inductor	PB2		4.944252	1	154760964.143460
12123C0003	Inductor	FB7		4.944252	1	154760964.143460
123131435J	Miscellaneous	Y5		19.200000	1	23844262.770939
1231324054	Miscellaneous	Y3		19.200000	1	23844262.770939
123132505D	Miscellaneous	Y6		19.200000	1	23844262.770939
1231327053	Miscellaneous	Y2,Y8		19.200000	2	8854051.752197
1231332721	Miscellaneous	Y1		19.200000	1	23844262.770939
1231332722	Miscellaneous	Y4		19.200000	1	23844262.770939
1301003240	Semiconductor	D34		7.793411	1	92807310.010983
1301005440	Semiconductor	D16,D24,D30		7.793411	3	35106858.962001
1301005442	Semiconductor	D32		7.793411	1	92807310.010983
1301005444	Semiconductor	D1,D10,D11, D18,D2, D3,D4,D5		7.793411	8	14161142.003130
1301005447	Semiconductor	D19,D31		7.793411	2	50578095.223398
1301005450	Semiconductor	D12,D13,D14, D15, D17,D20,D21, D22, D23,D6,D7,D8,D9		7.793411	13	8953033.829657
1304001340	Semiconductor	D29		7.793411	1	92807310.010983
1304101340	Semiconductor	D25		7.793411	1	92807310.010983
1305099140	Semiconductor	D26,D27		7.793411	2	50578095.223398
1310390413	Semiconductor	Q14,Q15,Q70,Q8,Q9		22.463360	5	7551839.591592
1311138610	Semiconductor	Q24,Q25		22.463360	2	17315095.066101

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1311390610	Semiconductor	Q7		22.463360	1	31642600.748419
1311390612	Semiconductor	Q16		22.463360	1	31642600.748419
1314108412	Semiconductor	U33		22.463360	1	31642600.748419
1314917314	Semiconductor	U41		22.463360	1	31642600.748419
1315030110	Semiconductor	Q4,Q5		22.463360	2	17315095.066101
1315230511	Semiconductor	Q23,Q69		22.463360	2	17315095.066101
1315422410	Semiconductor	U11,U2		22.463360	2	17315095.066101
1315482110	Semiconductor	U24,U28,U32		22.463360	3	12043329.789539
1315482410	Semiconductor	U31		22.463360	1	31642600.748419
1315667910	Semiconductor	U16,U25,U29,U34,U4		22.463360	5	7551839.591592
1315700216	Semiconductor	Q1,Q11,Q12,Q13,Q17,Q18,Q19,Q2,Q20,Q21,Q22,Q26,Q3,Q6,Q68		22.463360	15	2694825.052176
1315700217	Semiconductor	Q28,Q29,Q30,Q31,Q32		22.463360	5	7551839.591592
1315762010	Semiconductor	U21,U22		22.463360	2	17315095.066101
1430059300	Integrated Circuit	U3,U43		43.803003	2	6834791.244197
1440D25500	Integrated Circuit	U14	29.6	71.536243	1	7188137.206562
1447511B00	Integrated Circuit	U49		43.803003	1	11739202.588727
1469F016B0	Integrated Circuit	U12		11.063278	1	58231413.220643
14S2321900	Integrated Circuit	U23		43.803003	1	11739202.588727
14S3050100	Integrated Circuit	U20	17.5	141.232745	1	3640886.047945
14S3111600	Integrated Circuit	U1		43.803003	1	11739202.588727
14S3112400	Integrated Circuit	U9		43.803003	1	11739202.588727
14S3621601	Integrated Circuit	U7		43.803003	1	11739202.588727
14S3816700	Integrated Circuit	U26	39.5	519.268316	1	990263.247439
14S4001000	Integrated Circuit	U13		43.803003	1	11739202.588727
14S4020002	Integrated Circuit	U42	43.1	632.523903	1	812953.196778
14S4258300	Integrated Circuit	U27		43.803003	1	11739202.588727
14S4851800	Integrated Circuit	U35	37.4	461.925432	1	1113193.371688
14S5A00702	Integrated Circuit	U36		26.018600	1	25551442.237972
14S5A00704	Integrated Circuit	U47		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U17,U18,U19,U50		26.018600	4	7696979.559193
14S5A12503	Integrated Circuit	U39		26.018600	1	25551442.237972
14S5A12506	Integrated Circuit	U30		26.018600	1	25551442.237972
14S6203204	Integrated Circuit			11.063278	1	58231413.220643
14S6216060	Integrated Circuit			11.063278	1	58231413.220643
14S6225050	Integrated Circuit	U52		11.063278	1	58231413.220643
14S6308002	Integrated Circuit			11.063278	1	58231413.220643
14S6399044	Integrated Circuit	U48		43.803003	1	11739202.588727
14S63CCV00	Integrated Circuit	U40		11.063278	1	58231413.220643
14S9330600	Integrated Circuit	U53,U54		26.018600	2	14194252.866846

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697CV000A-D
Ref Des:
Description:

Failure Rate: 7388.601667
MTBF (hrs): 135,344
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S9781800	Integrated Circuit	U8		43.803003	1	11739202.588727
14S9894400	Integrated Circuit	U45	17.2	138.575872	1	3710691.630626
1600030803	Connection	SW1(10N)		16.184835	1	35685591.360212
16515A2991	Connection	DIMM1		16.184835	1	35685591.360212
1653212100	Connection	CN1		16.184835	1	35685591.360212
16540M0000	Connection	CN4,CN6		16.184835	2	20390152.380746
1654903030	Connection	CN5		16.184835	1	35685591.360212
1655902122	Connection	BAT1		16.184835	1	35685591.360212
1655907130	Connection	CN2		16.184835	1	35685591.360212

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050501004	Resistor	R126,R132,R133,R4,R493,R5,R835		2.547039	7	48991237.965885
1050501054	Resistor	R161,R168,R169		2.547039	3	107020754.986850
1050502204	Resistor	R128,R149,R150,R151,R3,R6		2.547039	6	56573956.677649
1050502224	Resistor	R1,R2,R31,R37,R401		2.547039	5	67008142.102588
1050503324	Resistor	R404		2.547039	1	282340674.079668
1050504724	Resistor	R105,R108,R119,R120,R183,R192,R245,R248,R257,R258,R264,R266,R267,R281,R310,R368,R385,R389,R390,R392,R422,R431,R467,R472,R476,R50,R504,R508,R51,R510,R61,R79,R81		2.547039	33	11164784.962504
1050504734	Resistor	R255,R261,R375		2.547039	3	107020754.986850
1050505124	Resistor	R380,R400,R402		2.547039	3	107020754.986850
1050510034	Resistor	R100,R103,R111,R127,R163,R164,R18,R302,R338,R344,R378,R40,R425,R428,R44,R45,R46,R483,R486,R487,R489,R490,R491,R514,R62,R63,R67,R833,R99		2.547039	29	12652760.276502

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050512004	Resistor	R19,R20,R32,R49		2.547039	4	82309758.689546
1050512124	Resistor	R538,R539		2.547039	2	154078778.388085
1050521024	Resistor	R832		2.547039	1	282340674.079668
1050522124	Resistor	R831		2.547039	1	282340674.079668
1050547034	Resistor	R384		2.547039	1	282340674.079668
1050549924	Resistor	R341		2.547039	1	282340674.079668
1050549964	Resistor	R195,R205,R214, R216,R226,R227, R232,R235,R242		2.547039	9	38754445.632391
1050702734	Resistor	R395		2.547039	1	282340674.079668
1053500489	Resistor	R146,SR5,SR6		2.547039	3	107020754.986850
1054600289	Resistor	R268,R513		2.547039	2	154078778.388085
1054700289	Resistor	R824		2.547039	1	282340674.079668
1059522001	Resistor	R65		2.547039	1	282340674.079668
1059700001	Resistor	R723,R727		2.547039	2	154078778.388085
1059700201	Resistor	R707		2.547039	1	282340674.079668
1059710001	Resistor	R64,R66		2.547039	2	154078778.388085
105A500133	Resistor	R272,R280,R304, R370		2.547039	4	82309758.689546
105A500139	Resistor	R124,R136,R137, R152,R153,R154, R155,R156,R179, R182,R190,R191, R193,R194,R252, R254,R256,R271, R273,R274,R28,R284, R29,R303,R311,R312, R399,R406,R407,R42, R427,R43,R441,R445, R446,R839,R843, R844		2.547039	38	9736567.158302
105A500333	Resistor	R231		2.547039	1	282340674.079668
105A501033	Resistor	R710		2.547039	1	282340674.079668

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A501039	Resistor	R159,R17,R198,R203,R204,R213,R219,R223,R243,R379,R383,R393,R394,R429,R430,R434,R435,R437,R438,R440,R443,R453,R478,R481		2.547039	24	15190138.820515
105A501053	Resistor	R123,R135		2.547039	2	154078778.388085
105A501323	Resistor	R551,R552		2.547039	2	154078778.388085
105A501413	Resistor	R287		2.547039	1	282340674.079668
105A501539	Resistor	R147,R346		2.547039	2	154078778.388085
105A501829	Resistor	R189,R197		2.547039	2	154078778.388085
105A502033	Resistor	R314		2.547039	1	282340674.079668
105A502039	Resistor	R104,R376,R377		2.547039	3	107020754.986850
105A503309	Resistor	R131,R207,R208,R212,R215,R218,R221,R222,R224,R229,R233,R369,R386,R448,R450,R451,R454,R465,R466,R468,R471		2.547039	21	17274945.076062
105A503323	Resistor	R834		2.547039	1	282340674.079668
105A503333	Resistor	R240,R840		2.547039	2	154078778.388085
105A506829	Resistor	R162,R165		2.547039	2	154078778.388085
105A507509	Resistor	R188,R209,R21,R210,R22,R23		2.547039	6	56573956.677649
105A510003	Resistor	R721,R722,R725, R726		2.547039	4	82309758.689546
105A510009	Resistor	R397		2.547039	1	282340674.079668
105A510033	Resistor	R246,R372,R716		2.547039	3	107020754.986850
105A512133	Resistor	R717		2.547039	1	282340674.079668
105A512413	Resistor	R711,R712		2.547039	2	154078778.388085
105A513003	Resistor	R388		2.547039	1	282340674.079668

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A514033	Resistor	R708		2.547039	1	282340674.079668
105A514723	Resistor	R715		2.547039	1	282340674.079668
105A515009	Resistor	R33,R34,R35		2.547039	3	107020754.986850
105A515034	Resistor	R130		2.547039	1	282340674.079668
105A547509	Resistor	R236		2.547039	1	282340674.079668
105A549913	Resistor	R432,R433		2.547039	2	154078778.388085
105A549919	Resistor	R148,R426		2.547039	2	154078778.388085
105A556003	Resistor	R249		2.547039	1	282340674.079668
105A700003	Resistor	R102,R16,R3 49,R374, R38,R382,R3 87,R396, R516,R517,R 542, R543,R544,R 553,R71, R713,R719,R 720, R729,R730,R 731, R838,R841,R 842,R90, R95,R96,R97 ,R98		2.547039	29	12652760.276502

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700009	Resistor	R10,R11,R12 ,R129, R13,R14,R15 ,R180, R184,R196,R 199, R200,R206,R 239,R24, R25,R260,R2 96,R297, R30,R323,R3 24,R325, R326,R36,R3 9,R391, R418,R419,R 420, R421,R424,R 447, R452,R461,R 469,R47, R473,R479,R 494, R498,R499,R 501, R503,R509,R 511, R512,R52,R5 3,R54, R55,R5		2.547039	61	6139957.583645
105A700103	Resistor	R825,R837		2.547039	2	154078778.388085
105A701529	Resistor	R107,R109,R 125,R78, R80		2.547039	5	67008142.102588
105A704723	Resistor	R331		2.547039	1	282340674.079668
105A705139	Resistor	R138,R139,R 140, R141,R142,R 143, R144,R145,R 85,R86, R87,R88,R89 ,R91, R92,R93		2.547039	16	22425139.809646
105A733009	Resistor	R315,R409,R 411, R412,R413,R 415, R416,R417		2.547039	8	43225424.698300
105A747033	Resistor	R714		2.547039	1	282340674.079668
1112647112	Capacitor	C164,C298		4.744484	2	86049450.747498
111961029D	Capacitor	C173,C316		4.744484	2	86049450.747498

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1124410191	Capacitor	C356,C358,C362, C376,C377,C378, C385		1.128806	7	115633865.771428
1124418090	Capacitor	C190,C191		1.128806	2	375289731.076049
1124427090	Capacitor	C16,C17,C18,C19, C20,C21,C22,C31, C399,C429,C45		1.128806	11	74892583.279796
1124501780	Capacitor	C427,C428,C605		1.128806	3	257514172.353070
1124510280	Capacitor	C607		1.128806	1	704977644.692287
1124522280	Capacitor	C617,C644		1.128806	2	375289731.076049
1124522680	Capacitor	C606,C613		1.128806	2	375289731.076049
1124533190	Capacitor	C408,C410,C411, C412		1.128806	4	196873384.410843
1124533282	Capacitor	C633		1.128806	1	704977644.692287
1129610051	Capacitor	C267,C268,C287, C609,C73		1.128806	5	159367490.199266
1129710090	Capacitor	C192,C193,C194,C26, C27,C28,C50,C58		1.128806	8	101746760.035398
1129722091	Capacitor	C161,C162		1.128806	2	375289731.076049
1142547080	Capacitor	C296,C448,C450		1.128806	3	257514172.353070
1161627100	Capacitor	C195		4.744484	1	159663026.715137
1169656132	Capacitor	C228,C643		4.744484	2	86049450.747498
1181610180	Capacitor	TC25		4.744484	1	159663026.715137
1181627197	Capacitor	C263,C630		4.744484	2	86049450.747498
1183610191	Capacitor	C647		4.744484	1	159663026.715137
1183622190	Capacitor	C615,C616		4.744484	2	86049450.747498
1184618190	Capacitor	EC4		4.744484	1	159663026.715137
1189610153	Capacitor	C319		4.744484	1	159663026.715137
1189615154	Capacitor	TC1,TC2		4.744484	2	86049450.747498
11C1547890	Capacitor	C364		1.128806	1	704977644.692287
11C2501790	Capacitor	C323,C327,C335, C340,C365,C368, C381,C383,C462, C463,C464,C465		1.128806	12	68856937.301178

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11C2510480	Capacitor	C110,C112,C140, C141,C142,C149, C163,C177,C179, C207,C208,C211, C212,C214,C215, C218,C227,C229, C230,C231,C254, C257,C258,C262, C264,C270,C275, C284,C285,C286,C34, C440,C441,C445, C446,C594,C629,C77		1.128806	38	22404668.588477
11C2522650	Capacitor	C614		1.128806	1	704977644.692287
11C2610030	Capacitor	C172,C278,C302		1.128806	3	257514172.353070
11C4501060	Capacitor	C588		1.128806	1	704977644.692287
11C4510380	Capacitor	C608		1.128806	1	704977644.692287
11C4547690	Capacitor	C388,C75,C83		1.128806	3	257514172.353070
11C5501650	Capacitor	C105,C393,C88		1.128806	3	257514172.353070
11C9501050	Capacitor	C222		1.128806	1	704977644.692287
11E1522680	Capacitor	C332,C95		1.128806	2	375289731.076049
11E2501080	Capacitor	C248,C256,C260, C261,C266,C269, C439,C449,C610, C635		1.128806	10	82101057.548118

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2501690	Capacitor	C1,C101,C102,C103,C106,C107,C108,C11,C114,C115,C116,C117,C118,C119,C12,C120,C121,C122,C124,C125,C126,C127,C128,C129,C13,C132,C134,C135,C136,C137,C138,C139,C14,C145,C15,C150,C153,C156,C159,C160,C165,C166,C168,C170,C171,C174,C175,C178,C180,C18		1.128806	235	3709284.420746
11E2510060	Capacitor	C143,C226,C234,C235,C255,C259,C271,C290,C443,C444,C627,C628,C63,C631		1.128806	14	59316298.011235
11E2522090	Capacitor	C176		1.128806	1	704977644.692287

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2610030	Capacitor	C130,C131,C144, C148,C167,C169, C184,C188,C189, C221,C250,C251, C252,C253,C311, C325,C338,C341, C354,C372,C373, C386,C387,C396, C397,C398,C405, C418,C425,C454, C455,C484,C485, C486,C496,C497, C501,C511		1.128806	38	22404668.588477
11E3510010	Capacitor	C589,C590,C591, C592,C595,C596, C597,C598,C600, C601,C602		1.128806	11	74892583.279796
11E4433090	Capacitor	C310		1.128806	1	704977644.692287
11E9501091	Capacitor	C10,C274,C289,C321, C353,C360,C361, C366,C369,C375, C380,C382,C387		1.128806	13	63728475.410842
11E9622050	Capacitor	C632,C634		1.128806	2	375289731.076049
11E9647690	Capacitor	C111,C113,C151, C158,C206,C209, C213,C216		1.128806	8	101746760.035398
11EB522640	Capacitor	C507,C508,C509, C512,C513,C514, C515		1.128806	7	115633865.771428

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11EB647020	Capacitor	C347,C348,C400, C401,C406,C407		1.128806	6	133979725.056342
121110156F	Inductor	L24	38.6	4.944252	1	154760964.143460
121110156J	Inductor	L15		9.460971	1	80877236.105974
121110226J	Inductor	L25		4.944252	1	154760964.143460
121110226M	Inductor	L20		4.944252	1	154760964.143460
12123C0010	Inductor	FB1,FB10,FB11,FB12, FB13,FB14,FB15, FB19,FB2,FB20,FB21, FB22,FB24,FB3,FB30, FB31,FB32,FB33, FB34,FB35,FB36, FB37,FB4,FB5,FB6, FB7,FB8,FB9			4.944252	28
12123D0002	Inductor	FB23,FB25,FB26, FB27,FB28,FB29		4.944252	6	30055900.223009
1214216190	Inductor	L5		4.944252	1	154760964.143460
1214309008	Inductor	L10,L11,L13,L17,L18,L2,L21,L22, L3,L4,L6,L7,L8,L9		4.944252	14	13381951.576219
1214309008	Inductor	L1	28.2	8.062437	1	94906440.691391
1214309008	Inductor	L12	22.6	7.365828	1	103882032.892841
12310027A0	Miscellaneous	Y2		19.200000	1	23844262.770939
123132505D	Miscellaneous	Y3		19.200000	1	23844262.770939
12333048A0	Miscellaneous	Y1		19.200000	1	23844262.770939
1300414841	Semiconductor	D6,D7		7.793411	2	50578095.223398
1301003440	Semiconductor	D61,D62		7.793411	2	50578095.223398
1301075140	Semiconductor	D19,D20		7.793411	2	50578095.223398
1301400541	Semiconductor	D1,D14,D21,D27,D65, D9		7.793411	6	18540453.699406
1301400642	Semiconductor	D10,D11,D12,D2,D25, D28,D29,D3,D4,D5, D64		7.793411	11	10495888.688121
1302005641	Semiconductor	D63		7.793411	1	92807310.010983
1304000003	Optical Device	LED3		79.003355	1	6497172.749112
1304101440	Optical Device	LED1,LED2		79.003355	2	3783722.582110

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1305080040	Semiconductor	U89,U90,U91 ,U92		22.463360	4	9270607.712006
1305100541	Semiconductor	U1,U10,U11, U12,U15, U16,U20,U21 ,U24, U25,U3,U30, U31,U5, U57,U58,U59 ,U6,U60, U61,U64,U66 ,U7,U8, U9		22.463360	25	1651126.285093
1305104041	Semiconductor	U18,U19,U22 ,U23, U26,U27,U28 ,U29, U32,U33,U34 ,U35, U36,U37,U38 ,U39		22.463360	16	2533798.883137
130533CA40	Semiconductor	D22		7.793411	1	92807310.010983
1310390410	Semiconductor	Q25		22.463360	1	31642600.748419
1310390411	Semiconductor	Q37		22.463360	1	31642600.748419
1310390413	Semiconductor	Q4,Q46,Q5		22.463360	3	12043329.789539
1311138610	Semiconductor	Q51,Q52		22.463360	2	17315095.066101
1314111712	Semiconductor	U80		22.463360	1	31642600.748419
1314780511	Semiconductor	U74		22.463360	1	31642600.748419
1314881910	Semiconductor	U55		22.463360	1	31642600.748419
13150123N0	Semiconductor	Q29,Q30		22.463360	2	17315095.066101
1315567011	Semiconductor	Q26,Q27		22.463360	2	17315095.066101
1315667910	Semiconductor	Q39,Q40,Q4 3,Q44		22.463360	4	9270607.712006
1315686110	Semiconductor	U85,U86,U95 ,U96, U97,U98		22.463360	6	6378891.324740
1315700216	Semiconductor	Q1,Q10,Q11, Q12,Q13, Q14,Q15,Q1 6,Q17, Q18,Q19,Q2, Q20,Q21, Q22,Q23,Q2 4,Q28,Q3, Q34,Q35,Q4 7,Q48, Q53,Q54,Q5 5,Q56, Q57,Q58,Q5 9,Q6,Q7, Q8,Q9		22.463360	34	1226782.660514
1315762010	Semiconductor	Q60		22.463360	1	31642600.748419

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315806511	Semiconductor	Q32,Q36		22.463360	2	17315095.066101
1315S4C550	Semiconductor	Q31,Q33		22.463360	2	17315095.066101
143ALC8920	Integrated Circuit	U88	30.1	304.037217	1	1691280.873366
144F751130	Integrated Circuit	U17		43.803003	1	11739202.588727
144F815120	Integrated Circuit	U62	30.8	316.729977	1	1623503.827973
1490011840	Integrated Circuit	U107	32.5	349.556911	1	1471040.375149
14S2200900	Integrated Circuit	U2		43.803003	1	11739202.588727
14S2432600	Integrated Circuit	U109		43.803003	1	11739202.588727
14S2921400	Integrated Circuit	U110		43.803003	1	11739202.588727
14S2921400	Integrated Circuit	U70	29.1	286.696221	1	1793579.025081
14S3378900	Integrated Circuit	U63		43.803003	1	11739202.588727
14S3435600	Integrated Circuit	U46		43.803003	1	11739202.588727
14S3902500	Integrated Circuit	U82	36.2	431.766933	1	1190948.843215
14S4021301	Integrated Circuit	U40,U41,U42 ,U43, U47,U48,U49 ,U50, U51,U52,U53 ,U54, U84,U94		43.803003	14	1306102.438990
14S4121602	Integrated Circuit	U45		43.803003	1	11739202.588727
14S4258300	Integrated Circuit	U99		43.803003	1	11739202.588727
14S4519500	Integrated Circuit	U72		43.803003	1	11739202.588727
14S4814380	Integrated Circuit	U13	35.7	419.730327	1	1225101.682326
14S4814380	Integrated Circuit	U14		43.803003	1	11739202.588727
14S4910400	Integrated Circuit	U67	33.7	374.532530	1	1372944.371779
14S4911216	Integrated Circuit	U56		26.018600	1	25551442.237972
14S5912300	Integrated Circuit	U87		26.018600	1	25551442.237972
14S5A00702	Integrated Circuit	U103,U69,U7 3		26.018600	3	9949526.289768
14S5A00703	Integrated Circuit	U68		26.018600	1	25551442.237972
14S5A00704	Integrated Circuit	U104		26.018600	1	25551442.237972
14S6308002	Integrated Circuit	U100		11.063278	1	58231413.220643
14S9341101	Integrated Circuit	U4		43.803003	1	11739202.588727
14S9811500	Integrated Circuit	U93		43.803003	1	11739202.588727
1540510380	Resistor	RP1,RP10,RP 2,RP3, RP4,RP5,RP6 ,RP7, RP8,RP9		9.971436	10	7746494.690806
1600000403	Connection	SW3		16.184835	1	35685591.360212
1601PB6130	Connection	SW4		16.184835	1	35685591.360212
1652003101	Connection	CN1		16.184835	1	35685591.360212
1652505212	Connection	CN23		16.184835	1	35685591.360212
1652532207	Connection	CN6,CN7		16.184835	2	20390152.380746
1652602107	Connection	CN26		16.184835	1	35685591.360212
1653002101	Connection	JP3,JP4,JP5,J P6, JP9		16.184835	5	9343344.843761

File Name: Boxer-6914.rfp
Assembly: 9697T30205-D
Ref Des:
Description:

Failure Rate: 10688.707838
MTBF (hrs): 93,557
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1653003101	Connection	JP10,JP11		16.184835	2	20390152.380746
1653003201	Connection	JP1,JP2,JP7		16.184835	3	14515880.849373
165312022E	Connection	CN10,CN8,CN9		16.184835	3	14515880.849373
1653212100	Connection	CN11		16.184835	1	35685591.360212
1653300102	Connection	JP11(2-3)		16.184835	1	35685591.360212
1653300108	Connection	JP10(1-2)		16.184835	1	35685591.360212
165390003B	Connection	CN31		16.184835	1	35685591.360212
1653924110	Connection	CN31		16.184835	1	35685591.360212
16540M0200	Connection	CN27,CN28		16.184835	2	20390152.380746
1654203623	Connection	CN12,CN17		16.184835	2	20390152.380746
1654226303	Connection	CN14,CN15		16.184835	2	20390152.380746
1654403032	Connection	CN5		16.184835	1	35685591.360212
1654418103	Connection	CN2,CN4,XN3		16.184835	3	14515880.849373
1654445300	Connection	DVI+VGA1		16.184835	1	35685591.360212
1654808201	Connection	CN21		16.184835	1	35685591.360212
1654900703	Connection	CN16		16.184835	1	35685591.360212
1654900731	Connection	CN32		16.184835	1	35685591.360212
1654903900	Connection	CN18		16.184835	1	35685591.360212
1655004011	Connection	CN24		16.184835	1	35685591.360212
1655909031	Connection	CN29,CN30		16.184835	2	20390152.380746
1655910032	Connection	CN22		16.184835	1	35685591.360212
1750113016	Miscellaneous	BATTERY1		306.000000	1	1681683.006787
1750220323	Connection	BT1		16.184835	1	35685591.360212
1752001900	Miscellaneous	FS7,FS8		2.400000	2	143944727.196625
1752310000	Miscellaneous	FS1		2.400000	1	254626042.602335
175910000B	Miscellaneous	BZ1		2.400000	1	254626042.602335

File Name: Boxer-6914.rfp
Assembly: 9697T31002-D
Ref Des:
Description:

Failure Rate: 588.419648
MTBF (hrs): 1,699,467
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050549924	Resistor	R39		2.547039	1	282340674.079668
105A500139	Resistor	R36		2.547039	1	282340674.079668
105A501833	Resistor	R38		2.547039	1	282340674.079668
105A504773	Resistor	R32		2.547039	1	282340674.079668
105A509123	Resistor	R40		2.547039	1	282340674.079668
105A510009	Resistor	R7		2.547039	1	282340674.079668
105A513733	Resistor	R26		2.547039	1	282340674.079668
105A518033	Resistor	R27		2.547039	1	282340674.079668
105A593123	Resistor	R37		2.547039	1	282340674.079668
105A700009	Resistor	R5,R6,R8		2.547039	3	107020754.986850
105A700139	Resistor	R17,R4,R42, R44,R45, R50,R54		2.547039	7	48991237.965885
105A701039	Resistor	R13,R33,R34 ,R35		2.547039	4	82309758.689546
105A702209	Resistor	R58		2.547039	1	282340674.079668
105A704729	Resistor	R1,R10,R11, R12,R18, R19,R2,R20, R21,R22, R23,R24,R25 ,R29,R3, R31,R41,R47 ,R48, R49,R51,R52 ,R53, R55,R56,R57 ,R59		2.547039	27	13557741.157915
105A705129	Resistor	R14		2.547039	1	282340674.079668
1112610102	Capacitor	C24,C30		4.744484	2	86049450.747498
1121501690	Capacitor	C1,C10,C11, C12,C2, C26,C27,C29 ,C3,C36, C37,C39,C4, C41,C42, C47,C48,C50 ,C51, C53,C55,C57 ,C58, C59,C6,C61, C62,C63, C68,C69,C7, C73,C76, C77,C8,C9		1.128806	36	23624151.295955
1124547190	Capacitor	C67		1.128806	1	704977644.692287
1129722091	Capacitor	C40		1.128806	1	704977644.692287
1142547080	Capacitor	C80		4.744484	1	159663026.715137
11A4410194	Capacitor	C75		1.128806	1	704977644.692287

File Name: Boxer-6914.rfp
Assembly: 9697T31002-D
Ref Des:
Description:

Failure Rate: 588.419648
MTBF (hrs): 1,699,467
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11C1510390	Capacitor	C25,C31,C66 ,C78, C79		1.128806	5	159367490.199266
11C2610030	Capacitor	C13,C14,C15 ,C44, C45,C46,C5		1.128806	7	115633865.771428
11E2522060	Capacitor	C32,C33,C34 ,C35, C65,C70		1.128806	6	133979725.056342
11E9501091	Capacitor	C49,C52,C54		1.128806	3	257514172.353070
11E9510050	Capacitor	C43		1.128806	1	704977644.692287
11E9647690	Capacitor	C28,C38,C60 ,C64, C71,C72,C74		1.128806	7	115633865.771428
11EB610160	Capacitor	C16,C17,C18 ,C19, C20,C21,C22 ,C23		1.128806	8	101746760.035398
121110226N	Inductor	L2		4.944252	1	154760964.143460
121110336Y	Inductor	L1		4.944252	1	154760964.143460
1211110007	Inductor	L3		4.944252	1	154760964.143460
1212308054	Inductor	FB1		4.944252	1	154760964.143460
12123C0006	Inductor	FB2,FB3,FB4		4.944252	3	57363284.375370
1301003440	Semiconductor	D1		7.793411	1	92807310.010983
1315442410	Semiconductor	Q1		22.463360	1	31642600.748419
1430622900	Integrated Circuit	U2		43.803003	1	11739202.588727
143RT72580	Integrated Circuit	U3		43.803003	1	11739202.588727
14S3306300	Integrated Circuit	U5		43.803003	1	11739202.588727
14S4011100	Integrated Circuit	U4		43.803003	1	11739202.588727
1654203624	Connection	CN2		16.184835	1	35685591.360212
1654260207	Connection	CN1		16.184835	1	35685591.360212

**Reliability Prediction
Summary**

File Name: Boxer-6914.rfp
Assembly: 9697T33500-D
Ref Des:
Description:

Failure Rate: 125.647199
MTBF (hrs): 7,958,793
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
165312022E	Connection	CN1,CN2		16.184835	2	20390152.380746
1654418103	Connection	CN3,CN4,CN5,CN6		16.184835	4	11344857.509064