

BOXER-6839

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 10384.588362 MTBF: 96,297 hours
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Issue date

QE Manager

Test Engineer

2017/4/28

KJ Wang

Anderson Lin

Reliability Prediction (MTBF)

I . Model Name: BOXER-6839

II . Prediction Date: Apr. 28, 2017

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

IV . Predicted by: Anderson Lin

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-6839(9697SKLS06-D):

- Failure Rate: 10384.588362

- MTBF: 96,297 Hours

**AAEON Reliability Prediction
Summary**

File Name: Boxer-6839.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
Boxer-6839	System		1	10384.588362	96,297

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500104.0000 00000000000	Resistor	R691,R716,R 749, R778		2.547039	4	82309758.689546
1050501004.0000 00000000000	Resistor	R650,R651,R 653, R654		2.547039	4	82309758.689546
1050501054.0000 00000000000	Resistor	R192,R570,R 646, R647,R829,R 883		2.547039	6	56573956.677649
1050502004.0000 00000000000	Resistor	R371,R374,R 957		2.547039	3	107020754.986850
1050502224.0000 00000000000	Resistor	R245,R270,R 271, R272,R292,R 294, R300,R306,R 313, R314,R315,R 733, R853,R854,R 885		2.547039	15	23852782.943395
1050502234.0000 00000000000	Resistor	R940		2.547039	1	282340674.079668
1050502724.0000 00000000000	Resistor	R969		2.547039	1	282340674.079668
1050503324.0000 00000000000	Resistor	R105,R13		2.547039	2	154078778.388085
1050504724.0000 00000000000	Resistor	R164,R175,R 357, R454,R462,R 549, R556,R775,R 784, R787,R795,R 810		2.547039	12	29507083.749401
1050504734.0000 00000000000	Resistor	R195,R451		2.547039	2	154078778.388085
1050504764.0000 00000000000	Resistor	R16		2.547039	1	282340674.079668
1050505124.0000 00000000000	Resistor	R768		2.547039	1	282340674.079668
1050505134.0000 00000000000	Resistor	R201,R561,R 861, R967		2.547039	4	82309758.689546
1050505164.0000 00000000000	Resistor	R336,R939		2.547039	2	154078778.388085
1050507524.0000 00000000000	Resistor	R117		2.547039	1	282340674.079668

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1050510034.0000 00000000000	Resistor	R103,R104,R114, R115,R116,R118, R119,R120,R225, R244,R254,R311, R320,R55,R56,R582, R588,R600,R61,R62, R63,R645,R649,R65, R652,R655,R71,R72, R73,R77,R779,R785, R79,R85,R884,R905, R91,R93,R96,R97, R98		2.547039	41	9043562.562696
1050512004.0000 00000000000	Resistor	R100,R110,R111, R112,R67,R70,R74, R80,R81,R82,R95, R99		2.547039	12	29507083.749401
1050512724.0000 00000000000	Resistor	R473		2.547039	1	282340674.079668
1050517424.0000 00000000000	Resistor	R52		2.547039	1	282340674.079668
1050520034.0000 00000000000	Resistor	R50,R53		2.547039	2	154078778.388085
1050522124.0000 00000000000	Resistor	R48		2.547039	1	282340674.079668
1050524004.0000 00000000000	Resistor	R193,R208		2.547039	2	154078778.388085
1050524324.0000 00000000000	Resistor	R19		2.547039	1	282340674.079668
1050524904.0000 00000000000	Resistor	R231,R280,R298, R299		2.547039	4	82309758.689546
1050524909.0000 00000000000	Resistor	R181,R229		2.547039	2	154078778.388085
1050524924.0000 00000000000	Resistor	R480		2.547039	1	282340674.079668
1050525524.0000 00000000000	Resistor	R12		2.547039	1	282340674.079668
1050526124.0000 00000000000	Resistor	R37		2.547039	1	282340674.079668

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1050528714.0000 00000000000	Resistor	R955		2.547039	1	282340674.079668
1050530164.0000 00000000000	Resistor	R919,R923,R 930		2.547039	3	107020754.986850
1050530914.0000 00000000000	Resistor	R856		2.547039	1	282340674.079668
1050533034.0000 00000000000	Resistor	R66,R962		2.547039	2	154078778.388085
1050540214.0000 00000000000	Resistor	R45,R47		2.547039	2	154078778.388085
1050542214.0000 00000000000	Resistor	R106,R659,R 69,R87		2.547039	4	82309758.689546
1050545364.0000 00000000000	Resistor	R17		2.547039	1	282340674.079668
1050547004.0000 00000000000	Resistor	R207		2.547039	1	282340674.079668
1050547034.0000 00000000000	Resistor	R57		2.547039	1	282340674.079668
1050549904.0000 00000000000	Resistor	R326		2.547039	1	282340674.079668
1050556269.0000 00000000000	Resistor	R139		2.547039	1	282340674.079668
1050560414.0000 00000000000	Resistor	R541,R954		2.547039	2	154078778.388085
1050561934.0000 00000000000	Resistor	R750		2.547039	1	282340674.079668
1050573214.0000 00000000000	Resistor	R318		2.547039	1	282340674.079668
1050700002.0000 00000000000	Resistor	R1,R1065,R1 066, R1067,R1068 ,R1069, R536		2.547039	7	48991237.965885
1050701504.0000 00000000000	Resistor	R243,R843,R 872		2.547039	3	107020754.986850
1050756004.0000 00000000000	Resistor	R713,R715,R 721, R941		2.547039	4	82309758.689546
1053500282.0000 00000000000	Resistor	R494,R769,R 920, R935		2.547039	4	82309758.689546
1053501289.0000 00000000000	Resistor	R658,R689		2.547039	2	154078778.388085
1053502099.0000 00000000000	Resistor	R717		2.547039	1	282340674.079668
1054500289.0000 00000000000	Resistor	R123		2.547039	1	282340674.079668
1054700289.0000 00000000000	Resistor	R171		2.547039	1	282340674.079668
1059501001.0000 00000000000	Resistor	R1054		2.547039	1	282340674.079668

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1059700001.0000 00000000000	Resistor	R122,R142,R150, R165,R421,R425, R437,R442,R447, R497,R553,R690, R714,R751,R801, R956		2.547039	16	22425139.809646
1059702261.0000 00000000000	Resistor	R141		2.547039	1	282340674.079668
	Resistor	R720		2.547039	1	282340674.079668
	Resistor	R687,R711,R747, R780		2.547039	4	82309758.689546
	Resistor	R382		2.547039	1	282340674.079668
	Resistor	R15,R217,R219,R236, R273,R286,R30,R31, R332,R362,R568, R583,R586,R59,R619, R620,R634,R635, R639,R641,R796, R797,R851,R898, R945		2.547039	25	14603612.751152
	Resistor	R75,R814		2.547039	2	154078778.388085
	Resistor	R543		2.547039	1	282340674.079668
	Resistor	R113,R331,R343, R349,R356		2.547039	5	67008142.102588

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	Resistor	R1056,R124, R127, R14,R194,R2 00,R205, R223,R256,R 265, R266,R282,R 283, R284,R323,R 341, R412,R413,R 415, R418,R532,R 563, R643,R736,R 771, R772,R777,R 783, R788,R789,R 803, R809,R839,R 840, R841,R846,R 847, R855,R859,R 862, R864,R867,R 868, R870,R871,R 876, R877,R88,R		2.547039	54	6915869.790048
	Resistor	R971		2.547039	1	282340674.079668
	Resistor	R860		2.547039	1	282340674.079668
	Resistor	R83		2.547039	1	282340674.079668
	Resistor	R576,R609,R 623		2.547039	3	107020754.986850
	Resistor	R296		2.547039	1	282340674.079668
	Resistor	R24,R25		2.547039	2	154078778.388085
	Resistor	R1024,R1027 ,R333, R347		2.547039	4	82309758.689546
	Resistor	R564,R565,R 794, R817,R904		2.547039	5	67008142.102588
	Resistor	R78		2.547039	1	282340674.079668
	Resistor	R237,R238,R 239, R247,R481		2.547039	5	67008142.102588
	Resistor	R637,R640		2.547039	2	154078778.388085

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	Resistor	R324,R328,R337, R350,R901,R909, R911,R913		2.547039	8	43225424.698300
	Resistor	R2,R4		2.547039	2	154078778.388085
	Resistor	R734		2.547039	1	282340674.079668
	Resistor	R138,R20,R21,R595, R596,R599,R9		2.547039	7	48991237.965885
	Resistor	R152		2.547039	1	282340674.079668
	Resistor	R29		2.547039	1	282340674.079668
	Resistor	R137,R140,R156, R162,R166,R597, R607,R618,R622, R636,R977		2.547039	11	32049696.385471
	Resistor	R663		2.547039	1	282340674.079668
	Resistor	R153,R235		2.547039	2	154078778.388085
	Resistor	R108		2.547039	1	282340674.079668
	Resistor	R335		2.547039	1	282340674.079668
	Resistor	R824		2.547039	1	282340674.079668
	Resistor	R129		2.547039	1	282340674.079668
	Resistor	R575		2.547039	1	282340674.079668
	Resistor	R739		2.547039	1	282340674.079668
	Resistor	R133		2.547039	1	282340674.079668
	Resistor	R648		2.547039	1	282340674.079668
	Resistor	R822		2.547039	1	282340674.079668
	Resistor	R571		2.547039	1	282340674.079668
	Resistor	R199		2.547039	1	282340674.079668
	Resistor	R1023		2.547039	1	282340674.079668
	Resistor	R92		2.547039	1	282340674.079668
	Resistor	R577		2.547039	1	282340674.079668
	Resistor	R525,R526,R528		2.547039	3	107020754.986850
	Resistor	R277,R32		2.547039	2	154078778.388085
	Resistor	R90		2.547039	1	282340674.079668
	Resistor	R319		2.547039	1	282340674.079668
	Resistor	R252		2.547039	1	282340674.079668
	Resistor	R51		2.547039	1	282340674.079668
	Resistor	R948		2.547039	1	282340674.079668

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	FB8,FB9,R1013, R1053,R1055, ,R109, R132,R177,R180, R202,R249,R279, R288,R303,R308, R321,R322,R375, R386,R388,R389, R390,R391,R392, R393,R453,R465, R472,R474,R475, R483,R484,R486, R557,R696,R697, R700,R758,R765, R800,R812,R815, R819,R821,R831, R857,R890		2.547039	47	7918121.839508

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	Resistor	R10,R1047,R1048, R1049,R1050, R1058, R1062,R1063, R11, R134,R157,R158, R161,R184,R185, R187,R206,R209, R222,R255,R257, R259,R260,R262, R263,R269,R27, R276, R281,R290,R291, R301,R302,R33, R339, R344,R346,R348, R353,R358,R363, R367,R372,R373, R377,R378,R379, R39		2.547039	140	2717798.525953
	Resistor	R242,R310,R406, R439		2.547039	4	82309758.689546
	Resistor	R891		2.547039	1	282340674.079668
	Resistor	R1001,R427, R432, R591,R743,R933		2.547039	6	56573956.677649
	Resistor	R224,R258		2.547039	2	154078778.388085
	Resistor	R35		2.547039	1	282340674.079668
	Resistor	R394,R806,R807, R925		2.547039	4	82309758.689546

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	Resistor	R1007,R1008 ,R1009, R1011,R1012 ,R1014, R1015,R1016 ,R1017, R1018,R1019 ,R1020, R1022,R1035 ,R1036, R1037,R1038 ,R1039, R1040,R1041 ,R1042, R1043,R1044 ,R1045, R1046,R173, R182, R186,R230,R 3,R345, R354,R376,R 383, R397,R398,R 42,R463, R464,R466,R 477, R478,R479,R 485,		2.547039	83	4542343.752032
	Resistor	R160,R573		2.547039	2	154078778.388085
	Resistor	R887		2.547039	1	282340674.079668
	Resistor	R523,R533,R 552, R554,R617,R 626, R627,R632,R 718, R719,R727		2.547039	11	32049696.385471
	Resistor	R128,R146,R 151, R172,R688,R 712, R746,R781		2.547039	8	43225424.698300
	Resistor	R125		2.547039	1	282340674.079668
	Resistor	R58,R960		2.547039	2	154078778.388085
	Resistor	R351		2.547039	1	282340674.079668
	Resistor	R22,R23,R84 8,R863		2.547039	4	82309758.689546

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	Resistor	R1006,R407, R423, R426,R429,R 430, R431,R435,R 436, R452,R984,R 987, R992,R993,R 999		2.547039	15	23852782.943395
	Resistor	R167		2.547039	1	282340674.079668
	Resistor	R163,R369,R 514, R515,R516,R 605, R633,R703,R 729, R735,R737,R 741, R744,R748,R 753, R756,R760,R 766, R770,R773		2.547039	20	18104712.511396
	Resistor	R1051,R1052 ,R121, R54,R64,R68 5,R76, R84		2.547039	8	43225424.698300
	Resistor	R264,R267,R 849, R852,R865,R 882, R949		2.547039	7	48991237.965885
	Resistor	R101,R102,R 143, R144,R145,R 188, R702		2.547039	7	48991237.965885
	Resistor	R361,R46,R5 37,R539, R551,R566,R 724, R730,R742,R 757, R944,R951		2.547039	12	29507083.749401
	Resistor	R1025,R1026 ,R1028, R1029,R1030 ,R1031, R1032,R1033 ,R1034, R580,R581		2.547039	11	32049696.385471
	Resistor	R574,R578		2.547039	2	154078778.388085

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	Resistor	R1021,R149, R189, R359,R774,R 997		2.547039	6	56573956.677649
	Resistor	R662		2.547039	1	282340674.079668
	Resistor	RT1,RT2,RT3 ,RT5		2.547039	4	82309758.689546
	Resistor	RT4,RT6		2.547039	2	154078778.388085
	Capacitor	C611		1.128806	1	704977644.692287
1121501680.0000 00000000000	Capacitor	C611		1.128806	1	704977644.692287
1121501690.0000 00000000000	Capacitor	C11,C12,C14 0,C141, C154,C155,C 156, C163,C165,C 166, C194,C210,C 232, C241,C246,C 320, C332,C336,C 361, C362,C363,C 368, C405,C445,C 451,C51, C526,C550,C 553, C558,C57,C5 9,C597, C603,C64,C6 5,C667, C668,C67,C6 99,C700, C701,C702,C 703, C704,C711,C 712, C713,C714,C 715		1.128806	79	10907152.962731

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1121501691.0000 00000000000	Capacitor	C101,C102,C 103, C104,C105,C 106, C107,C109,C 111, C114,C153,C 157, C195,C200,C 206, C216,C217,C 235, C237,C262,C 271, C290,C291,C 294, C302,C303,C 304, C308,C310,C 318, C321,C345,C 346, C347,C348,C 349, C350,C351,C 352, C354,C36,C3 8,C382, C384,C385,C 386, C395,C397,C 3		1.128806	141	6153418.665371
1121610180.0000 00000000000	Capacitor	C568,C569,C 570, C577		1.128806	4	196873384.410843
1122522890.0000 00000000000	Capacitor	C243,C277		1.128806	2	375289731.076049
1124410191.0000 00000000000	Capacitor	C34,C35,C37 ,C39, C423,C428,C 429, C430,C450,C 453, C454,C455		1.128806	12	68856937.301178
1124418090.0000 00000000000	Capacitor	C10,C679,C6 91,C9		1.128806	4	196873384.410843
1124422080.0000 00000000000	Capacitor	C355,C356,C 357, C358		1.128806	4	196873384.410843
1124427091.0000 00000000000	Capacitor	C379,C380,C 381, C391,C392,C 393		1.128806	6	133979725.056342

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1124427190.0000 00000000000	Capacitor	C53,C54		1.128806	2	375289731.076049
1124433090.0000 00000000000	Capacitor	C260		1.128806	1	704977644.692287
1124433190.0000 00000000000	Capacitor	C94		1.128806	1	704977644.692287
1124510280.0000 00000000000	Capacitor	C639		1.128806	1	704977644.692287
1124522680.0000 00000000000	Capacitor	C123,C91		1.128806	2	375289731.076049
1124533190.0000 00000000000	Capacitor	C482		1.128806	1	704977644.692287
1124547190.0000 00000000000	Capacitor	C13,C5		1.128806	2	375289731.076049
1129610080.0000 00000000000	Capacitor	C30,C31,C45 9,C461, C466,C49,C5 0		1.128806	7	115633865.771428
1129701690.0000 00000000000	Capacitor	C18,C22,C40 ,C499, C632,C633,C 637, C655,C656,C 675,C82		1.128806	11	74892583.279796
1129701790.0000 00000000000	Capacitor	C414,C415,C 416, C417,C418,C 419, C420,C421,C 747, C748,C749,C 750		1.128806	12	68856937.301178
1129701791.0000 00000000000	Capacitor	C24,C372,C8 8,C93		1.128806	4	196873384.410843
1129710090.0000 00000000000	Capacitor	C6,C7,C8		1.128806	3	257514172.353070
1129710091.0000 00000000000	Capacitor	C367		1.128806	1	704977644.692287
1129710390.0000 00000000000	Capacitor	C167		1.128806	1	704977644.692287
1129710391.0000 00000000000	Capacitor	C439,C543		1.128806	2	375289731.076049
1129722091.0000 00000000000	Capacitor	C2,C3,C674, C69,C70, C76		1.128806	6	133979725.056342
1129747090.0000 00000000000	Capacitor	C41,C48		1.128806	2	375289731.076049
1129747091.0000 00000000000	Capacitor	C651		1.128806	1	704977644.692287

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1184633090.0000 00000000000	Capacitor	C814,C815		1.128806	2	375289731.076049
1189615151.0000 00000000000	Capacitor	TC1,TC2		1.128806	2	375289731.076049
1189615154.0000 00000000000	Capacitor	C340,C341,C 444, C556,C572,C 638, C777,C778,C 781, C782,C788,C 789, C790		1.128806	13	63728475.410842
1189633151.0000 00000000000	Capacitor	C226,C594		1.128806	2	375289731.076049
	Capacitor	C644,C660		1.128806	2	375289731.076049
	Capacitor	C630,C631		1.128806	2	375289731.076049
	Capacitor	C309		1.128806	1	704977644.692287
	Capacitor	C732,C733,C 734		1.128806	3	257514172.353070
	Capacitor	C122,C242,C 247, C278		1.128806	4	196873384.410843
	Capacitor	C306		1.128806	1	704977644.692287
	Capacitor	C1,C15,C343 ,C359, C364,C371,C 390, C449,C595,C 596, C645,C670,C 673, C693,C698,C 735, C736,C752,C 766, C769,C770,C 771, C772,C792,C 793, C794,C795,C 796, C797,C809,C 811		1.128806	31	27349602.091781
	Capacitor	C62,C90		1.128806	2	375289731.076049
	Capacitor	C524,C610,C 619,C63		1.128806	4	196873384.410843
	Capacitor	C19,C657		1.128806	2	375289731.076049
	Capacitor	C485		1.128806	1	704977644.692287
	Capacitor	C647		1.128806	1	704977644.692287

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Capacitor	C118,C230,C437,C45,C504,C52,C532,C536,C541,C554,C627		1.128806	11	74892583.279796
	Capacitor	C267		1.128806	1	704977644.692287
	Capacitor	C25,C26,C44,C471,C56		1.128806	5	159367490.199266
	Capacitor	C14,C658		1.128806	2	375289731.076049
	Capacitor	C534,C539		1.128806	2	375289731.076049
	Capacitor	C4,C61,C66,C83		1.128806	4	196873384.410843
	Capacitor	C545,C654		1.128806	2	375289731.076049
	Capacitor	C316,C317,C775		1.128806	3	257514172.353070
	Capacitor	C112,C268,C269,C599,C609,C663		1.128806	6	133979725.056342
	Capacitor	C447,C588		1.128806	2	375289731.076049
	Capacitor	C129,C142,C180,C259,C580,C604,C618,C780,C92		1.128806	9	90863428.080946
	Capacitor	C125,C127,C191,C27,C28,C32,C324,C353,C42,C425,C46,C460,C462,C464,C467,C47,C470,C478,C479,C502,C503,C531,C540,C542,C557,C664,C71,C72,C807,C87		1.128806	30	28241202.507613

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Capacitor	C119,C120,C121, C135,C136,C137, C150,C151,C152, C207,C208,C209, C388,C493,C494, C495,C496		1.128806	17	49133303.073811
	Capacitor	C500,C501,C527, C528,C529		1.128806	5	159367490.199266
	Capacitor	C530,C648,C649		1.128806	3	257514172.353070
	Capacitor	C369		1.128806	1	704977644.692287
	Capacitor	C17,C251,C253,C472, C473,C474,C475, C583,C584,C585, C600,C642		1.128806	12	68856937.301178
	Capacitor	C623		1.128806	1	704977644.692287
	Capacitor	C549		1.128806	1	704977644.692287

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Capacitor	C100,C108,C110, C132,C144,C164, C212,C228,C255, C258,C270,C275, C276,C282,C289, C297,C299,C300, C301,C305,C314, C319,C323,C327, C328,C329,C330, C337,C338,C366, C373,C378,C383, C389,C396,C400, C401,C410,C411, C431,C432,C435, C448,C505,C511, C544,C552,C606,		1.128806	69	12464035.316736
	Capacitor	C406,C407		1.128806	2	375289731.076049
	Capacitor	C16		1.128806	1	704977644.692287
	Capacitor	C374		1.128806	1	704977644.692287
	Capacitor	C375,C376,C377, C592,C751,C753, C754,C755,C756, C757,C758,C759, C760		1.128806	13	63728475.410842
	Capacitor	C325,C360,C571, C741		1.128806	4	196873384.410843
	Capacitor	C197,C463,C661		1.128806	3	257514172.353070

**Reliability Prediction
Summary**

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Capacitor	C124,C128,C131, C133,C143,C145, C148,C168,C169, C170,C171,C172, C173,C174,C175, C176,C177,C179, C183,C184,C185, C186,C187,C188, C189,C190,C193, C199,C201,C202, C203,C213,C214, C215,C219,C220, C221,C227,C234, C238,C239,C245, C250,C254,C265, C266,C311,C312, C272,C273,C387, C548		1.128806	85	10147209.588673
	Capacitor			1.128806	4	196873384.410843

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit	
	Capacitor	C139,C192,C211, C218,C222,C224, C225,C231,C236, C240,C248,C249, C257,C261,C263, C264,C274,C283, C284,C285,C288, C292,C295,C296, C298,C322,C533, C538,C551,C567, C578,C586,C641, C646,C659,C669, C671,C682,C686		1.128806	39	21841170.168719	
	Capacitor	C244,C279		1.128806	2	375289731.076049	
	Capacitor	C149,C182,C205, C280,C281,C286, C287,C613		1.128806	8	101746760.035398	
	Capacitor	C457		1.128806	1	704977644.692287	
	Capacitor	C126		1.128806	1	704977644.692287	
	Capacitor	C158,C159,C160, C161,C181,C342, C344,C403,C441, C442,C443,C456, C680,C690		1.128806	14	59316298.011235	
	1211101573.0000 00000000000	Inductor	L13		4.944252	1	154760964.143460
		Inductor	L1		4.944252	1	154760964.143460
		Inductor	L7		4.944252	1	154760964.143460
		Inductor	L3,L4,L5,L8		4.944252	4	43912872.424775
		Inductor	L10,L12,L6,L9		4.944252	4	43912872.424775
	1211106874.0000 00000000000	Inductor	L11		4.944252	1	154760964.143460

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1212306030.0000 00000000000	Inductor	L2		4.944252	1	154760964.143460
	Inductor	FB10,FB11,F B12, FB13,FB14,F B19, FB29,FB30		4.944252	8	22874049.098230
1212308054.0000 00000000000	Inductor	FB2,FB21,FB 22,FB23, FB24,FB4,FB 5,FB6, FB7		4.944252	9	20443842.451049
	Inductor	FB1,FB20,FB 27,FB28, FB3,FB31,FB 32,FB33, FB34,FB35,F B36, FB37		4.944252	12	15520616.516984
1214309008.0000 00000000000	Inductor	FB25,FB26		4.944252	2	83201062.149749
	Inductor	FB15,FB16,F B17, FB18		4.944252	4	43912872.424775
	Inductor	CH1,CH10,C H11,CH12, CH13,CH14,C H15, CH16,CH17,C H18, CH19,CH2,C H20,CH21, CH22,CH23,C H24, CH25,CH26,C H27, CH28,CH29,C H3,CH30, CH31,CH32,C H33, CH34,CH4,C H5,CH6, CH7,CH8,CH 9		4.944252	34	5659689.323884
	Inductor	Y7		4.944252	1	154760964.143460
1231327610.0000 00000000000	Inductor	Y2,Y3,Y4		4.944252	3	57363284.375370
	Inductor	Y6		4.944252	1	154760964.143460
1233348051.0000 00000000000	Inductor	Y5		4.944252	1	154760964.143460
1300414841.0000 00000000000	Miscellaneous	D3		19.200000	1	23844262.770939
1301003440.0000 00000000000	Miscellaneous	D23,D31,D34		19.200000	3	5742504.738137
1301005440.0000 00000000000	Miscellaneous	D13,D5,D56, D6		19.200000	4	4388233.395340

File Name: Boxer-6839.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1301005442.0000 00000000000	Miscellaneous	D10,D27,D9		19.200000	3	5742504.738137
1301005447.0000 00000000000	Miscellaneous	D35		19.200000	1	23844262.770939
1301400541.0000 00000000000	Miscellaneous	D1		19.200000	1	23844262.770939
1301400640.0000 00000000000	Miscellaneous	D4		19.200000	1	23844262.770939
1301400642.0000 00000000000	Miscellaneous	D28		19.200000	1	23844262.770939
1301793040.0000 00000000000	Miscellaneous	D11,D25,D26 ,D36,D7, D8		19.200000	6	3109492.345532
1302005641.0000 00000000000	Miscellaneous	D30		19.200000	1	23844262.770939
1304001340.0000 00000000000	Miscellaneous	LED1		19.200000	1	23844262.770939
1304300140.0000 00000000000	Miscellaneous	LED2		19.200000	1	23844262.770939
1305080040.0000 00000000000	Miscellaneous	D17,D18,D19 ,D20, D21,D22,D41 ,D42, D43,D44,D45 ,D46, D47,D48,D49 ,D50, D52,D53,D54 ,D55, D60,D61,D62 ,D63, U51,U52,U53 ,U54		19.200000	28	955426.472752
1305100541.0000 00000000000	Miscellaneous	D2		19.200000	1	23844262.770939
1305100541.0000 00000000000	Miscellaneous	D29,U1,U2,U 3,U4,U5, U6,U7		19.200000	8	2473720.227203
1310390410.0000 00000000000	Semiconductor	Q14,Q38,Q5 2,Q56		22.463360	4	9270607.712006
1314111713.0000 00000000000	Semiconductor	U73		22.463360	1	31642600.748419
1314881910.0000 00000000000	Semiconductor	Q22		22.463360	1	31642600.748419
1315049820.0000 00000000000	Semiconductor	Q27,Q28,Q3 0		22.463360	3	12043329.789539
1315049820.0000 00000000000	Semiconductor	Q33,Q34,Q3 6,Q43, Q44,Q50,Q5 1,Q58, Q59		22.463360	9	4366472.106532
1315200312.0000 00000000000	Semiconductor	Q67,Q68		22.463360	2	17315095.066101

File Name: Boxer-6839.rfp
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Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315230211.0000 00000000000	Semiconductor	Q12,Q13		22.463360	2	17315095.066101
1315700216.0000 00000000000	Semiconductor	Q1,Q11,Q15, Q17,Q18, Q19,Q2,Q20, Q21,Q3, Q31,Q4,Q49, Q5,Q62, Q64,Q65,Q7 5,Q77,Q8		22.463360	20	2046335.090970
	Semiconductor	Q10,Q40,Q4 1,Q42,Q6, Q7,Q9		22.463360	7	5525968.936223
	Semiconductor	Q35,Q45,Q5 3,Q63		22.463360	4	9270607.712006
	Semiconductor	Q39		22.463360	1	31642600.748419
1430006850.0000 00000000000	Integrated Circuit	U77		43.803003	1	11739202.588727
1430080650.0000 00000000000	Integrated Circuit	U15,U79		43.803003	2	6834791.244197
1430082021.0000 00000000000	Integrated Circuit	U30,U50,U75		43.803003	3	4923240.069161
1430097420.0000 00000000000	Integrated Circuit	U14,U57,U81 ,U82, U90,U91,U92 ,U93, U94,U95,U96 ,U97		43.803003	12	1499359.883490
1430455200.0000 00000000000	Integrated Circuit	U29,U40,U67 ,U86, U89		43.803003	5	3214211.402100
1430532190.0000 00000000000	Integrated Circuit	U64		43.803003	1	11739202.588727
1430811460.0000 00000000000	Integrated Circuit	U23,U25,U26 ,U27		43.803003	4	3879156.910661
1430812430.0000 00000000000	Integrated Circuit	U17		43.803003	1	11739202.588727
	Integrated Circuit	U47		43.803003	1	11739202.588727
	Integrated Circuit	U43,U44,U45		43.803003	3	4923240.069161
	Integrated Circuit	U16		43.803003	1	11739202.588727
	Integrated Circuit	U78		43.803003	1	11739202.588727
	Integrated Circuit	U42		43.803003	1	11739202.588727
	Integrated Circuit	U39		43.803003	1	11739202.588727
	Integrated Circuit	D14,D15,D16 ,D37, D38,D39,D40 ,D51, U10,U11,U12 ,U13,U8, U9		43.803003	14	1306102.438990
	Integrated Circuit	U24		43.803003	1	11739202.588727
	Integrated Circuit	U48		43.803003	1	11739202.588727

File Name: Boxer-6839.rfp
Assembly: System
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Description:

Failure Rate: 10384.588362
MTBF (hrs): 96,297
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Integrated Circuit	U18		43.803003	1	11739202.588727
	Integrated Circuit	U37		43.803003	1	11739202.588727
	Integrated Circuit	U46		43.803003	1	11739202.588727
	Integrated Circuit	U65		43.803003	1	11739202.588727
	Integrated Circuit	U19,U20,U21, U60, U61,U62		43.803003	6	2750969.191556
	Integrated Circuit	U69		43.803003	1	11739202.588727
	Integrated Circuit	U41		43.803003	1	11739202.588727
	Integrated Circuit	U66		43.803003	1	11739202.588727
	Integrated Circuit	U28,U31,U32, U33, U35,U36,U38, U68, U70,U72,U74, U76		43.803003	12	1499359.883490
	Integrated Circuit	U58,U59		43.803003	2	6834791.244197
	Integrated Circuit	U22		43.803003	1	11739202.588727
1540510380.0000 00000000000	Resistor	RP1,RP2,RP3, RP4, RP5,RP6,RP7, RP8		9.971436	8	9424088.116087
1540722281.0000 00000000000	Resistor	RP9		9.971436	1	51606907.671214
1540733085.0000 00000000000	Resistor	RP10		9.971436	1	51606907.671214
1540782282.0000 00000000000	Resistor	RP11,RP12		9.971436	2	30043399.401299
	Capacitor	C60		1.128806	1	704977644.692287
	Capacitor	C73		1.128806	1	704977644.692287
	Capacitor	C58,C68		1.128806	2	375289731.076049
	Capacitor	C113,C115,C 116, C130,C138,C 147, C178,C196,C 223, C256		1.128806	10	82101057.548118
1315060301.0000 00000000000	Semiconductor	Q32,Q37,Q4 6,Q54, Q55,Q66,Q6 9,Q76, Q78		22.463360	9	4366472.106532
1189656196.0000 00000000000	Capacitor	C146,C162,C 806		1.128806	3	257514172.353070
1181633193.0000 00000000000	Miscellaneous Capacitor	Y1 C117,C134		19.200000 1.128806	1 2	23844262.770939 375289731.076049