

HSB-LN2I

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 7505.914667 ppm MTBF: 133,228 Hours
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Issue date	Approval	Test Engineer
2014/04/03	Tom Lin	Louie Lee

Reliability Prediction (MTBF)

I . Model Name: HSB-LN2I

II . Prediction Date: April. 4th, 2014

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:

HSB-LN2I (9697LN2I00-D):

- Failure Rate: 7505.914667 ppm

- MTBF: 133,228 Hours

**AAEON Reliability Prediction
Summary**

File Name: HSB-LN21.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 7505.914667
MTBF (hrs): 133,228
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
HSB-LN21	9697LN2100-D		1	7505.914667	133,228

File Name: HSB-LN2I.rfp
 Assembly: 9697LN2100-D
 Ref Des:
 Description:

Failure Rate: 7505.914667
 MTBF (hrs): 133,228
 Temperature: 30
 Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050501004	Resistor	R694		2.547039	1	282340674.079668
1050502204	Resistor	R145,R296,R297, R298,R299,R312, R470,R522,R523		2.547039	9	38754445.632391
1050502224	Resistor	R171,R219,R220, R436,R508,R509, R510,R597		2.547039	8	43225424.698300
1050502734	Resistor	R110,R28		2.547039	2	154078778.388085
1050504724	Resistor	R103,R112,R183, R192,R27,R304,R309, R310,R318,R323, R326,R34,R363,R365, R402,R406,R408, R409,R417,R429, R430,R458,R48,R503, R566,R608,R609, R610,R613,R615, R616,R618,R619, R623,R626,R698,R83, R95,R98		2.547039	39	9493970.778443
1050505134	Resistor	R371,R372		2.547039	2	154078778.388085
1050505633	Resistor	R414		2.547039	1	282340674.079668
1050508224	Resistor	R189,R305,R324, R339,R367,R368, R433,R434,R443, R444,R455,R477, R482,R496,R550, R558,R559,R612, R620		2.547039	19	19019185.781770

File Name: HSB-LN21.rfp
Assembly: 9697LN2100-D
Ref Des:
Description:

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050510034	Resistor	R380,R448,R520, R533,R545,R634, R635,R636,R637, R692		2.547039	10	35079934.879747
1050520004	Resistor	R272		2.547039	1	282340674.079668
1050524904	Resistor	R180,R185,R505, R562		2.547039	4	82309758.689546
1050532414	Resistor	R440		2.547039	1	282340674.079668
1050533004	Resistor	R325,R342,R343, R611,R614,R617		2.547039	6	56573956.677649
1050533034	Resistor	R465,R479,R494		2.547039	3	107020754.986850
1050547004	Resistor	R108,R335,R548, R553,R560		2.547039	5	67008142.102588
1050556269	Resistor	R191,R282		2.547039	2	154078778.388085
1050580664	Resistor	R148,R151		2.547039	2	154078778.388085
1050586604	Resistor	R693		2.547039	1	282340674.079668
1059702261	Resistor	R685,R689		2.547039	2	154078778.388085
1059710001	Resistor	R15,R20		2.547039	2	154078778.388085
1059722001	Resistor	R106		2.547039	1	282340674.079668

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105A500139	Resistor	R100,R127,R149, R150,R156,R22,R24, R273,R280,R348, R349,R350,R351, R352,R366,R373, R374,R381,R392, R394,R403,R407, R411,R419,R424, R427,R432,R447, R449,R468,R493, R500,R511,R519, R540,R561,R563, R567,R586,R595, R621,R622,R624, R638,R653,R654, R661,R662,R666		2.547039	57	6560413.827351
105A500239	Resistor	R279,R537		2.547039	2	154078778.388085

File Name: HSB-LN2I.rfp
Assembly: 9697LN2100-D
Ref Des:
Description:

Failure Rate: 7505.914667
MTBF (hrs): 133,228
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A501039	Resistor	R114,R117,R118, R119,R120,R124, R125,R126,R128, R129,R130,R16, R17,R175,R186,R200, R251,R253,R264, R265,R30,R315, R317,R320,R330,R331, R332,R364,R370, R376,R377,R378, R396,R397,R398, R399,R400,R401, R416,R418,R445, R446,R451,R453, R454,R459,R460, R461,R47		2.547039	79	4767599.765436
105A501043	Resistor	R711,R731,R735		2.547039	3	107020754.986850
105A501333	Resistor	R717		2.547039	1	282340674.079668
105A501533	Resistor	R738,R739		2.547039	2	154078778.388085
105A501539	Resistor	R101,R72		2.547039	2	154078778.388085
105A501833	Resistor	R733		2.547039	1	282340674.079668
105A502003	Resistor	R260		2.547039	1	282340674.079668
105A502039	Resistor	R104,R504,R585, R703		2.547039	4	82309758.689546

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A503309	Resistor	R122,R123,R140, R158,R159,R160, R161,R162,R163, R164,R165,R166, R167,R168,R169, R170,R172,R173, R174,R176,R177, R203,R204,R205, R208,R209,R210, R211,R212,R213, R214,R215,R216, R217,R336,R391, R456,R457,R47,R640, R642		2.547039	41	9043562.562696
105A505109	Resistor	R274,R275,R276, R277,R278,R281, R385,R386,R420, R421,R422,R426, R464,R467		2.547039	14	25477245.255648
105A506829	Resistor	R228,R236		2.547039	2	154078778.388085
105A507509	Resistor	R643,R644,R645		2.547039	3	107020754.986850
105A510009	Resistor	R102,R107,R29,R31, R583		2.547039	5	67008142.102588
105A510223	Resistor	R707		2.547039	1	282340674.079668
105A512423	Resistor	R718		2.547039	1	282340674.079668
105A513033	Resistor	R686		2.547039	1	282340674.079668
105A515009	Resistor	R144,R147,R155, R196,R197,R198, R235,R46,R54,R91		2.547039	10	35079934.879747
105A515033	Resistor	R259		2.547039	1	282340674.079668

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105A518033	Resistor	R712		2.547039	1	282340674.079668
105A522669	Resistor	R234		2.547039	1	282340674.079668
105A523713	Resistor	R517		2.547039	1	282340674.079668
105A524003	Resistor	R715		2.547039	1	282340674.079668
105A524913	Resistor	R425,R547		2.547039	2	154078778.388085
105A524933	Resistor	R734		2.547039	1	282340674.079668
105A530003	Resistor	R736		2.547039	1	282340674.079668
105A531613	Resistor	R742		2.547039	1	282340674.079668
105A531623	Resistor	R719,R721,R722		2.547039	3	107020754.986850
105A532423	Resistor	R706		2.547039	1	282340674.079668
105A533213	Resistor	R541		2.547039	1	282340674.079668
105A536533	Resistor	R254		2.547039	1	282340674.079668
105A545303	Resistor	R439		2.547039	1	282340674.079668
105A549919	Resistor	R702		2.547039	1	282340674.079668
105A549969	Resistor	R240,R247,R525,R542,R554,R565		2.547039	6	56573956.677649
105A552323	Resistor	R737		2.547039	1	282340674.079668
105A553623	Resistor	R716		2.547039	1	282340674.079668
105A554923	Resistor	R691		2.547039	1	282340674.079668
105A566503	Resistor	R193		2.547039	1	282340674.079668
105A575009	Resistor	R527		2.547039	1	282340674.079668
105A575033	Resistor	R696		2.547039	1	282340674.079668
105A580623	Resistor	R697		2.547039	1	282340674.079668
105A584523	Resistor	R688		2.547039	1	282340674.079668
105A597604	Resistor	R534		2.547039	1	282340674.079668
105A700003	Resistor	R142,R19,R23,R252,R261,R262,R263,R290,R306,R307,R347,R512,R557,R570,R572,R576,R579,R587,R701,R710,R713,R723,R732,R80		2.547039	25	14603612.751152

File Name: HSB-LN2I.rfp
Assembly: 9697LN2100-D
Ref Des:
Description:

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MTBF (hrs): 133,228
Temperature: 30
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700009	Resistor	R111,R116,R135, R136,R137,R14, R153,R179,R182,R199, R202,R221,R222, R238,R241,R255, R256,R257,R268, R269,R287,R288, R292,R302,R308, R313,R316,R353, R357,R360,R361, R369,R375,R379, R390,R405,R412, R415,R442,R450, R478,R483,R501, R513,R514,R516, R518,R52,R5		2.547039	74	5082863.157600
105A700103	Resistor	R113,R225,R232, R293		2.547039	4	82309758.689546
105A701003	Resistor	R740		2.547039	1	282340674.079668
105A701009	Resistor	R181,R184,R190, R195,R224,R227, R300,R551		2.547039	8	43225424.698300
105A701039	Resistor	R258		2.547039	1	282340674.079668
105A701059	Resistor	R194,R492		2.547039	2	154078778.388085
105A701069	Resistor	R178		2.547039	1	282340674.079668
105A702053	Resistor	R384		2.547039	1	282340674.079668
105A702209	Resistor	R12		2.547039	1	282340674.079668
105A702239	Resistor	R413		2.547039	1	282340674.079668
105A702263	Resistor	R556,R684		2.547039	2	154078778.388085
105A703363	Resistor	R720		2.547039	1	282340674.079668
105A704729	Resistor	R11,R600		2.547039	2	154078778.388085
105A704739	Resistor	R201		2.547039	1	282340674.079668
105A730009	Resistor	R625		2.547039	1	282340674.079668
105A733003	Resistor	R13,R36,R37		2.547039	3	107020754.986850

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A733009	Resistor	R10,R423,R9		2.547039	3	107020754.986850
105A768009	Resistor	R270,R271,R289, R294,R295,R578, R581		2.547039	7	48991237.965885
106B500144	Resistor	RT2,RT3		7.724580	2	38596617.434771
106B510034	Resistor	RT4		7.724580	1	66247589.526685
1119647191	Capacitor	EC4,EC6,EC7		4.744484	3	59399119.141203
1121501691	Capacitor	BC10,BC100,BC101, BC102,BC103,BC104, BC105,BC106,BC107, BC108,BC109,BC110, BC111,BC112,BC113, BC114,BC115,BC116, BC117,BC118,BC119, BC12,BC120,BC121, BC122,BC123,BC124, BC125,BC126,BC127, BC128,BC13,BC130, BC131,BC132,BC133, BC134,BC135,BC136, BC137,BC138		1.128806	197	4418246.911252
1121647480	Capacitor	C130		1.128806	1	704977644.692287
1122522890	Capacitor	C140,C152,C8		1.128806	3	257514172.353070
1124410080	Capacitor	C63,C64		1.128806	2	375289731.076049
1124427091	Capacitor	C151,C364,C366,C47, C48,C66,C72,C75, C77		1.128806	9	90863428.080946
1124433090	Capacitor	C125,C126,C188,C65, C68		1.128806	5	159367490.199266
1124522190	Capacitor	C171,C285		1.128806	2	375289731.076049
1124522290	Capacitor	C145,C320		1.128806	2	375289731.076049
1124533282	Capacitor	C165		1.128806	1	704977644.692287

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1124547190	Capacitor	C101,C102,C108, C111,C114,C115, C284		1.128806	7	115633865.771428
1124701680	Capacitor	BC129,BC3		1.128806	2	375289731.076049
1129522790	Capacitor	C158		1.128806	1	704977644.692287
1129610051	Capacitor	C129,C153,T C10, TC13,TC16,T C17, TC18,TC19,T C20, TC21,TC22,T C23, TC24,TC25,T C26, TC27,TC29,T C30, TC32,TC4,TC 7,TC9		1.128806	22	38230892.707156
1129610080	Capacitor	BC11,BC183, BC184, BC185,BC18 6,BC191, BC202,BC21 9		1.128806	8	101746760.035398
1129622050	Capacitor	C106,C110,C 128, C176,C177,C 197,C57, C61		1.128806	8	101746760.035398
1129622690	Capacitor	C81		1.128806	1	704977644.692287
1129701791	Capacitor	C11,C116,C1 2,C13, C14,C191,C1 92,C193, C194,C195,C 196, C199,C24,C2 5,C26, C27,C31,C32 ,C33, C34		1.128806	20	41950408.034165
1129710091	Capacitor	C119,C120,C 121,C52, C56,C62		1.128806	6	133979725.056342
1129710391	Capacitor	C282,C304,C 82		1.128806	3	257514172.353070
1129747091	Capacitor	C182,C183,C 185, C186		1.128806	4	196873384.410843
1174518180	Capacitor	CP1,CP2,CP3 ,CP4		1.128806	4	196873384.410843
1189610153	Capacitor	C352		4.744484	1	159663026.715137

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
118961018A	Capacitor	C117,C84		4.744484	2	86049450.747498
1189615154	Capacitor	C361,C362		4.744484	2	86049450.747498
1189627150	Capacitor	C365		4.744484	1	159663026.715137
1189633151	Capacitor	TC34,TC35,T C36, TC37,TC38,T C39, TC40		4.744484	7	26949727.707925
1189633181	Capacitor	EC11,EC20,E C24		4.744484	3	59399119.141203
1189922180	Capacitor	EC5,EC9		4.744484	2	86049450.747498
1189922181	Capacitor	EC23		4.744484	1	159663026.715137
11B2710060	Capacitor	C93,TC11,TC 31,TC8		1.128806	4	196873384.410843
11C1547890	Capacitor	C157,C60		1.128806	2	375289731.076049
11C4410280	Capacitor	C363		1.128806	1	704977644.692287
11C4582190	Capacitor	C306		1.128806	1	704977644.692287
11E1510050	Capacitor	BC148,BC16 6,BC182, BC187,BC18 8,BC189, BC196,BC20 7,BC213, C161,C355		1.128806	11	74892583.279796
11E1522680	Capacitor	C135,C175,C 179,C18, C19,C198,C2 0,C21, C22,C23,C5, C6,C96, C99		1.128806	14	59316298.011235
11E2501080	Capacitor	C160,C49,C8 5,C9, C90		1.128806	5	159367490.199266
11E4433090	Capacitor	C79		1.128806	1	704977644.692287

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11E9501091	Capacitor	C1,C112,C118,C122,C123,C124,C131,C132,C133,C134,C136,C137,C138,C139,C141,C142,C143,C144,C146,C147,C148,C15,C154,C155,C156,C16,C162,C163,C167,C169,C170,C173,C174,C180,C181,C184,C53,C54,C55,C58,C59,C67,C69,C70,C71,C76,C91,C92		1.128806	48	17813540.224875
11E9510051	Capacitor	C313,C314		1.128806	2	375289731.076049
11E9547630	Capacitor	C164		1.128806	1	704977644.692287
11E9647680	Capacitor	C127,C178,C74,C78,C80,C83		1.128806	6	133979725.056342
121110106D	Inductor	L10,L12,L7,L8,L9		4.944252	5	35631881.582999
121110106G	Inductor	L4		4.944252	1	154760964.143460
121110156K	Inductor	L23		4.944252	1	154760964.143460
121110226K	Inductor	L24,L25		4.944252	2	83201062.149749
121110476Q	Inductor	L11,L6		4.944252	2	83201062.149749
1211122076	Inductor	L19		4.944252	1	154760964.143460
1212306030	Inductor	FB15,FB16,FB29,FB3,FB30		4.944252	5	35631881.582999
121230603B	Inductor	FB4,FB5,FB7		4.944252	3	57363284.375370
121230603C	Inductor	FB11,FB12,FB13,FB14		4.944252	4	43912872.424775
121230603W	Inductor	L18		4.944252	1	154760964.143460

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12123A0009	Inductor	FB20,FB21,F B22, FB23,FB24,F B25, FB26,FB27,F B28, FB31,FB32		4.944252	11	16872203.304846
12123C0003	Inductor	FB10,FB9		4.944252	2	83201062.149749
12123C0010	Inductor	FB17,FB19,F B6,FB8, PB1		4.944252	5	35631881.582999
1214309006	Inductor	L13,L14,L15, L16, L17		4.944252	5	35631881.582999
1231314350	Miscellaneous	Y3		19.200000	1	23844262.770939
123132505D	Miscellaneous	Y1,Y4		19.200000	2	8854051.752197
1231332721	Miscellaneous	Y2		19.200000	1	23844262.770939
1300414843	Semiconductor	D3,D4,D5,D6 ,D7,D8		7.793411	6	18540453.699406
1301005444	Semiconductor	D28,D31		7.793411	2	50578095.223398
1301400642	Semiconductor	D1,D10,D11, D2,D23, D26,D27		7.793411	7	16052497.121446
1304001340	Optical Device	LED2		79.003355	1	6497172.749112
1304101340	Optical Device	LED1		79.003355	1	6497172.749112
1305080040	Semiconductor	D33		7.793411	1	92807310.010983
1305099140	Semiconductor	D24,D25		7.793411	2	50578095.223398
1305100541	Semiconductor	D13,D14,D15 ,D16, D17,D18,D19 ,D20, D21,D22		7.793411	10	11489279.961809
1310390413	Semiconductor	Q20,Q22,Q2 5,Q26, Q27,Q29,Q3 3,Q39, Q41,Q49,Q5, Q6,Q65		22.463360	13	3088344.241500
1311390612	Semiconductor	Q34,Q40		22.463360	2	17315095.066101
1315033510	Semiconductor	Q23		22.463360	1	31642600.748419
1315034430	Semiconductor	Q7		22.463360	1	31642600.748419
1315230511	Semiconductor	Q50		22.463360	1	31642600.748419
1315493910	Semiconductor	Q28,Q31,Q8		22.463360	3	12043329.789539

File Name: HSB-LN2I.rfp
Assembly: 9697LN2I00-D
Ref Des:
Description:

Failure Rate: 7505.914667
MTBF (hrs): 133,228
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315700211	Semiconductor	Q10,Q19,Q21,Q24,Q3,Q35,Q36,Q4,Q43,Q44,Q45,Q46,Q47,Q51,Q54,Q56,Q58,Q59,Q60,Q61,Q62,Q63,Q66,Q67,Q68,Q9		22.463360	26	1589867.643171
1315720010	Semiconductor	Q70,Q71		22.463360	2	17315095.066101
1315762010	Semiconductor	Q69,Q73		22.463360	2	17315095.066101
1315806210	Semiconductor	U53		22.463360	1	31642600.748419
1315806510	Semiconductor	U54		22.463360	1	31642600.748419
1315970211	Semiconductor	U61,U62,U63		22.463360	3	12043329.789539
1430012830	Integrated Circuit	U15	12.5	102.429404	1	5020163.231636
14S2200900	Integrated Circuit	U14		43.803003	1	11739202.588727
14S2538000	Integrated Circuit	U38		43.803003	1	11739202.588727
14S2591200	Integrated Circuit	U59	12.9	105.135171	1	4890963.916048
14S2750100	Integrated Circuit	U2		43.803003	1	11739202.588727
14S3050100	Integrated Circuit	U16	12.7	103.774327	1	4955101.578967
14S3102000	Integrated Circuit	U22		43.803003	1	11739202.588727
14S3111701	Integrated Circuit	U1		43.803003	1	11739202.588727
14S3111703	Integrated Circuit	Q48		43.803003	1	11739202.588727
14S3112400	Integrated Circuit	U7		43.803003	1	11739202.588727
14S3121600	Integrated Circuit	U5		43.803003	1	11739202.588727
14S3128422	Integrated Circuit	U31		43.803003	1	11739202.588727
14S3524701	Integrated Circuit	U13		43.803003	1	11739202.588727
14S4021301	Integrated Circuit	U3		43.803003	1	11739202.588727
14S4048502	Integrated Circuit	U27,U28		43.803003	2	6834791.244197
14S4081102	Integrated Circuit	U39		43.803003	1	11739202.588727
14S4180010	Integrated Circuit	U18	9.7	32.894541	1	15632148.042949
14S4280126	Integrated Circuit	U17	21.5	181.321181	1	2835919.815007
14S4362707	Integrated Circuit	U9		43.803003	1	11739202.588727
14S4519500	Integrated Circuit	U19		43.803003	1	11739202.588727
14S4811103	Integrated Circuit	U2	9.7	85.182395	1	6036603.315081
14S4811103	Integrated Circuit	U8		43.803003	1	11739202.588727
14S4888801	Integrated Circuit	U23		43.803003	1	11739202.588727
14S5812502	Integrated Circuit	U29		26.018600	1	25551442.237972
14S5912300	Integrated Circuit	U40		26.018600	1	25551442.237972
14S5A00703	Integrated Circuit	U20,U36		26.018600	2	14194252.866846
14S5A00704	Integrated Circuit	U34		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U24,U35,U60		26.018600	3	9949526.289768
14S5A01400	Integrated Circuit	U30		26.018600	1	25551442.237972
14S5A01402	Integrated Circuit	U41,U42		26.018600	2	14194252.866846
14S5A12506	Integrated Circuit	U26		26.018600	1	25551442.237972

File Name: HSB-LN2I.rfp
Assembly: 9697LN2I00-D
Ref Des:
Description:

Failure Rate: 7505.914667
MTBF (hrs): 133,228
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S5A23200	Integrated Circuit	U4	19.8	163.177041	1	3151254.166640
14S6252501	Integrated Circuit	U25		11.063278	1	58231413.220643
1540510380	Resistor	RN1,RN10,R N9		9.971436	3	21639329.074793
1540710280	Resistor	RP1,RP2		9.971436	2	30043399.401299
1540733085	Resistor	RP3,RP4,RP5 ,RP6		9.971436	4	17049357.262242
1540747285	Resistor	RP16,RP17,R P19,RP7		9.971436	4	17049357.262242
1540782282	Resistor	RN4,RN5,RN 6,RN7, RN8,RP10,RP 11,RP12, RP13,RP14,R P15, RP18,RP8,RP 9		9.971436	14	5739351.900524
1651520400	Connection	DIMM2		16.184835	1	35685591.360212
16515A2994	Connection	DIMM1		16.184835	1	35685591.360212
165251420K	Connection	LAN1,LAN2		16.184835	2	20390152.380746
1653002100	Connection	CN1		16.184835	1	35685591.360212
1653003101	Connection	JP1,JP2,JP4,J P5		16.184835	4	11344857.509064
1653003201	Connection	JP3		16.184835	1	35685591.360212
1653004200	Connection	FP1,FP2		16.184835	2	20390152.380746
165300420L	Connection	SPI1		16.184835	1	35685591.360212
1653005201	Connection	USB1,USB2		16.184835	2	20390152.380746
1653005202	Connection	COM1,COM2, DIO1		16.184835	3	14515880.849373
1653005205	Connection	CN2		16.184835	1	35685591.360212
1653213207	Connection	LPT1		16.184835	1	35685591.360212
165322020I	Connection	IDE1		16.184835	1	35685591.360212
1653300100	Connection	XFP2(5-7)		16.184835	1	35685591.360212
1653300102	Connection	JP1(1-2)1, JP4(1-2) 1,JP5(2-3)		16.184835	3	14515880.849373
1653300107	Connection	JP2(2-3)1, JP3(3-5)1, JP3(4-6)1		16.184835	3	14515880.849373
165392521J	Connection	CFD1		16.184835	1	35685591.360212
1654030003	Connection	CN3		16.184835	1	35685591.360212
1654515308	Connection	VGA1		16.184835	1	35685591.360212
1654606100	Connection	CN4		16.184835	1	35685591.360212
1654804100	Connection	USB3		16.184835	1	35685591.360212
1654900703	Connection	SATA1,SATA 2,SATA3		16.184835	3	14515880.849373
1655004014	Connection	CPUFAN1,SY SFAN1		16.184835	2	20390152.380746

**Reliability Prediction
Summary**

File Name: HSB-LN21.rfp
Assembly: 9697LN2100-D
Ref Des:
Description:

Failure Rate: 7505.914667
MTBF (hrs): 133,228
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1655005021	Connection	CN5		16.184835	1	35685591.360212
1655204022	Connection	PCIE_12V1		16.184835	1	35685591.360212
1655305020	Connection	CN6		16.184835	1	35685591.360212
1655902030	Connection	BAT1A		16.184835	1	35685591.360212
175011901C	Miscellaneous	BAT1B		306.000000	1	1681683.006787
1752001603	Miscellaneous	FS1,P4		2.400000	2	143944727.196625