

# ESBD-EUGEH01

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 7376.827727 MTBF: 135,560 Hours
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Issue date	QE Manager	Test Engineer
2017-10-05	KJ Wang	Max Chang

# Reliability Prediction (MTBF)

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**I . Model Name:** ESBD-EUGEH01

**II . Prediction Date:** October. 5th, 2017

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

**IV . Predicted by:** Max Chang

**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:**

ESBD-EUGEH01 (M/B: 9697EUGE81-D):

- Failure Rate: 7376.827727

- MTBF: 135,560 Hours

**Reliability Prediction  
Summary**

**File Name:** ESBD-EUGEH01.rfp  
**System:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
ESBD-EUGEH01	9697EUGE81-D		1	7376.827727	135,560

**File Name:** ESBD-EUGEH01.rfp  
**Assembly:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1050500104	Resistor	R238,R31 1	2.547039	2	6.490186
1050501004	Resistor	R360,R60 0,R690	2.547039	3	9.343982
1050501234	Resistor	R158	2.547039	1	3.541821
1050502004	Resistor	R257,R35 7,R385	2.547039	3	9.343982
1050502734	Resistor	R69,R737	2.547039	2	6.490186
1050503324	Resistor	R220,R38 6,R400	2.547039	3	9.343982
1050503634	Resistor	R12	2.547039	1	3.541821
1050504724	Resistor	R167,R20 7,R212, R213,R24, R29	2.547039	6	17.675978
1050504734	Resistor	R518	2.547039	1	3.541821
1050505124	Resistor	R675	2.547039	1	3.541821
1050505134	Resistor	R11	2.547039	1	3.541821
1050505633	Resistor	R426	2.547039	1	3.541821
1050506234	Resistor	R617,R66 7,R703	2.547039	3	9.343982
1050507530	Resistor	R208,R34 6,R382	2.547039	3	9.343982
1050510034	Resistor	R345,R35 9,R701	2.547039	3	9.343982
1050512104	Resistor	R428,R53 5	2.547039	2	6.490186
1050513724	Resistor	R13,R389	2.547039	2	6.490186
1050515034	Resistor	R209,R33 9,R368	2.547039	3	9.343982
1050518204	Resistor	R572,R60 5	2.547039	2	6.490186
1050518744	Resistor	R206,R39 2	2.547039	2	6.490186
1050520034	Resistor	R320,R55 9,R655	2.547039	3	9.343982
1050524034	Resistor	R601	2.547039	1	3.541821
1050525524	Resistor	R722	2.547039	1	3.541821
1050526124	Resistor	R602	2.547039	1	3.541821
1050530124	Resistor	R639	2.547039	1	3.541821
1050531624	Resistor	R210	2.547039	1	3.541821
1050535734	Resistor	R682	2.547039	1	3.541821
1050536514	Resistor	R738	2.547039	1	3.541821
1050540204	Resistor	R513,R54 8,R552, R558,R57 4	2.547039	5	14.923560
1050540224	Resistor	R338	2.547039	1	3.541821

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1050545304	Resistor	R258,R34 4,R712	2.547039	3	9.343982
1050545364	Resistor	R547	2.547039	1	3.541821
1050549964	Resistor	R259,R33 7,R366, R581	2.547039	4	12.149228
1050561934	Resistor	R435	2.547039	1	3.541821
1050700002	Resistor	R449	2.547039	1	3.541821
1050710014	Resistor	R797,R79 8,R799, R800,R80 1,R802, R803,R80 4	2.547039	8	23.134533
1050718034	Resistor	R434	2.547039	1	3.541821
1051500172	Resistor	R598	2.547039	1	3.541821
1052500171	Resistor	R277,R48 8,R522, R549,R55 5,R563, R579,R59 0	2.547039	8	23.134533
1059520001	Resistor	R5	2.547039	1	3.541821
1059710001	Resistor	R6	2.547039	1	3.541821
1059710003	Resistor	R409,R41 3	2.547039	2	6.490186
105A500103	Resistor	R34	2.547039	1	3.541821
105A500139	Resistor	R171,R23 2,R264, R313,R35 2,R354, R374,R39 4,R567, R645,R68 1,R699	2.547039	12	33.890167
105A500173	Resistor	R546,R57 5,R615, R618,R61 9,R623, R643	2.547039	7	20.411813
105A500239	Resistor	R162	2.547039	1	3.541821
105A501003	Resistor	R450	2.547039	1	3.541821
105A501039	Resistor	R235,R31 4,R336, R340,R35 3,R588, R727	2.547039	7	20.411813
105A501539	Resistor	R64	2.547039	1	3.541821
105A501829	Resistor	R364,R74 1,R742	2.547039	3	9.343982

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105A502039	Resistor	R157,R165,R290,R497,R541	2.547039	5	14.923560
105A502223	Resistor	R516	2.547039	1	3.541821
105A502263	Resistor	R627,R632,R672,R704,R714,R721	2.547039	6	17.675978
105A503039	Resistor	R278,R342	2.547039	2	6.490186
105A503309	Resistor	R408,R412	2.547039	2	6.490186
105A504703	Resistor	R227,R379,R398	2.547039	3	9.343982
105A505109	Resistor	R530,R533,R542,R61,R78	2.547039	5	14.923560
105A506834	Resistor	R142	2.547039	1	3.541821
105A507509	Resistor	R711,R745,R746,R747	2.547039	4	12.149228
105A507533	Resistor	R447	2.547039	1	3.541821
105A508223	Resistor	R517	2.547039	1	3.541821
105A510009	Resistor	R254,R255,R369,R387,R540,R594,R608,R726,R731	2.547039	9	25.803491
105A510223	Resistor	R457	2.547039	1	3.541821
105A511303	Resistor	R71	2.547039	1	3.541821
105A513323	Resistor	R634	2.547039	1	3.541821
105A514023	Resistor	R309	2.547039	1	3.541821
105A515009	Resistor	R529	2.547039	1	3.541821
105A515823	Resistor	R321	2.547039	1	3.541821
105A524919	Resistor	R355,R356,R587	2.547039	3	9.343982
105A524963	Resistor	R445	2.547039	1	3.541821
105A530109	Resistor	R260	2.547039	1	3.541821
105A531623	Resistor	R538,R707	2.547039	2	6.490186
105A536503	Resistor	R543	2.547039	1	3.541821
105A540269	Resistor	R604,R609	2.547039	2	6.490186
105A544223	Resistor	R545	2.547039	1	3.541821
105A547003	Resistor	R22	2.547039	1	3.541821
105A548723	Resistor	R333	2.547039	1	3.541821
105A549919	Resistor	R199	2.547039	1	3.541821

**Reliability Prediction  
Summary**

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105A553629	Resistor	R713	2.547039	1	3.541821
105A700003	Resistor	R121,R131,R16,R177, R18,R247, R294,R295, R317,R326,R396, R406,R433,R468, R515,R679	2.547039	16	44.592810
105A700009	Resistor	R146,R160,R169, R170,R175,R179, R181,R184,R187, R211,R214,R216, R217,R221,R226, R228,R229,R231, R236,R246,R267, R268,R269,R270, R276,R282,R298, R312,R327,R337, R347,R357, R371,R377, R383,R402,R403, R405,R416, R484,R486, R489,R496,R520, R527,R528,R568, R569	2.547039	82	217.550778



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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
105A700139	Resistor	R103,R135,R15,R17  R223,R284,R285,R300,R304,R305,R307,R315,R316,R350,R375,R424,R465,R53,R562,R564, R614,R708,R709,R716,R720,R732,R777	2.547039	27	73.758599
105A701009	Resistor	R692,R693,R694,R695	2.547039	4	12.149228

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105A701039	Resistor	R1,R101,R106,R119,R122,R126,R136,R144,R163,R174,R176,R180,R182,R188,R196,R20,R200,R218,R225,R234,R239,R240,R241,R242,R244,R266,R274,R291,R293,R3,R301  R306,R328,R329,R332,R343,R348,R363,R365,R43,R446,R469,R47,R474,R490,R491,R492,R495,R500,R531,	2.547039	82	217.550778
105A701059	Resistor	R166,R183,R401,R421,R725	2.547039	5	14.923560
105A701069	Resistor	R584	2.547039	1	3.541821
105A701539	Resistor	R303,R308	2.547039	2	6.490186
105A702039	Resistor	R592,R599	2.547039	2	6.490186
105A702229	Resistor	R318,R319,R440,R441,R482,R56,R650,R659,R73,R74	2.547039	10	28.506324
105A702263	Resistor	R222,R297,R662	2.547039	3	9.343982

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105A702269	Resistor	R341	2.547039	1	3.541821
105A703309	Resistor	R201,R237,R628,R638,R710,R719,R770,R771,R772,R773,R774,R775,R776	2.547039	13	36.573004
105A703363	Resistor	R510	2.547039	1	3.541821
105A704729	Resistor	R185,R186,R219,R273,R283,R362,R384,R411,R479,R554,R585,R595,R616,R661,R665,R740,R76,R77,R79,R9	2.547039	20	55.234238
105A704739	Resistor	R471	2.547039	1	3.541821
105A706829	Resistor	R419,R754	2.547039	2	6.490186
105A710009	Resistor	R67	2.547039	1	3.541821

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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
105A710039	Resistor	R115,R116,R124,R125,R139,R145,R189,R192,R194,R195,R197,R198,R203,R204,R224,R230,R26,R281,R30,R381,R391,R416,R42,R420,R423,R425,R460,R523,R524,R525,R537,R54,R556,R577,R578,R631,R663,R673,R678,R7,R733 R760,R8,R80,R88	2.547039	45	121.056938
105A720009	Resistor	R261,R334,R370,R534,R717	2.547039	5	14.923560
105A733009	Resistor	R275,R286,R322,R323,R335,R349,R367,R422,R430,R788,R791	2.547039	11	31.201544
105A747009	Resistor	R130,R151,R2,R436	2.547039	6	17.675978
106B510034	Resistor	R49,R576 RT1,RT2,RT3,RT4,RT5,RT6	2.547039	6	17.675978

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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1121501691	Capacitor	C10,C100, C102,C10 4, C106,C10 8,C111, C113,C11 4,C115, C119,C12 0,C124, C125,C12 7,C131, C137,C14 0,C145, C146,C15, C150,C15 1, C153,C15 6,C158, C159,C16, C163,C16 9, C170,C17 4,C175, C176,C17 7,C182, C183,C18 4,C189, C192,C19 5,C196, C198,C20 0,C201, C202,C20 3,C215, C21	1.128806	187	214.944255
1124410191	Capacitor	C240,C24 9,C264, C269	1.128806	4	5.079407
1124418090	Capacitor	C489,C49 0,C89,C99	1.128806	4	5.079407
1124420090	Capacitor	C252,C27 1	1.128806	2	2.664608
1124427090	Capacitor	C205,C20 6,C222, C223	1.128806	4	5.079407
1124533190	Capacitor	C530	1.128806	1	1.418485
1124533191	Capacitor	C136,C26 6,C282	1.128806	3	3.883281
1124533282	Capacitor	C339	1.128806	1	1.418485

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1129701791	Capacitor	C132,C149,C191,C219,C3,C380,C389,C394,C4,C402,C415,C5,C649,C680,C681,C682,C683,C7	1.128806	19	22.676921
1129710090	Capacitor	C440,C463	1.128806	2	2.664608
1129710091	Capacitor	C284,C672,C673,C674,C675,C676,C677	1.128806	7	8.647986
1129710391	Capacitor	C122,C128,C204,C235,C263,C279,C318,C355,C485,C68	1.128806	10	12.180111
1129747090	Capacitor	C130,C241,C273	1.128806	3	3.883281
1181610196	Capacitor	EC1	4.744484	1	6.263191
1189615154	Capacitor	TC15,TC2,TC7,TC9	4.744484	4	21.975190
1189633151	Capacitor	TC12,TC4	4.744484	2	11.621225
118A6221B0	Capacitor	TC1,TC13,TC14,TC3	4.744484	4	21.975190
118C6331B0	Capacitor	TC5,TC6,TC8	4.744484	3	16.835266
11A2422190	Capacitor	C628	1.128806	1	1.418485
11A4410194	Capacitor	C255	1.128806	1	1.418485
11C1501030	Capacitor	C332	1.128806	1	1.418485
11C2510480	Capacitor	C28,C320,C592,C63	1.128806	4	5.079407
11C2522480	Capacitor	C543,C600,C630	1.128806	3	3.883281
11C4401880	Capacitor	C129	1.128806	1	1.418485
11C4501380	Capacitor	C180,C591	1.128806	2	2.664608
11C4522191	Capacitor	C243	1.128806	1	1.418485
11C4522290	Capacitor	C17,C19,C44	1.128806	3	3.883281
11C4533240	Capacitor	C147,C242,C277	1.128806	3	3.883281

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11C4547190	Capacitor	C121,C15 2,C155, C157,C16 6,C193, C194,C22 8,C300, C301,C30 2,C303, C304,C30 6,C312, C319,C33 1,C41,C65 7, C685,C68 6	1.128806	21	24.997630
11C4547290	Capacitor	C20	1.128806	1	1.418485
11E1510050	Capacitor	C173,C18 6,C187, C188,C23, C296,C29 7, C321,C35 7,C403, C406,C42 8,C429, C532,C59 8,C622, C678,C68 4,C9	1.128806	19	22.676921
11E1522680	Capacitor	C12,C123, C207,C52 1, C614	1.128806	5	6.274805
11E2501080	Capacitor	C558,C58 2,C599	1.128806	3	3.883281
11E2501690	Capacitor	C270,C28 6,C307,C3 5, C6,C84	1.128806	6	7.463816
11E2510010	Capacitor	C160,C30 9,C554, C601	1.128806	4	5.079407
11E2510060	Capacitor	C359,C36 0,C361	1.128806	3	3.883281
11E2522060	Capacitor	C687,C68 8	1.128806	2	2.664608
11E2610032	Capacitor	C594,C61 1,C679	1.128806	3	3.883281

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11E2622011	Capacitor	C1,C311,C324,C34,C343,C346,C371,C388,C392,C566,C567,C70,C72,C77,C90	1.128806	15	18.024625
11E2647650	Capacitor	C40	1.128806	1	1.418485
11E4433090	Capacitor	C288,C290,C39,C552	1.128806	4	5.079407
11E9522790	Capacitor	C232,C289,C293,C298	1.128806	4	5.079407
11E9547630	Capacitor	C171,C172,C178,C179,C393	1.128806	5	6.274805
11E9547682	Capacitor	C445,C470,C481,C535,C537,C551	1.128806	6	7.463816
11E9547790	Capacitor	C347	1.128806	1	1.418485
11E9610080	Capacitor	C101,C107,C112,C116,C209,C210,C211,C226,C227,C25,C274,C280,C363,C378,C398,C407,C408,C461,C487,C488,C500,C512,C522,C584,C588,C589,C61,C619,C663,C668,C671,C73	1.128806	32	37.717541



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11E9622080	Capacitor	C375,C376,C413,C475,C477,C486,C507,C508,C518,C523,C524,C534,C536,C549,C550,C580,C581,C74,C83	1.128806	19	22.676921
11EA610030	Capacitor	C604,C660	1.128806	2	2.664608
11EB510640	Capacitor	C13,C181,C199,C208,C212,C213,C214,C221,C238,C258,C276,C334,C367,C373,C390,C395,C396,C397,C400,C412,C414,C418,C419,C423,C425,C427,C430,C432,C433,C434,C435,C436,C437,C438,C439,C446,C447,C448,C450,C458,C459,C460,C465,C466,C469,C471,C472,C473,C	1.128806	92	106.555873
121110156Z	Inductor	L1	4.944252	1	6.461578
121110226X	Inductor	L3,L7	4.944252	2	12.019077
1211102275	Inductor	L5,L8	4.944252	2	12.019077
1211103376	Inductor	L6	4.944252	1	6.461578
121110476Q	Inductor	L10,L9	4.944252	2	12.019077

**File Name:** ESBD-EUGEH01.rfp  
**Assembly:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
121110686A	Inductor	L4	4.944252	1	6.461578
1211115073	Inductor	L2	4.944252	1	6.461578
1211202700	Inductor	L11,L12,L13	4.944252	3	17.432754
1212306030	Inductor	FB15,FB20,FB26,FB27,FB3	4.944252	5	28.064754
1212308054	Inductor	FB28,FB7,FB9	4.944252	3	17.432754
12123C0031	Inductor	FB12,FB22,FB23,FB24,FB8	4.944252	5	28.064754
1214109000	Inductor	CH1,CH11,CH12,CH13, CH2	4.944252	5	28.064754
1214109004	Inductor	CH10,CH3,CH5,CH8	4.944252	4	22.772366
12310027A2	Miscellaneous	Y5	19.200000	1	41.938810
12310192A0	Miscellaneous	Y6	19.200000	1	41.938810
1231324056	Miscellaneous	Y1	19.200000	1	41.938810
123132505M	Miscellaneous	Y3,Y4	19.200000	2	112.942642
1231332726	Miscellaneous	Y7	19.200000	1	41.938810
12330024A1	Miscellaneous	Y2	19.200000	1	41.938810
1301005444	Semiconductor	D10,D9	7.793411	2	19.771405
1301013040	Semiconductor	D11	7.793411	1	10.775013
1301400642	Semiconductor	D4	7.793411	1	10.775013
1301793040	Semiconductor	D17,D18,D21	7.793411	3	28.484462
1304000043	Optical Device	LED3	79.003355	1	153.913100
1304101440	Optical Device	LED2	79.003355	1	153.913100
1304500240	Optical Device	LED1	79.003355	1	153.913100
130505ESD0	Semiconductor	U33,U41,U42,U43,U82,U83,U84,U85,U86,U87,U88,U89	22.463360	12	300.088196
1305080040	Semiconductor	D12,D22,D23,U37,U39	7.793411	5	45.526910
1310390413	Semiconductor	Q58,Q59	22.463360	2	57.753076
1311390612	Semiconductor	Q13,Q9	22.463360	2	57.753076
1315013810	Semiconductor	Q26	22.463360	1	31.602965
1315190100	Semiconductor	U64,U67,U71	22.463360	3	83.033515
1315230511	Semiconductor	Q37,Q38,Q39,Q42,Q46,Q47,Q50,Q53	22.463360	8	205.039971

**File Name:** ESBD-EUGEH01.rfp  
**Assembly:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1315443512	Semiconductor	Q1,Q2,Q5	22.463360	3	83.033515
1315700216	Semiconductor	Q11,Q40, Q61,Q62, Q63,Q8	22.463360	6	156.767054
1315720010	Semiconductor	Q16,Q19, Q27,Q28	22.463360	4	107.867794
1315762010	Semiconductor	Q20	22.463360	1	31.602965
1315D4C500	Semiconductor	Q10,Q29	22.463360	2	57.753076
1315EM6K10	Semiconductor	Q12,Q14, Q17,Q18, Q21,Q22, Q3,Q31,Q 35, Q36,Q4,Q 44,Q45,Q 48, Q49,Q51, Q52,Q54, Q55,Q56, Q57,Q6,Q 60, Q65,Q7	22.463360	25	605.647193
1430053250	Integrated Circuit	U38	43.803003	1	85.184662
1430455200	Integrated Circuit	U1,U11,U 16,U48	43.803003	4	257.787974
1430532190	Integrated Circuit	U49	43.803003	1	85.184662
1430812410	Integrated Circuit	U22,U36, U40	43.803003	3	203.118269
143117ADJ0	Integrated Circuit	U10,U47	43.803003	2	146.310248
14407517A1	Integrated Circuit	U44	43.803003	1	85.184662
1440N31600	Integrated Circuit	U14	21.706765	1	42.213622
1462GBW5A1	Integrated Circuit	U90	11.063278	1	17.172862
149TB01040	Integrated Circuit	U58,U66	43.803003	2	146.310248
149TS01040	Integrated Circuit	U26	43.803003	1	85.184662
14S1035803	Integrated Circuit	U70	43.803003	1	85.184662
14S2200900	Integrated Circuit	U46	43.803003	1	85.184662
14S2432600	Integrated Circuit	U3	43.803003	1	85.184662
14S3009900	Integrated Circuit	U78,U79, U80,U81	43.803003	4	257.787974
14S3112400	Integrated Circuit	U9	43.803003	1	85.184662
14S3121600	Integrated Circuit	U68	43.803003	1	85.184662
14S3524700	Integrated Circuit	U50	43.803003	1	85.184662
14S3902500	Integrated Circuit	U27,U6	43.803003	2	146.310248
14S4186600	Integrated Circuit	U19	43.803003	1	85.184662
14S4251402	Integrated Circuit	U15	43.803003	1	85.184662
14S4751100	Integrated Circuit	U7	43.803003	1	85.184662
14S4811103	Integrated Circuit	U34,U35	43.803003	2	146.310248
14S5A00704	Integrated Circuit	U17	43.803003	1	85.184662
14S5A00802	Integrated Circuit	U23,U24	43.803003	2	146.310248

**File Name:** ESBD-EUGEH01.rfp  
**Assembly:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
14S5A00821	Integrated Circuit	U18,U53, U61	43.803003	3	203.118269
14S5A01402	Integrated Circuit	U28,U29	43.803003	2	146.310248
14S5A30601	Integrated Circuit	U30,U59	43.803003	2	146.310248
14S5A73200	Integrated Circuit	U21	43.803003	1	85.184662
14S6206403	Integrated Circuit		43.803003	1	85.184662
14S6366B00	Integrated Circuit	U62,U63	43.803003	2	146.310248
14S9346001	Integrated Circuit	U4	43.803003	1	85.184662
1540722281	Resistor	RP2	9.971436	1	19.377251
1540733085	Resistor	RP1	9.971436	1	19.377251
16515A2990	Connection	CN34	16.184835	1	28.022514
165251420B	Connection	CN26,CN2 7	16.184835	2	49.043282
165300210C	Connection	JP22,JP23	16.184835	2	49.043282
165300310G	Connection	JP12,JP15	16.184835	2	49.043282
165300320K	Connection	JP3,JP4,JP 6	16.184835	3	68.890067
165300520X	Connection	JP1	16.184835	1	28.022514
165320520V	Connection	CN12	16.184835	1	28.022514
1653300107	Connection	JP3(3- 5),JP3(4- 6), JP4(3- 5),JP4(4- 6)	16.184835	4	88.145664
165330010E	Connection	JP12(2- 3),JP6(1- 3), JP6(2- 4)	16.184835	3	68.890067
165330010G	Connection	JP15(1-2)	16.184835	1	28.022514
1654030003	Connection	CN9	16.184835	1	28.022514
1654226303	Connection	CN37	16.184835	1	28.022514
1654415308	Connection	CN32	16.184835	1	28.022514
1654801833	Connection	CN28	16.184835	1	28.022514
1654907009	Connection	CN38,CN5	16.184835	2	49.043282
1654926900	Connection	CN36	16.184835	1	28.022514
1655003016	Connection	CN25	16.184835	1	28.022514
1655003028	Connection	CN4	16.184835	1	28.022514
1655302025	Connection	CN2,CN39	16.184835	2	49.043282
1655305025	Connection	CN3	16.184835	1	28.022514
1655306027	Connection	CN24	16.184835	1	28.022514
1655404020	Connection	CN40	16.184835	1	28.022514
1655807030	Connection	CN18	16.184835	1	28.022514
1655902034	Connection	CN31	16.184835	1	28.022514
1655905038	Connection	CN19,CN2 0,CN21	16.184835	3	68.890067
1655912032	Connection	CN14	16.184835	1	28.022514
175011301C	Connection	CN31	16.184835	1	28.022514
1752001603	Miscellaneous	FS8,FS9	2.400000	2	6.947111

**Reliability Prediction  
Summary**

**File Name:** ESBD-EUGEH01.rfp  
**Assembly:** 9697EUGE81-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 7376.827727  
**MTBF (hrs):** 135,560  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1752002500	Miscellaneous	FS4	2.400000	1	3.927328