

# FSB-866G Reliability Prediction Report (MTBF)

Report NO : 05I070008

**08-22-2005**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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I . **Model Name:** FSB-866G (Full-Size PCIMG CPU Card.Socket 775 Pentium 4.VGA.2\*Gigabit Ethernet)

II . **Prediction Date:** Aug. 22, 2005

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

IV . **Predicted by :** Jessica Chou

V . **Equipment:** Relex Ver.7.3 Visual Reliability Software

### VI. Simulation Environment:

- Temperature: 25.4 degrees C
- Standard: Telcordia (Bellcore) Standard

### VII. Term and Definition:

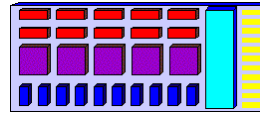
- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000.
- MTBF : MTBF is always specified in hours.

### VIII. Prediction Result:

- Failure Rate: 14.510941 ppm
- MTBF: 68,914 Hours

**AAEON Reliability Prediction Report**

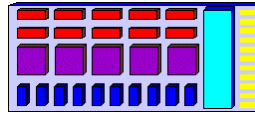
**Part Number** 9697866G0E  
**Reference Des**  
**Date** 08. 22, 2005  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.40



**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
FSB-866G	9697866G0E	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	14.510941	68,914

### AAEON Reliability Prediction Report



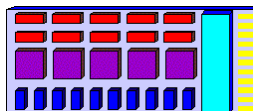
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**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
14S6200403	Integrated Circuit	BIOSIC1	Bellcore Issue 6	Level I		0.166454	1.00	1.1471	0.166454	6007674.65
1750119013	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	6.2022	0.900000	11111111.11
1654515308	Connection	VGA1	Bellcore Issue 6	Level I		0.008715	1.00	.0601	0.008715	114750278.51
1653005201	Connection	USB1-USB3	Bellcore Issue 6	Level I		0.005810	3.00	.1201	0.017429	172125417.76
1654907000	Connection	SATA1-SATA4	Bellcore Issue 6	Level I		0.004067	4.00	.1121	0.016267	245893453.94
1653017205	Connection	FDD1	Bellcore Issue 6	Level I		0.019753	1.00	.1361	0.019753	50625122.87
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.023239	3.00	.4804	0.069717	43031354.44
1653220208	Connection	IDE2-IDE3	Bellcore Issue 6	Level I		0.023239	3.00	.4804	0.069717	43031354.44
1653006101	Connection	IR1	Bellcore Issue 6	Level I		0.003486	1.00	.0240	0.003486	286875696.27
1652510201	Connection	LAN1,LAN2	Bellcore Issue 6	Level I		0.005810	2.00	.0801	0.011619	172125417.76
1653213203	Connection	LPT1	Bellcore Issue 6	Level I		0.015105	1.00	.1041	0.015105	66202083.75
1651592490	Connection	DIMM1,DIMM2	Bellcore Issue 6	Level I		0.106899	2.00	1.4734	0.213798	9354642.27
1654606200	Connection	CN7	Bellcore Issue 6	Level I		0.003486	1.00	.0240	0.003486	286875696.27
1653205203	Connection	COM1,COM2	Bellcore Issue 6	Level I		0.005810	2.00	.0801	0.011619	172125417.76
1653900034	Connection	CFD1	Bellcore Issue 6	Level I		0.001162	1.00	.0080	0.001162	860627088.80
1653002100	Connection	CN2,CN4	Bellcore Issue 6	Level I		0.001162	2.00	.0160	0.002324	860627088.80
1119612291	Capacitor	C103,C105,C121,C151,C17-C19,C-41,C92	Bellcore Issue 6	Level I		0.076927	9.00	4.7712	0.692346	12999289.51
1119612291	Capacitor	C115	Bellcore Issue 6	Level I	4.00	0.094496	1.00	.6512	0.094496	10582436.95
1169656130	Capacitor	C20-C24,C27,C42,C51,C62,C85,C-90	Bellcore Issue 6	Level I		0.020772	11.00	1.5746	0.228488	48142610.31
1169656130	Capacitor	C32	Bellcore Issue 6	Level I	1.60	0.020988	1.00	.1446	0.020988	47646083.03
1111610292	Capacitor	C2,C52,C8,C9	Bellcore Issue 6	Level I		0.046361	4.00	1.2780	0.185444	21569812.29
1111610292	Capacitor	C16	Bellcore Issue 6	Level I	2.30	0.052217	1.00	.3598	0.052217	19150890.49
1231232720	Miscellaneous	Y3	Bellcore Issue 6	Level I		0.150000	1.00	1.0337	0.150000	6666666.67
1654804100	Connection	USB4	Bellcore Issue 6	Level I		0.002324	1.00	.0160	0.002324	430313544.40
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.004648	2.00	.0641	0.009296	215156772.20
1653002101	Connection	JP1	Bellcore Issue 6	Level I		0.001162	1.00	.0080	0.001162	860627088.80
1211100662	Inductor	L10,L15,L9	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
1211100662	Inductor	L12	Bellcore Issue 6	Level I	1.90	0.002371	1.00	.0163	0.002371	421686512.86
1211101161	Inductor	L7	Bellcore Issue 6	Level I	6.10	0.002569	1.00	.0177	0.002569	389294329.53
1653005205	Connection	CN6	Bellcore Issue 6	Level I		0.005810	1.00	.0400	0.005810	172125417.76

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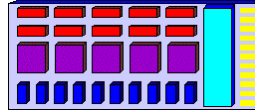


**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1655005021	Connection	CN8	Bellcore Issue 6	Level I		0.002905	1.00	.0200	0.002905	344250835.52
1655003022	Connection	CN1	Bellcore Issue 6	Level I		0.001743	1.00	.0120	0.001743	573751392.53
1119647191	Capacitor	C1,C108-C110,C119-C120,C4,C6,-C61,C75,C87	Bellcore Issue 6	Level I		0.048292	11.00	3.6607	0.531209	20707474.87
1119647191	Capacitor	C118	Bellcore Issue 6	Level I	3.90	0.059020	1.00	.4067	0.059020	16943290.62
1655004014	Connection	FAN1	Bellcore Issue 6	Level I		0.002324	1.00	.0160	0.002324	430313544.40
1655417020	Connection	ATX2	Bellcore Issue 6	Level I		0.011619	1.00	.0801	0.011619	86062708.88
1655404020	Connection	ATX1	Bellcore Issue 6	Level I		0.002324	1.00	.0160	0.002324	430313544.40
1212306031	Inductor	PB16	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A542203	Resistor	R443	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
14S9070800	Integrated Circuit	U42-U44	Bellcore Issue 6	Level I		0.061126	3.00	1.2637	0.183379	16359526.04
14S4805301	Integrated Circuit	U20	Bellcore Issue 6	Level I		0.040229	1.00	.2772	0.040229	24857399.53
14S4805301	Integrated Circuit	U27	Bellcore Issue 6	Level I	1.50	0.043908	1.00	.3026	0.043908	22774758.12
105A502033	Resistor	R163	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A501233	Resistor	R453	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
1654030000	Connection	CN9	Bellcore Issue 6	Level I		0.017429	1.00	.1201	0.017429	57375139.25
105A502003	Resistor	R314	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A520003	Resistor	R335,R407	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
1129710050	Capacitor	CA1,CA10,CA11,CA13-CA15,CA20-CA22,CA27,CA3,CA4	Bellcore Issue 6	Level I		0.002729	12.00	.2257	0.032753	366378757.23
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.029049	1.00	.2002	0.029049	34425083.55
1651612990	Connection	CPU1	Bellcore Issue 6	Level I		0.001162	1.00	.0080	0.001162	860627088.80
1124522280	Capacitor	C123,C7	Bellcore Issue 6	Level I		0.001063	2.00	.0147	0.002126	940740803.88
1124522080	Capacitor	C111,C112,C33,C37,C47,C53,C57-C58,C60,C67,C69,C73,C74,C82-C84,C86	Bellcore Issue 6	Level I		0.001063	17.00	.1245	0.018071	940740803.88
1124418080	Capacitor	C59,C66	Bellcore Issue 6	Level I		0.001063	2.00	.0147	0.002126	940740803.88
1121722780	Capacitor	C91	Bellcore Issue 6	Level I		0.002546	1.00	.0175	0.002546	392826361.27
1124547080	Capacitor	C116,C122,C125,C129,C130,C149	Bellcore Issue 6	Level I		0.001063	6.00	.0440	0.006378	940740803.88
1124556280	Capacitor	C146	Bellcore Issue 6	Level I		0.001063	1.00	.0073	0.001063	940740803.88
1129701790	Capacitor	N1,N10,N11,N2,N3,N8,N9	Bellcore Issue 6	Level I		0.001602	7.00	.0773	0.011212	624322869.81
1212308054	Inductor	L13,L14,PB1,PB10,PB12,PB14,PB15,PB2-PB4	Bellcore Issue 6	Level I		0.002286	10.00	.1575	0.022855	437535796.67

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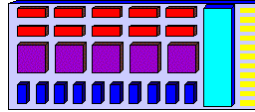


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1752311000	Miscellaneous	P1,P2	Bellcore Issue 6	Level I		0.030000	2.00	.4135	0.060000	33333333.33
1315041210	Semiconductor	Q19,Q2,Q32,Q4,Q8	Bellcore Issue 6	Level I		0.161045	5.00	5.5491	0.805224	6209450.90
1315041210	Semiconductor	Q3	Bellcore Issue 6	Level I	.80	0.164770	1.00	1.1355	0.164770	6069059.24
14S2200900	Integrated Circuit	U19	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S3115000	Integrated Circuit	U24	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
1314916710	Integrated Circuit	U28	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S5A01400	Integrated Circuit	U12,U32	Bellcore Issue 6	Level I		0.061126	2.00	.8425	0.122253	16359526.04
14S4021310	Integrated Circuit	U35	Bellcore Issue 6	Level I	15.20	0.175595	1.00	1.2101	0.175595	5694921.04
14S4888800	Integrated Circuit	U37	Bellcore Issue 6	Level I	13.50	0.085783	1.00	.5912	0.085783	11657276.57
12313012A0	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	1.0337	0.150000	6666666.67
105A700103	Resistor	R295	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
1121747660	Capacitor	CA2,CA30	Bellcore Issue 6	Level I		0.002546	2.00	.0351	0.005091	392826361.27
121231206E	Inductor	L24	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
1540701380	Resistor	RN58	Bellcore Issue 6	Level I		0.006361	1.00	.0438	0.006361	157205134.20
106B701032	Resistor	RT1	Bellcore Issue 6	Level I		0.011619	1.00	.0801	0.011619	86062708.88
105A702733	Resistor	R28,R339	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A702263	Resistor	R32,R324,R325,R358,R37,R38,R41-R42,R66,R80,R82,R85	Bellcore Issue 6	Level I		0.002286	12.00	.1890	0.027426	437535796.67
105A747033	Resistor	R36,R74,R76,R78	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A704723	Resistor	R120,R121,R123,R124,R133,R135-R136,R139,R186,R190,R245,R251-R254,R318	Bellcore Issue 6	Level I		0.002286	16.00	.2520	0.036568	437535796.67
105A704723	Resistor	R333,R337,R342,R346,R347,R352-R355,R366,R371,R388,R389,R415-R426,R428	Bellcore Issue 6	Level I		0.002286	14.00	.2205	0.031997	437535796.67
105A704723	Resistor	R433,R444,R86,R87,R90	Bellcore Issue 6	Level I		0.002286	5.00	.0788	0.011428	437535796.67
105A708223	Resistor	R125-R129,R149-R158,R160,R193-R194,R196,R212,R214,R242,R250-R266,R343	Bellcore Issue 6	Level I		0.002286	25.00	.3938	0.057138	437535796.67
105A708223	Resistor	R344,R345,R348,R349,R372,R396-R398,R403,R404,R408,R411,R414-R416,R418	Bellcore Issue 6	Level I		0.002286	15.00	.2363	0.034283	437535796.67
105A708223	Resistor	R425,R431,R432	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A510003	Resistor	R134,R162,R184,R189,R213,R240-R288,R367,R430,R434	Bellcore Issue 6	Level I		0.002286	10.00	.1575	0.022855	437535796.67

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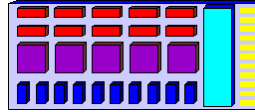


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105A707503	Resistor	R143-R145	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A524963	Resistor	R159,R258,R399	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A702223	Resistor	R170	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A560463	Resistor	R180,R284,R317	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A720033	Resistor	R207	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A524903	Resistor	R215,R311,R326	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A702203	Resistor	R219-R223,R235,R262-R265,R267-R270,R360,R376-R383	Bellcore Issue 6	Level I		0.002286	23.00	.3623	0.052567	437535796.67
105A751003	Resistor	R238,R331	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A525503	Resistor	R260	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A522663	Resistor	R291	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
1315700211	Semiconductor	Q11,Q16,Q33	Bellcore Issue 6	Level I		0.080522	3.00	1.6647	0.241567	12418901.81
1315041410	Semiconductor	Q14,Q15,Q18,Q20,Q21,Q25,Q28,Q-31	Bellcore Issue 6	Level I		0.161045	8.00	8.8785	1.288359	6209450.90
1315041410	Semiconductor	Q30	Bellcore Issue 6	Level I	13.60	0.233809	1.00	1.6113	0.233809	4276996.42
1315041410	Semiconductor	Q27	Bellcore Issue 6	Level I	15.20	0.243774	1.00	1.6799	0.243774	4102168.01
1315041410	Semiconductor	Q24	Bellcore Issue 6	Level I	13.80	0.235037	1.00	1.6197	0.235037	4254642.13
1540747282	Resistor	RN41-RN43,RN53,RN56,RN57,RN-71	Bellcore Issue 6	Level I		0.006361	7.00	.3069	0.044528	157205134.20
105A704733	Resistor	R361,R362	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A505633	Resistor	R386	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A502233	Resistor	R387	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A705603	Resistor	R412	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A703903	Resistor	R417,R419	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A538323	Resistor	R421	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A515033	Resistor	R435	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
1651203291	Connection	SKT1	Bellcore Issue 6	Level I		0.018591	1.00	.1281	0.018591	53789193.05
14S9660100	Integrated Circuit	U3,U30,U5,U6	Bellcore Issue 6	Level I		0.061126	4.00	1.6850	0.244506	16359526.04
14S4362703	Integrated Circuit	U15	Bellcore Issue 6	Level I	8.60	0.065672	1.00	.4526	0.065672	15227088.64
14S4821100	Integrated Circuit	U16	Bellcore Issue 6	Level I	8.90	0.066772	1.00	.4601	0.066772	14976396.03
14S9080900	Integrated Circuit	U18	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S4813000	Integrated Circuit	U21	Bellcore Issue 6	Level I	9.40	0.068640	1.00	.4730	0.068640	14568759.77

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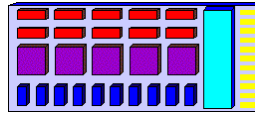
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14S4410100	Integrated Circuit	U25	Bellcore Issue 6	Level I	16.30	0.099558	1.00	.6861	0.099558	10044361.83
1314919410	Integrated Circuit	U29	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S3128420	Integrated Circuit	U33	Bellcore Issue 6	Level I	9.30	0.118033	1.00	.8134	0.118033	8472222.36
1314917313	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S5A23200	Integrated Circuit	U36	Bellcore Issue 6	Level I	9.30	0.108189	1.00	.7456	0.108189	9243063.21
14S4655600	Integrated Circuit	U38	Bellcore Issue 6	Level I	7.50	0.104243	1.00	.7184	0.104243	9592950.13
1231325050	Miscellaneous	Y1, Y5	Bellcore Issue 6	Level I		0.150000	2.00	2.0674	0.300000	6666666.67
1231314350	Miscellaneous	Y4	Bellcore Issue 6	Level I		0.150000	1.00	1.0337	0.150000	6666666.67
105A501123	Resistor	R29	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
121230603D	Inductor	FB1-FB7	Bellcore Issue 6	Level I		0.002286	7.00	.1103	0.015999	437535796.67
121110010F	Inductor	L16-L20	Bellcore Issue 6	Level I		0.086850	5.00	2.9926	0.434250	11514099.91
1211104760	Inductor	L22, L23	Bellcore Issue 6	Level I		0.086850	2.00	1.1970	0.173700	11514099.91
1540733180	Resistor	RN48	Bellcore Issue 6	Level I		0.006361	1.00	.0438	0.006361	157205134.20
1540722084	Resistor	RN59-RN70	Bellcore Issue 6	Level I		0.006361	12.00	.5260	0.076333	157205134.20
105A733003	Resistor	R1, R3, R35, R365	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A501033	Resistor	R131, R2, R281-R283, R363, R368, R-373-R375, R384, R390-R393, R413, -R445, R446	Bellcore Issue 6	Level I		0.002286	18.00	.2835	0.041139	437535796.67
105A501033	Resistor	R89, R93, R95	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A500133	Resistor	R164, R167, R168, R173, R27, R292, -R332, R336, R350, R351, R353, R359- R364, R405	Bellcore Issue 6	Level I		0.002286	14.00	.2205	0.031997	437535796.67
105A500133	Resistor	R410	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A756033	Resistor	R30, R75, R77, R79	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A703323	Resistor	R31, R34, R356, R83	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A704763	Resistor	R33, R341, R39, R67	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A701003	Resistor	R210, R211, R224-R227, R229-R234- R239, R271-R280, R357, R40, R68, R-81	Bellcore Issue 6	Level I		0.002286	27.00	.4253	0.061709	437535796.67
105A700003	Resistor	R313, R322, R323, R338, R406, R454- R69-R73, R84	Bellcore Issue 6	Level I		0.002286	12.00	.1890	0.027426	437535796.67
105A705623	Resistor	R88, R94	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A707509	Resistor	R91, R92	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A768003	Resistor	R100-R103, R340, R97, R99	Bellcore Issue 6	Level I		0.002286	7.00	.1103	0.015999	437535796.67



**AAEON Reliability Prediction Report**

**Part Number** 9697866G0E  
**Reference Des**  
**Date** 08. 22, 2005  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.40

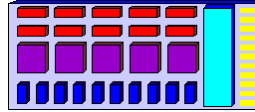


**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A549963	Resistor	R105-R108,R111,R115,R118,R195- R255,R257,R261,R286,R287,R296- R316,R319	Bellcore Issue 6	Level I		0.002286	16.00	.2520	0.036568	437535796.67
105A549963	Resistor	R327,R96	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A710053	Resistor	R122,R171,R188,R191,R328	Bellcore Issue 6	Level I		0.013713	5.00	.4725	0.068566	72922632.78
105A501533	Resistor	R130	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A506203	Resistor	R138,R147,R148,R175,R185,R187- R217,R241,R243,R244,R285,R312	Bellcore Issue 6	Level I		0.002286	12.00	.1890	0.027426	437535796.67
105A548713	Resistor	R140,R330	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A580663	Resistor	R146,R165	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A710033	Resistor	R166,R179,R182,R192,R208,R394- R436,R455	Bellcore Issue 6	Level I		0.002286	8.00	.1260	0.018284	437535796.67
105A500333	Resistor	R169,R177	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A739033	Resistor	R178	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A701053	Resistor	R183	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A505103	Resistor	R109,R110,R112-R114,R116,R117- R119,R132,R137,R176,R197-R206- R298-R307	Bellcore Issue 6	Level I		0.002286	31.00	.4883	0.070851	437535796.67
105A701523	Resistor	R209	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A515003	Resistor	R216,R293,R329,R402,R438,R439- R441,R442	Bellcore Issue 6	Level I		0.002286	8.00	.1260	0.018284	437535796.67
105A547503	Resistor	R228	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A503300	Resistor	R236,R237,R369	Bellcore Issue 6	Level I		0.002286	3.00	.0473	0.006857	437535796.67
105A722003	Resistor	R256	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A530103	Resistor	R289	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A510203	Resistor	R290	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A747003	Resistor	R308-R310,R370	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
105A561963	Resistor	R320	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A511103	Resistor	R321	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
175910000A	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.0337	0.150000	6666666.67
1129747650	Capacitor	CA12,CA16-CA19,CA23,CA25,CA2- 6,CA29,CA5-CA9	Bellcore Issue 6	Level I		0.002729	14.00	.2633	0.038212	366378757.23
1129510060	Capacitor	CA24,CA28	Bellcore Issue 6	Level I		0.006047	2.00	.0833	0.012093	165383594.62
1174518180	Capacitor	CP1-CP4	Bellcore Issue 6	Level I		0.001063	4.00	.0293	0.004252	940740803.88

**AAEON Reliability Prediction Report**

**Part Number** 9697866G0E  
**Reference Des**  
**Date** 08. 22, 2005  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.40

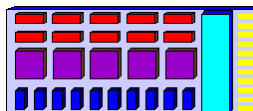


**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1121701080	Capacitor	C10,C107,C11,C13,C117,C12,C126-C127,C13,C131-C134,C139,C14,C144,C15	Bellcore Issue 6	Level I		0.002546	1.00	.0175	0.002546	392826361.27
1121701080	Capacitor	C29,C3,C30,C31,C34-C36,C46,C68-C94,M74,M92	Bellcore Issue 6	Level I		0.002546	29.00	.5087	0.073824	392826361.27
1124533080	Capacitor	C124,C25,C26	Bellcore Issue 6	Level I		0.001063	3.00	.0220	0.003189	940740803.88
1124510080	Capacitor	C100-C102,C76-C80,C88,C89,C95-C99	Bellcore Issue 6	Level I		0.001063	15.00	.1099	0.015945	940740803.88
1124522180	Capacitor	C81,C93	Bellcore Issue 6	Level I		0.001063	2.00	.0147	0.002126	940740803.88
1189647080	Capacitor	C114	Bellcore Issue 6	Level I		0.004972	1.00	.0343	0.004972	201142032.82
1124547180	Capacitor	C128	Bellcore Issue 6	Level I		0.001063	1.00	.0073	0.001063	940740803.88
1124510280	Capacitor	C135,C137,C140-C143,C148,M106-M115,M119,M120,M130-M133	Bellcore Issue 6	Level I		0.001063	15.00	.1099	0.015945	940740803.88
1124527180	Capacitor	C150	Bellcore Issue 6	Level I		0.001063	1.00	.0073	0.001063	940740803.88
1301005440	Semiconductor	DD1-DD3,DD5	Bellcore Issue 6	Level I		0.024157	4.00	.6659	0.096627	41396339.36
1300283540	Semiconductor	DD4,DD6	Bellcore Issue 6	Level I		0.024157	2.00	.3329	0.048313	41396339.36
1300414843	Semiconductor	D1-D4	Bellcore Issue 6	Level I		0.024157	4.00	.6659	0.096627	41396339.36
121230603C	Inductor	FB8-FB11	Bellcore Issue 6	Level I		0.002286	4.00	.0630	0.009142	437535796.67
1304101340	Semiconductor	LED1	Bellcore Issue 6	Level I		0.005058	1.00	.0349	0.005058	197707633.75
1214309002	Inductor	L1-L6,L11	Bellcore Issue 6	Level I		0.002286	7.00	.1103	0.015999	437535796.67
1211103367	Inductor	L21	Bellcore Issue 6	Level I		0.086850	1.00	.5985	0.086850	11514099.91
1211103367	Inductor	L8	Bellcore Issue 6	Level I	4.20	0.094172	1.00	.6490	0.094172	10618863.01
1122701680	Capacitor	C5,M1,M100-M105,M107-M114,M116-M118,M121-M123,M126,M128,-M129,M134	Bellcore Issue 6	Level I		0.001602	26.00	.2870	0.041645	624322869.81
1122701680	Capacitor	M135-M139,M141-M230,M27-M31,-M54-M57,M62-M73,M75-M78,M80-M91,M93-M99	Bellcore Issue 6	Level I		0.001602	139.00	1.5343	0.222641	624322869.81
1129701690	Capacitor	M10-M19,M2,M20-M26,M3,M32-M53,M4,M5,M6,M58-M61,M7-M9	Bellcore Issue 6	Level I		0.002546	51.00	.8947	0.129828	392826361.27
1121501680	Capacitor	M125,M127	Bellcore Issue 6	Level I		0.002546	2.00	.0351	0.005091	392826361.27
1124501780	Capacitor	N12-N27,N29,N30,N34-N38,N4-N7	Bellcore Issue 6	Level I		0.001063	27.00	.1978	0.028701	940740803.88
1212306030	Inductor	PB13,PB5-PB9	Bellcore Issue 6	Level I		0.002286	6.00	.0945	0.013713	437535796.67
1310390411	Semiconductor	Q1,Q10,Q17	Bellcore Issue 6	Level I		0.024157	3.00	.4994	0.072470	41396339.36
1315035200	Semiconductor	Q5	Bellcore Issue 6	Level I		0.000000	1.00	.0000	0.000000	.00

### AAEON Reliability Prediction Report

**Part Number** 9697866G0E  
**Reference Des**  
**Date** 08. 22, 2005  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.40



**Description** Top-level assembly  
**File Name** FSB-866G-G2.RPJ  
**Time** 3:39 下午  
**Failure Rate** 14.510941  
**MTBF** 68,914

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1311006910	Semiconductor	Q13,Q6,Q7,Q9	Bellcore Issue 6	Level I		0.024157	4.00	.6659	0.096627	41396339.36
1314108513	Integrated Circuit	Q12	Bellcore Issue 6	Level I	6.30	0.095879	1.00	.6607	0.095879	10429806.94
1540756081	Resistor	RN1,RN10-RN40,RN2-RN9	Bellcore Issue 6	Level I		0.006361	40.00	1.7535	0.254445	157205134.20
1540782280	Resistor	RN44-RN47,RN49-RN52,RN54,RN-55,RN73,RN74	Bellcore Issue 6	Level I		0.006361	13.00	.5699	0.082695	157205134.20
105A530003	Resistor	R354	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
105A500233	Resistor	R420,R422	Bellcore Issue 6	Level I		0.002286	2.00	.0315	0.004571	437535796.67
105A703033	Resistor	R423	Bellcore Issue 6	Level I		0.002286	1.00	.0158	0.002286	437535796.67
14S2303700	Integrated Circuit	U1,U31	Bellcore Issue 6	Level I		0.061126	2.00	.8425	0.122253	16359526.04
1315970110	Semiconductor	U7-U10	Bellcore Issue 6	Level I		0.161045	4.00	4.4393	0.644179	6209450.90
14S6340801	Integrated Circuit	U17,U26	Bellcore Issue 6	Level I		0.036215	2.00	.4991	0.072429	27613124.40
105A704709	Resistor	R10-R26,R4,R43-R65,R5-R9	Bellcore Issue 6	Level I		0.002286	46.00	.7245	0.105134	437535796.67
14S5A12503	Integrated Circuit	U11,U2,U4	Bellcore Issue 6	Level I		0.061126	3.00	1.2637	0.183379	16359526.04
14S4048501	Integrated Circuit	U13,U14	Bellcore Issue 6	Level I		0.061126	2.00	.8425	0.122253	16359526.04
1129722060	Capacitor	C106,C136,C38-C40,C43-C45,C48-C50,C54-C56,C63-C65,C70-C72	Bellcore Issue 6	Level I		0.002729	20.00	.3762	0.054588	366378757.23
14S4081110	Integrated Circuit	U41	Bellcore Issue 6	Level I		0.061126	1.00	.4212	0.061126	16359526.04
14S4291501	Integrated Circuit	U22	Bellcore Issue 6	Level I	6.70	0.059074	1.00	.4071	0.059074	16928045.78
14S4280110	Integrated Circuit	U23	Bellcore Issue 6	Level I	1.60	0.044164	1.00	.3043	0.044164	22642992.05