

# **FSB-868G**

## **Reliability Prediction Report**

### **(MTBF)**

Report NO : 06I070003

**12-28-2006**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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**I . Model Name:** FSB-868G

**II . Prediction Date:** Dec. 28, 2006

**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: 23.6 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:**

- FSB-868G
  - Failure Rate: 14.706449 ppm
  - MTBF: 67,997 Hours

### AAEON Reliability Prediction Report

**Part Number** 9697868G0A  
**Reference Des**  
**Date** 12. 28, 2006  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 23.60



**Description** Top-level assembly  
**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
FSB-868G	9697868G0A	Belcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	14.706449	67,997

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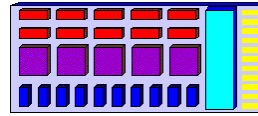


**Description** Top-level assembly  
**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1231232720	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	1.0200	0.150000	6666666.67
1750119013	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	6.1198	0.900000	1111111.11
1653002100	Connection	CN2,CN5,JP1	Bellcore Issue 6	Level I		0.001057	3.00	.0216	0.003172	945804499.21
1653003100	Connection	JP2	Bellcore Issue 6	Level I		0.001586	1.00	.0108	0.001586	630536332.80
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.004229	2.00	.0575	0.008458	236451124.80
1653005201	Connection	USB1-USB3	Bellcore Issue 6	Level I		0.005287	3.00	.1078	0.015860	189160899.84
1653300100	Connection	XFP2	Bellcore Issue 6	Level I		0.001057	1.00	.0072	0.001057	945804499.21
1653300101	Connection	XJP2	Bellcore Issue 6	Level I		0.001057	1.00	.0072	0.001057	945804499.21
1654606200	Connection	CN7	Bellcore Issue 6	Level I		0.003172	1.00	.0216	0.003172	315268166.40
1655005021	Connection	CN8	Bellcore Issue 6	Level I		0.002643	1.00	.0180	0.002643	378321799.68
1653006101	Connection	IR1	Bellcore Issue 6	Level I		0.003172	1.00	.0216	0.003172	315268166.40
1653213203	Connection	LPT1	Bellcore Issue 6	Level I		0.013745	1.00	.0935	0.013745	72754192.25
1653205203	Connection	COM1,COM2	Bellcore Issue 6	Level I		0.005287	2.00	.0719	0.010573	189160899.84
1653217205	Connection	FDD1	Bellcore Issue 6	Level I		0.017974	1.00	.1222	0.017974	55635558.78
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.021146	1.00	.1438	0.021146	47290224.96
1655404020	Connection	ATX2	Bellcore Issue 6	Level I		0.002115	1.00	.0144	0.002115	472902249.60
1655003022	Connection	CN1	Bellcore Issue 6	Level I		0.001586	1.00	.0108	0.001586	630536332.80
1653900034	Connection	XCFD1	Bellcore Issue 6	Level I		0.001057	1.00	.0072	0.001057	945804499.21
1654804100	Connection	USB4	Bellcore Issue 6	Level I		0.002115	1.00	.0144	0.002115	472902249.60
1653005205	Connection	CN6	Bellcore Issue 6	Level I		0.005287	1.00	.0359	0.005287	189160899.84
1119612291	Capacitor	C122,C133,C134,C137,C140,C16,- C17,C3,C41-C45,C50,C66	Bellcore Issue 6	Level I		0.066081	15.00	6.7400	0.991220	15132871.99
1119612291	Capacitor	C139	Bellcore Issue 6	Level I	4.00	0.081375	1.00	.5533	0.081375	12288732.88
1119612291	Capacitor	C46	Bellcore Issue 6	Level I	2.00	0.073382	1.00	.4990	0.073382	13627350.85
1652510201	Connection	LAN1,LAN2	Bellcore Issue 6	Level I		0.005287	2.00	.0719	0.010573	189160899.84
1654515308	Connection	VGA1	Bellcore Issue 6	Level I		0.007930	1.00	.0539	0.007930	126107266.56
1119647191	Capacitor	C106,C121,C123,C130,C131,C135- C136,C40	Bellcore Issue 6	Level I		0.066081	8.00	3.5947	0.528650	15132871.99
1169656190	Capacitor	C103,C107,C35-C39,C51,C65,C75- C91	Bellcore Issue 6	Level I		0.005416	11.00	.4051	0.059572	184650431.46
1169656190	Capacitor	C49	Bellcore Issue 6	Level I	21.60	0.006184	1.00	.0421	0.006184	161694899.71
1655004014	Connection	FAN1	Bellcore Issue 6	Level I		0.002115	1.00	.0144	0.002115	472902249.60

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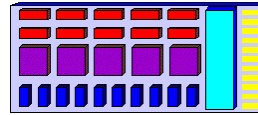


**Description** Top-level assembly  
**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1655420023	Connection	ATX1	Bellcore Issue 6	Level I		0.012688	1.00	.0863	0.012688	78817041.60
1211101161	Inductor	L7	Bellcore Issue 6	Level I		0.057382	1.00	.3902	0.057382	17426980.33
1111610292	Capacitor	C1,C15,C18,C2,C34,C74	Bellcore Issue 6	Level I		0.066081	6.00	2.6960	0.396488	15132871.99
16515C0494	Connection	DIMM1,DIMM3	Bellcore Issue 6	Level I		0.126876	2.00	1.7254	0.253752	7881704.16
1654907002	Connection	SATA2,SATA4	Bellcore Issue 6	Level I		0.003701	2.00	.0503	0.007401	270229856.92
1654907003	Connection	SATA1,SATA3	Bellcore Issue 6	Level I		0.003701	2.00	.0503	0.007401	270229856.92
1211105672	Inductor	L12,L9	Bellcore Issue 6	Level I		0.083830	2.00	1.1400	0.167660	11928885.78
1211105672	Inductor	L13	Bellcore Issue 6	Level I		0.068023	1.00	.4625	0.068023	14700944.01
1211105672	Inductor	L10	Bellcore Issue 6	Level I		0.078158	1.00	.5315	0.078158	12794584.80
121110010X	Inductor	L17	Bellcore Issue 6	Level I		0.067735	1.00	.4606	0.067735	14763495.62
121110010X	Inductor	L8	Bellcore Issue 6	Level I		0.062006	1.00	.4216	0.062006	16127495.84
14S6200404	Integrated Circuit	XU37	Bellcore Issue 6	Level I		0.141113	1.00	.9595	0.141113	7086512.25
105A500233	Resistor	R405,R422	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A501033	Resistor	R1,R268,R278,R279,R284,R293,R-294,R319,R321,R324-R326,R329,-R381,R386	Bellcore Issue 6	Level I		0.002206	15.00	.2250	0.033091	453297659.60
105S501033	Resistor	R387-R389,R407,R415,R419,R452	Bellcore Issue 6	Level I		0.002206	7.00	.1050	0.015442	453297659.60
105A700003	Resistor	R10,R223,R24,R257,R258,R270,R-30,R392,R439,R6,R8,R9	Bellcore Issue 6	Level I		0.002206	12.00	.1800	0.026473	453297659.60
105A701003	Resistor	R11,R13,R139-R142,R144-R149,R-161,R171,R172,R174-R181,R2,R2-30,R261,R3	Bellcore Issue 6	Level I		0.002206	27.00	.4050	0.059564	453297659.60
105A701003	Resistor	R33,R7	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A701053	Resistor	R351	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A702203	Resistor	R134-R138,R162-R164,R166-R170-R205,R64	Bellcore Issue 6	Level I		0.002206	15.00	.2250	0.033091	453297659.60
105A702223	Resistor	R348	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A703323	Resistor	R248,R25,R39,R51	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A704723	Resistor	R105,R111,R152,R153,R159,R160-R218,R221,R253,R255,R256,R260-R265,R269	Bellcore Issue 6	Level I		0.002206	14.00	.2100	0.030885	453297659.60
105A704723	Resistor	R272,R291,R292,R296,R301,R412-R418,R420,R423,R424,R429,R432-R433,R446	Bellcore Issue 6	Level I		0.002206	14.00	.2100	0.030885	453297659.60
105A704723	Resistor	R447,R450,R451,R453	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60

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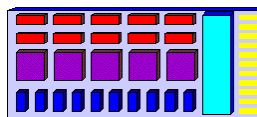


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**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A705623	Resistor	R397,R398	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A708223	Resistor	R165,R173,R195-R197,R199-R204-,R206-R217,R267,R302,R309,R312-,R314,R316	Bellcore Issue 6	Level I		0.002206	29.00	.4350	0.063976	453297659.60
105A708223	Resistor	R340-R345,R358,R363-R368,R370-,R378,R406,R421,R430,R431,R434-,R438,R70	Bellcore Issue 6	Level I		0.002206	32.00	.4800	0.070594	453297659.60
105A708223	Resistor	R71-R77	Bellcore Issue 6	Level I		0.002206	7.00	.1050	0.015442	453297659.60
105A700133	Resistor	R273-R275,R359,R379	Bellcore Issue 6	Level I		0.002206	5.00	.0750	0.011030	453297659.60
105A733003	Resistor	R232,R280,R281,R67	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A715003	Resistor	R327,R338,R339,R391,R400,R401	Bellcore Issue 6	Level I		0.002206	6.00	.0900	0.013236	453297659.60
105A722003	Resistor	R155	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A702733	Resistor	R236,R315	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A747003	Resistor	R226-R228,R266	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A710053	Resistor	R118,R12,R150,R249,R299	Bellcore Issue 6	Level I		0.013236	5.00	.4500	0.066182	75549609.93
105A500133	Resistor	R103,R104,R237,R276,R295,R298-,R300,R313,R317,R346,R360,R369-,R390,R426	Bellcore Issue 6	Level I		0.002206	14.00	.2100	0.030885	453297659.60
105A500133	Resistor	R427,R428,R441,R86	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A501533	Resistor	R328	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A502033	Resistor	R350	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A502423	Resistor	R234	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A507503	Resistor	R114,R131,R151	Bellcore Issue 6	Level I		0.002206	3.00	.0450	0.006618	453297659.60
105A510003	Resistor	R277,R395,R396,R444,R449	Bellcore Issue 6	Level I		0.002206	5.00	.0750	0.011030	453297659.60
105A515003	Resistor	R409,R413	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A548713	Resistor	R109,R254	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A549963	Resistor	R119-R128,R182-R193,R219,R222-,R225,R235,R241,R247,R90-R97	Bellcore Issue 6	Level I		0.002206	36.00	.5400	0.079418	453297659.60
105A701523	Resistor	R4	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A703903	Resistor	R384,R385	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A704733	Resistor	R282,R283	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A704763	Resistor	R18,R19,R252,R42	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A705603	Resistor	R194	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60

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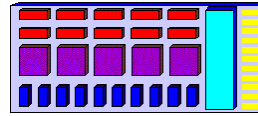


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**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

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105A710033	Resistor	R22,R23,R31,R34,R361,R448,R45-R5	Bellcore Issue 6	Level I		0.002206	8.00	.1200	0.017648	453297659.60
105A720003	Resistor	R404	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A747033	Resistor	R310,R320,R35,R37	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A756033	Resistor	R311,R322,R36,R38	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A768003	Resistor	R443,R47-R50,R52,R53	Bellcore Issue 6	Level I		0.002206	7.00	.1050	0.015442	453297659.60
105A502233	Resistor	R323	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
1212306030	Inductor	PB12,PB13,PB18,PB19,PB2-PB6	Bellcore Issue 6	Level I		0.002206	9.00	.1350	0.019855	453297659.60
1212306031	Inductor	FB8,FB9	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
1212308054	Inductor	PB10,PB11,PB14-PB17,PB7-PB9	Bellcore Issue 6	Level I		0.002206	9.00	.1350	0.019855	453297659.60
1121501680	Capacitor	M12,M15,M170,M171,M27,M28,M3-M33-M35,M38-M40,M42,M43,M45-M49,M5,M52	Bellcore Issue 6	Level I		0.004412	22.00	.6600	0.097066	226648829.80
1121722650	Capacitor	C156-C159,C163,C168	Bellcore Issue 6	Level I		0.004412	6.00	.1800	0.026473	226648829.80
1121747660	Capacitor	CA3,CA51	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
1122701680	Capacitor	M1,M10,M100-M169,M11,M13,M14-M16,M17,M172-M196,M2,M20-M26-M29-M32	Bellcore Issue 6	Level I		0.004412	116.00	3.4801	0.511805	226648829.80
1122701680	Capacitor	M36,M37,M4,M41,M44,M50,M51,M53-M99,M6-M9	Bellcore Issue 6	Level I		0.004412	58.00	1.7401	0.255902	226648829.80
1124501780	Capacitor	N1,N10-N40,N2,N4,N6,N7	Bellcore Issue 6	Level I		0.004412	36.00	1.0800	0.158836	226648829.80
1124510080	Capacitor	C104,C108-C115,C77-C81,C99	Bellcore Issue 6	Level I		0.004412	15.00	.4500	0.066182	226648829.80
1124510280	Capacitor	C125,C160,C162,C164-C167,C174-C175,C177-C180,C182,C183,C186-C20,C29	Bellcore Issue 6	Level I		0.004412	18.00	.5400	0.079418	226648829.80
1124510280	Capacitor	C32	Bellcore Issue 6	Level I		0.004412	1.00	.0300	0.004412	226648829.80
1124522080	Capacitor	C101,C102,C105,C12,C128,C129,-C13,C181,C189,C53,C67,C68,C72-C76,C85,C89	Bellcore Issue 6	Level I		0.004412	16.00	.4800	0.070594	226648829.80
1124522080	Capacitor	C90,C92,C97	Bellcore Issue 6	Level I		0.004412	3.00	.0900	0.013236	226648829.80
1124522180	Capacitor	C126,C73	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
1124522280	Capacitor	C120,C155	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
1124527180	Capacitor	C194	Bellcore Issue 6	Level I		0.004412	1.00	.0300	0.004412	226648829.80
1124533080	Capacitor	C193,C55	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
1124547080	Capacitor	C141,C144,C146,C147,C191,C192	Bellcore Issue 6	Level I		0.004412	6.00	.1800	0.026473	226648829.80

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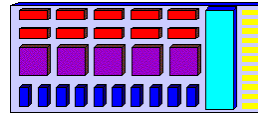
Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1124547180	Capacitor	C149	Bellcore Issue 6	Level I		0.004412	1.00	.0300	0.004412	226648829.80
1129747650	Capacitor	CA11,CA12,CA15,CA17,CA19,CA2-0,CA27-CA31,CA33,CA34,CA39,C-A40,CA49	Bellcore Issue 6	Level I		0.004412	16.00	.4800	0.070594	226648829.80
1129747650	Capacitor	CA50,CA52,CA56,CA57,CA6-CA8	Bellcore Issue 6	Level I		0.004412	7.00	.2100	0.030885	226648829.80
1540701380	Resistor	RN1	Bellcore Issue 6	Level I		0.005857	1.00	.0398	0.005857	170737844.42
1300283540	Semiconductor	DD4	Bellcore Issue 6	Level I		0.022935	1.00	.1560	0.022935	43601802.04
1301005440	Semiconductor	DD1,DD3,DD5,DD6	Bellcore Issue 6	Level I		0.022935	4.00	.6238	0.091739	43601802.04
1540733180	Resistor	RN21	Bellcore Issue 6	Level I		0.005857	1.00	.0398	0.005857	170737844.42
1540782280	Resistor	RN14,RN16-RN20,RN22-RN25,RN-30-RN32	Bellcore Issue 6	Level I		0.005857	13.00	.5177	0.076140	170737844.42
1124556280	Capacitor	C188	Bellcore Issue 6	Level I		0.004412	1.00	.0300	0.004412	226648829.80
1314108513	Integrated Circuit	Q30	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
1314111713	Integrated Circuit	Q28	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
1651203291	Connection	U25	Bellcore Issue 6	Level I		0.016917	1.00	.1150	0.016917	59112781.20
14S4048501	Integrated Circuit	U1,U2	Bellcore Issue 6	Level I		0.053561	2.00	.7284	0.107122	18670314.21
1540733082	Resistor	RN10,RN2-RN5,RN7-RN9	Bellcore Issue 6	Level I		0.005857	8.00	.3186	0.046855	170737844.42
1540747282	Resistor	RN12,RN13,RN15,RN26-RN29	Bellcore Issue 6	Level I		0.005857	7.00	.2788	0.040999	170737844.42
14S6341600	Integrated Circuit	U43	Bellcore Issue 6	Level I		0.031732	1.00	.2158	0.031732	31513486.85
14S4021310	Integrated Circuit	U15,U7	Bellcore Issue 6	Level I		0.053561	2.00	.7284	0.107122	18670314.21
1315700211	Semiconductor	Q13,Q31,Q33	Bellcore Issue 6	Level I		0.076449	3.00	1.5595	0.229348	13080540.61
14S5A01400	Integrated Circuit	U6	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
105A520003	Resistor	R238	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A530003	Resistor	R425	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A505633	Resistor	R318	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A720033	Resistor	R17	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
1211104760	Inductor	L18,L19	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
105A560463	Resistor	R100,R108,R133,R224,R246,R65,-R82,R89,R98	Bellcore Issue 6	Level I		0.002206	9.00	.1350	0.019855	453297659.60
105A530103	Resistor	R251	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A516213	Resistor	R394	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A512403	Resistor	R250,R99	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60





### AAEON Reliability Prediction Report

**Part Number** 9697868G0A  
**Reference Des**  
**Date** 12. 28, 2006  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 23.60



**Description** Top-level assembly  
**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A706203	Resistor	R106,R110,R112,R115,R117,R129-,R132,R229,R240,R242,R243,R56--R61,R63,R66	Bellcore Issue 6	Level I		0.002206	19.00	.2850	0.041915	453297659.60
105A706203	Resistor	R68,R69,R79-R81,R84,R85,R87,R-88	Bellcore Issue 6	Level I		0.002206	9.00	.1350	0.019855	453297659.60
14S9660100	Integrated Circuit	U29	Bellcore Issue 6	Level I	18.50	0.193794	1.00	1.3177	0.193794	5160114.09
14S9660100	Integrated Circuit	U8	Bellcore Issue 6	Level I	19.80	0.210926	1.00	1.4342	0.210926	4740997.72
14S9660100	Integrated Circuit	U14	Bellcore Issue 6	Level I	21.30	0.232384	1.00	1.5801	0.232384	4303226.86
14S9660100	Integrated Circuit	U9	Bellcore Issue 6	Level I	25.80	0.309089	1.00	2.1017	0.309089	3235317.15
121231206E	Inductor	PB1	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
1129510060	Capacitor	CA38,CA45	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
105A522663	Resistor	R154	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
1304101340	Semiconductor	LED1	Bellcore Issue 6	Level I		0.004288	1.00	.0292	0.004288	233211292.15
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.026433	1.00	.1797	0.026433	37832179.97
1121701080	Capacitor	C10,C100,C11,C116,C118,C119,C-14,C142,C143,C145,C150-C152,C-161,C169-C173	Bellcore Issue 6	Level I		0.004412	19.00	.5700	0.083830	226648829.80
1121701080	Capacitor	C21-C28,C30,C31,C4,C47,C48,C5,-C52,C54,C59,C6,C60,C61,C7-C9	Bellcore Issue 6	Level I		0.004412	23.00	.6900	0.101479	226648829.80
1189922180	Capacitor	C154,C19	Bellcore Issue 6	Level I		0.004412	2.00	.0600	0.008824	226648829.80
1129722060	Capacitor	C127,C56-C58,C62-C64,C69-C71,-C82-C84,C86-C88,C93-C95	Bellcore Issue 6	Level I		0.004412	19.00	.5700	0.083830	226648829.80
106B701032	Resistor	RT1	Bellcore Issue 6	Level I		0.010573	1.00	.0719	0.010573	94580449.92
105A525503	Resistor	R231	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A538323	Resistor	R416	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A524903	Resistor	R408,R410	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
1301003240	Semiconductor	D4	Bellcore Issue 6	Level I		0.022935	1.00	.1560	0.022935	43601802.04
14S4655600	Integrated Circuit	U46	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
14S2200900	Integrated Circuit	U17	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
121110010F	Inductor	L14-L16	Bellcore Issue 6	Level I		0.083830	3.00	1.7101	0.251490	11928885.78
14S9080900	Integrated Circuit	U36	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
1214309002	Inductor	L1,L11,L2-L6	Bellcore Issue 6	Level I		0.002206	7.00	.1050	0.015442	453297659.60
14S4813000	Integrated Circuit	U10	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
12313012A0	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	1.0200	0.150000	6666666.67

### AAEON Reliability Prediction Report

**Part Number** 9697868G0A  
**Reference Des**  
**Date** 12. 28, 2006  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 23.60



**Description** Top-level assembly  
**File Name** FSB-868G.RPJ  
**Time** 3:22 下午  
**Failure Rate** 14.706449  
**MTBF** 67,997

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1314917313	Integrated Circuit	U32	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
175910000A	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.0200	0.150000	6666666.67
1315231310	Semiconductor	Q5	Bellcore Issue 6	Level I		0.076449	1.00	.5198	0.076449	13080540.61
1651612990	Connection	CPU1	Bellcore Issue 6	Level I		0.001057	1.00	.0072	0.001057	945804499.21
105A580663	Resistor	R347,R354	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
14S4410100	Integrated Circuit	U21	Bellcore Issue 6	Level I	26.80	0.328960	1.00	2.2368	0.328960	3039881.97
14S4081110	Integrated Circuit	U39	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
14S4730800	Integrated Circuit	U44	Bellcore Issue 6	Level I		0.053561	1.00	.3642	0.053561	18670314.21
14S4362703	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.036177	1.00	.2460	0.036177	27641738.38
1314919410	Integrated Circuit	U40,U45	Bellcore Issue 6	Level I		0.053561	2.00	.7284	0.107122	18670314.21
1315995311	Semiconductor	U42	Bellcore Issue 6	Level I		0.152899	1.00	1.0397	0.152899	6540270.31
14S4888801	Integrated Circuit	U28	Bellcore Issue 6	Level I	12.10	0.072119	1.00	.4904	0.072119	13865893.48
123131435B	Miscellaneous	Y4,Y6	Bellcore Issue 6	Level I		0.150000	2.00	2.0399	0.300000	6666666.67
1231325058	Miscellaneous	Y3	Bellcore Issue 6	Level I		0.150000	1.00	1.0200	0.150000	6666666.67
1231325058	Miscellaneous	Y5	Bellcore Issue 6	Level I		0.150000	1.00	1.0200	0.150000	6666666.67
1540743080	Resistor	RN11,RN6	Bellcore Issue 6	Level I		0.005857	2.00	.0797	0.011714	170737844.42
105A704303	Resistor	R285,R286,R303,R304	Bellcore Issue 6	Level I		0.002206	4.00	.0600	0.008824	453297659.60
105A584563	Resistor	R245	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A505173	Resistor	R233,R357,R362	Bellcore Issue 6	Level I		0.002206	3.00	.0450	0.006618	453297659.60
105A516963	Resistor	R220	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
105A521003	Resistor	R107,R239	Bellcore Issue 6	Level I		0.002206	2.00	.0300	0.004412	453297659.60
14S4294500	Integrated Circuit	U19	Bellcore Issue 6	Level I		0.036177	1.00	.2460	0.036177	27641738.38
105A542203	Resistor	R442	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
14S4805301	Integrated Circuit	U18	Bellcore Issue 6	Level I	14.70	0.083060	1.00	.5648	0.083060	12039471.34
14S4805301	Integrated Circuit	U27	Bellcore Issue 6	Level I		0.036177	1.00	.2460	0.036177	27641738.38
14S428010C	Integrated Circuit	U20	Bellcore Issue 6	Level I		0.036177	1.00	.2460	0.036177	27641738.38
105A522613	Resistor	R297	Bellcore Issue 6	Level I		0.002206	1.00	.0150	0.002206	453297659.60
1315780310	Semiconductor	Q15,Q18,Q19,Q21,Q27,Q29,Q32	Bellcore Issue 6	Level I		0.076449	7.00	3.6389	0.535146	13080540.61
1315780310	Semiconductor	Q12	Bellcore Issue 6	Level I	14.10	0.112971	1.00	.7682	0.112971	8851834.16
1315780310	Semiconductor	Q11	Bellcore Issue 6	Level I	13.80	0.112078	1.00	.7621	0.112078	8922389.68
1315780310	Semiconductor	Q3	Bellcore Issue 6	Level I	18.90	0.128009	1.00	.8704	0.128009	7811927.67

