

GENE-1270

Reliability Prediction Report (MTBF)

Report NO : 06E070013

8-14-2006

Issue Date

Wenyuan Yang

Manager

Jessica Chou

Test Engineer

Reliability Prediction (MTBF)

I . **Model Name:** GENE-1270

II . **Prediction Date:** Aug. 14, 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: 27.3 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:**

- GENE-1270
 - Failure Rate: 10.042879 ppm
 - MTBF: 99,573 Hours

AAEON Reliability Prediction Report

Part Number 9697127020
Reference Des
Date 08. 14, 2006
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 27.30



Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
GENE-1270	9697127020	Belcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	10.042879	99,573

AAEON Reliability Prediction Report

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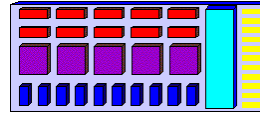


Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653003100	Connection	JP6,JP7	Bellcore Issue 6	Level I		0.001923	2.00	.0383	0.003846	519988103.06
1653003101	Connection	JP1-JP5	Bellcore Issue 6	Level I		0.001923	5.00	.0957	0.009616	519988103.06
1653004100	Connection	CN5	Bellcore Issue 6	Level I		0.002564	1.00	.0255	0.002564	389991077.30
1653005100	Connection	CN10,CN11	Bellcore Issue 6	Level I		0.003205	2.00	.0638	0.006410	311992861.84
1654409103	Connection	CN22	Bellcore Issue 6	Level I		0.005769	1.00	.0574	0.005769	173329367.69
1655002020	Connection	JP8	Bellcore Issue 6	Level I		0.001282	1.00	.0128	0.001282	779982154.60
1655005021	Connection	CN16	Bellcore Issue 6	Level I		0.003205	1.00	.0319	0.003205	311992861.84
1653007101	Connection	CN7	Bellcore Issue 6	Level I		0.004487	1.00	.0447	0.004487	222852044.17
1654804301	Connection	CN21	Bellcore Issue 6	Level I		0.002564	1.00	.0255	0.002564	389991077.30
1111610192	Capacitor	CE2,CE7	Bellcore Issue 6	Level I		0.048078	2.00	.9575	0.096156	20799524.12
1653900034	Connection	CFD1	Bellcore Issue 6	Level I		0.001282	1.00	.0128	0.001282	779982154.60
1655003023	Connection	CN15	Bellcore Issue 6	Level I		0.001923	1.00	.0191	0.001923	519988103.06
1654415305	Connection	CN23	Bellcore Issue 6	Level I		0.009616	1.00	.0957	0.009616	103997620.61
1114622110	Capacitor	CE9	Bellcore Issue 6	Level I		0.048078	1.00	.4787	0.048078	20799524.12
1119633195	Capacitor	C07,CE1,CE3,CE8	Bellcore Issue 6	Level I		0.048078	4.00	1.9149	0.192312	20799524.12
1652602900	Connection	CN18	Bellcore Issue 6	Level I		0.001282	1.00	.0128	0.001282	779982154.60
1654808201	Connection	USB1	Bellcore Issue 6	Level I		0.005128	1.00	.0511	0.005128	194995538.65
1652512207	Connection	CN20	Bellcore Issue 6	Level I		0.007692	1.00	.0766	0.007692	129997025.77
1655902030	Connection	CN8	Bellcore Issue 6	Level I		0.001282	1.00	.0128	0.001282	779982154.60
111961029G	Capacitor	CE4,CE6	Bellcore Issue 6	Level I		0.080130	2.00	1.5958	0.160260	12479714.47
105A501033	Resistor	R207	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A512103	Resistor	R329,R434,R435	Bellcore Issue 6	Level I		0.002371	3.00	.0708	0.007114	421686512.86
105A700003	Resistor	L10,L11,L13,L14,L3,L8,R119,R124- R135,R163,R193,R23,R231,R24,R- 26,R278,R279	Bellcore Issue 6	Level I		0.002371	17.00	.4014	0.040314	421686512.86
105A700003	Resistor	R294,R32,R335,R336,R34,R345,R- 352,R361,R372,R388,R392,R419-- R421,R457	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A700003	Resistor	R462,R464,R474,R477,R478,R501- R56,R7,R80	Bellcore Issue 6	Level I		0.002371	9.00	.2125	0.021343	421686512.86
105A701003	Resistor	R245,R272,R524,R525	Bellcore Issue 6	Level I		0.002371	4.00	.0945	0.009486	421686512.86
105A701053	Resistor	R479	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A702223	Resistor	R69	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86

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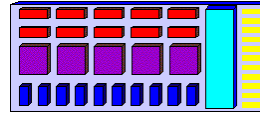


Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A708223	Resistor	R301,R349	Bellcore Issue 6	Level I		0.002371	2.00	.0472	0.004743	421686512.86
105A733003	Resistor	R288,R290,R317,R318,R538,R540-R81	Bellcore Issue 6	Level I		0.002371	7.00	.1653	0.016600	421686512.86
1059700001	Resistor	L15,R195,R208,R220,R227,R283,R285,R295,R316,R320,R338,R339,R343,R357	Bellcore Issue 6	Level I		0.002371	14.00	.3306	0.033200	421686512.86
1059700001	Resistor	R360,R401,R446,R452,R495,R510-R511,R523,R531,R539,R85,R86	Bellcore Issue 6	Level I		0.002371	12.00	.2834	0.028457	421686512.86
105A502033	Resistor	R244,R410,R467,R468	Bellcore Issue 6	Level I		0.002371	4.00	.0945	0.009486	421686512.86
105A503033	Resistor	R199,R237,R398,R459	Bellcore Issue 6	Level I		0.002371	4.00	.0945	0.009486	421686512.86
105A503333	Resistor	R224,R226,R229,R422,R440,R441	Bellcore Issue 6	Level I		0.002371	5.00	.1181	0.011857	421686512.86
105A505623	Resistor	R415	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A507503	Resistor	R506,R507,R532,R533,R534	Bellcore Issue 6	Level I		0.002371	5.00	.1181	0.011857	421686512.86
105A511503	Resistor	R89	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A518703	Resistor	R88	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A549963	Resistor	R264-R267	Bellcore Issue 6	Level I		0.002371	4.00	.0945	0.009486	421686512.86
105A569823	Resistor	R412	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A701523	Resistor	R469,R493	Bellcore Issue 6	Level I		0.002371	2.00	.0472	0.004743	421686512.86
1212308054	Inductor	L1,L6,L2,L7	Bellcore Issue 6	Level I		0.002371	4.00	.0945	0.009486	421686512.86
1231332721	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	1.4936	0.150000	6666666.67
1121733780	Capacitor	C33,R373	Bellcore Issue 6	Level I		0.004743	2.00	.0945	0.009486	210843256.43
1124422080	Capacitor	C271,C289,C7,C8	Bellcore Issue 6	Level I		0.004743	4.00	.1889	0.018971	210843256.43
1124510280	Capacitor	C100,C142,C157,C293	Bellcore Issue 6	Level I		0.004743	4.00	.1889	0.018971	210843256.43
1124415080	Capacitor	C309,C310	Bellcore Issue 6	Level I		0.004743	2.00	.0945	0.009486	210843256.43
1124527180	Capacitor	C268,C290,C297	Bellcore Issue 6	Level I		0.004743	3.00	.1417	0.014229	210843256.43
1129701080	Capacitor	C1,C11,C114,C115,C117,C126,C128,C134,C143,C159,C168,C18,C25-C273,C285	Bellcore Issue 6	Level I		0.004743	15.00	.7084	0.071143	210843256.43
1129701080	Capacitor	C296,C299,C3,C32,C328,C36,C41-C5,C6,C72,C94	Bellcore Issue 6	Level I		0.004743	11.00	.5195	0.052171	210843256.43
1301005440	Semiconductor	D14,D5	Bellcore Issue 6	Level I		0.025500	2.00	.5078	0.051000	39215725.03
1174547080	Capacitor	NC4,NC5	Bellcore Issue 6	Level I		0.005548	2.00	.1105	0.011095	180254343.35
1304100540	Semiconductor	LED1,LED3	Bellcore Issue 6	Level I		0.006008	2.00	.1197	0.012017	166435258.25
1310390410	Semiconductor	Q24,Q7	Bellcore Issue 6	Level I		0.025500	2.00	.5078	0.051000	39215725.03

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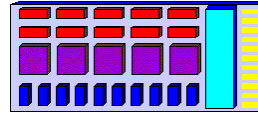


Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653005202	Connection	CN1	Bellcore Issue 6	Level I		0.006410	1.00	.0638	0.006410	155996430.92
1653207201	Connection	CN2	Bellcore Issue 6	Level I		0.008975	1.00	.0894	0.008975	111426022.09
1653205201	Connection	CN13,CN9	Bellcore Issue 6	Level I		0.006410	1.00	.0638	0.006410	155996430.92
1301005442	Semiconductor	D1,D10,D2-D4,D7	Bellcore Issue 6	Level I		0.025500	6.00	1.5235	0.153000	39215725.03
14S4021310	Integrated Circuit	U31	Bellcore Issue 6	Level I	9.90	0.139927	1.00	1.3933	0.139927	7146591.02
14S4021310	Integrated Circuit	U42	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
1315700211	Semiconductor	Q15-Q17,Q19,Q20,Q6	Bellcore Issue 6	Level I		0.085000	6.00	5.0782	0.509999	11764717.51
14S5A01400	Integrated Circuit	U44	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
14S5A00700	Integrated Circuit	U21	Bellcore Issue 6	Level I		0.043329	1.00	.4314	0.043329	23078975.22
105A530003	Resistor	R481	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A523233	Resistor	R270	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
14S3020100	Integrated Circuit	U32	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
1124418080	Capacitor	C291,C292	Bellcore Issue 6	Level I		0.004743	2.00	.0945	0.009486	210843256.43
1124447180	Capacitor	C144,C150,C154,C158,C20	Bellcore Issue 6	Level I		0.004743	5.00	.2361	0.023714	210843256.43
1122501780	Capacitor	C73,C74	Bellcore Issue 6	Level I		0.004743	2.00	.0945	0.009486	210843256.43
105A503300	Resistor	R260,R261	Bellcore Issue 6	Level I		0.002371	2.00	.0472	0.004743	421686512.86
105A510053	Resistor	R423	Bellcore Issue 6	Level I		0.014229	1.00	.1417	0.014229	70281085.48
105A504733	Resistor	R146	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A530933	Resistor	R268	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A506823	Resistor	R259	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
1540722085	Resistor	RN10,RN13,RN15,RN18,RN25,RN-26,RN28,RN3,RN30,RN31,RN44,R-N45,RN6,RN9	Bellcore Issue 6	Level I		0.006933	14.00	.9665	0.097062	144237329.71
1540700081	Resistor	RN11,RN12,RN16,RN17,RN38-RN-43,RN46-RN51	Bellcore Issue 6	Level I		0.006933	16.00	1.1045	0.110928	144237329.71
105A700139	Resistor	R152,R161,R184,R186,R204,R327-,R337,R346,R351,R355,R363,R364-,R381,R386	Bellcore Issue 6	Level I		0.002371	14.00	.3306	0.033200	421686512.86
105A700139	Resistor	R395,R400,R429,R55,R6,R82	Bellcore Issue 6	Level I		0.002371	6.00	.1417	0.014229	421686512.86
105A704729	Resistor	R1,R12,R17,R2,R20,R225,R233,R-256,R29,R291,R300,R313,R315,R3-19,R334,R353	Bellcore Issue 6	Level I		0.002371	16.00	.3778	0.037943	421686512.86
105A704729	Resistor	R358,R365,R384,R396,R416,R463-,R49,R496,R497,R528,R58,R62,R63	Bellcore Issue 6	Level I		0.002371	13.00	.3070	0.030829	421686512.86

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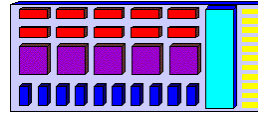


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File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A700009	Resistor	R100-R105,R108,R109,R117,R120-,R121,R126,R138,R139,R148,R149-,R151,R167	Bellcore Issue 6	Level I		0.002371	18.00	.4250	0.042686	421686512.86
105A700009	Resistor	R168-R170,R172,R176,R179,R185-,R187-R189,R197,R198,R210,R219-,R230,R243	Bellcore Issue 6	Level I		0.002371	16.00	.3778	0.037943	421686512.86
105A700009	Resistor	R248,R251,R252,R254,R271,R276-,R281,R284,R289,R293,R296-R299-,R3,R30,R309	Bellcore Issue 6	Level I		0.002371	17.00	.4014	0.040314	421686512.86
105A700009	Resistor	R342,R344,R348,R36,R375,R378-,R38,R382,R387,R39,R390,R391,R-394,R4,R41	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A700009	Resistor	R418,R42,R43,R437,R451,R46,R4-70,R473,R476,R480,R482,R483,R4-88,R494,R498	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A700009	Resistor	R5,R512,R513,R515-R518,R521,R-527,R53,R530,R535-R537,R59,R65-,R72,R73,R75	Bellcore Issue 6	Level I		0.002371	19.00	.4486	0.045057	421686512.86
105A700009	Resistor	R77,R8,R9,R90-R97,R99	Bellcore Issue 6	Level I		0.002371	12.00	.2834	0.028457	421686512.86
105A701039	Resistor	R137,R14,R141,R143,R155,R157-,R162,R174,R175,R191,R21,R236-,R238,R273,R28	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A701039	Resistor	R376,R383,R389,R403,R406,R407-,R426,R428,R443-R445,R458,R465-,R466,R472	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A701039	Resistor	R487,R489,R57,R61,R74,R79,R84	Bellcore Issue 6	Level I		0.002371	7.00	.1653	0.016600	421686512.86
105A756039	Resistor	R154	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A704739	Resistor	R10,R122,R123,R127,R129,R131-,R133,R134,R144,R150,R25,R27,R-31,R377,R379	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A704739	Resistor	R509,R52,R87	Bellcore Issue 6	Level I		0.002371	3.00	.0708	0.007114	421686512.86
1129701690	Capacitor	C102-C104,C108-C110,C125,C127-,C129,C13,C131,C135,C137,C139-,C14,C140	Bellcore Issue 6	Level I		0.004743	16.00	.7556	0.075886	210843256.43
1129701690	Capacitor	C145-C149,C15,C151-C153,C156-,C16,C161-C166,C17,C173,C174,C-179-C184,C186	Bellcore Issue 6	Level I		0.004743	27.00	1.2751	0.128057	210843256.43
1129701690	Capacitor	C189,C195,C197-C199,C201,C203-,C204,C206,C207,C209,C21,C211-,C214,C215	Bellcore Issue 6	Level I		0.004743	15.00	.7084	0.071143	210843256.43

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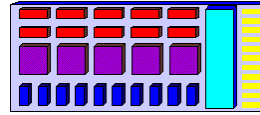


Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

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1129701690	Capacitor	C217-C232,C23,C234-C243,C24,C-245,C247-C249,C251-C259,C261,-C262,C264,C265	Bellcore Issue 6	Level I		0.004743	45.00	2.1252	0.213429	210843256.43
1129701690	Capacitor	C269,C27,C270,C274-C278,C280--C284,C288,C29,C30,C300,C304,C-31,C313,C314	Bellcore Issue 6	Level I		0.004743	21.00	.9917	0.099600	210843256.43
1129701690	Capacitor	C317,C318,C320,C322,C330-C333-.C34,C35,C37-C39,C4,C40,C42-C4-6,C50-C53,C56	Bellcore Issue 6	Level I		0.004743	25.00	1.1807	0.118571	210843256.43
1129701690	Capacitor	C57,C59,C60,C63,C66-C68,C71,C-77,C78,C82,C83,C88,C9,C93,C97	Bellcore Issue 6	Level I		0.004743	16.00	.7556	0.075886	210843256.43
1129722091	Capacitor	C112,C113,C118-C121,C307,C308	Bellcore Issue 6	Level I		0.004743	8.00	.3778	0.037943	210843256.43
1129701790	Capacitor	C12,C169,C171,C19,C26,C28	Bellcore Issue 6	Level I		0.004743	6.00	.2834	0.028457	210843256.43
14S5A00401	Integrated Circuit	Q11,Q8,U12,U9	Bellcore Issue 6	Level I		0.044938	4.00	1.7899	0.179753	22252768.73
1129722680	Capacitor	C10,C194,C294,C295,C90,C98,C99	Bellcore Issue 6	Level I		0.004743	7.00	.3306	0.033200	210843256.43
1121733380	Capacitor	C160	Bellcore Issue 6	Level I		0.004743	1.00	.0472	0.004743	210843256.43
1301053040	Semiconductor	D11-D13,D6	Bellcore Issue 6	Level I		0.025500	4.00	1.0156	0.102000	39215725.03
1174522180	Capacitor	NC1-NC3	Bellcore Issue 6	Level I		0.005548	3.00	.1657	0.016643	180254343.35
14S3115000	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
105A552303	Resistor	R502	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
1129710050	Capacitor	C106,C122-C124,C132,C136,C138-.C141,C155,C167,C2,C200,C202,C-212,C22,C244	Bellcore Issue 6	Level I		0.004743	16.00	.7556	0.075886	210843256.43
1129710050	Capacitor	C266,C267,C279,C286,C287,C298-.C302,C305,C306,C315,C316,C321-.C323,C329	Bellcore Issue 6	Level I		0.004743	14.00	.6612	0.066400	210843256.43
1129710050	Capacitor	C47,C48,C54,C55,C58,C64,C69,C-70,C75,C76,C79,C84,C91,C92,C95-.C96	Bellcore Issue 6	Level I		0.004743	16.00	.7556	0.075886	210843256.43
1653222208	Connection	CN6	Bellcore Issue 6	Level I		0.028206	1.00	.2809	0.028206	35453734.30
105A553663	Resistor	R331	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A710039	Resistor	R158,R182,R203,R211,R214,R221-.R234,R235,R242,R246,R249,R302-.R308,R314	Bellcore Issue 6	Level I		0.002371	19.00	.4486	0.045057	421686512.86
105A710039	Resistor	R321-R325,R341,R404,R409,R411-.R413,R436,R438,R51,R529,R64,R-83	Bellcore Issue 6	Level I		0.002371	16.00	.3778	0.037943	421686512.86

AAEON Reliability Prediction Report

Part Number 9697127020
Reference Des
Date 08. 14, 2006
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 27.30



Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A747009	Resistor	R542	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A501539	Resistor	R424,R425,R449,R450,R453-R456	Bellcore Issue 6	Level I		0.002371	8.00	.1889	0.018971	421686512.86
105A702209	Resistor	R106,R107,R110-R112,R114,R202-,R209,R212,R215,R217,R228,R232-,R366,R367	Bellcore Issue 6	Level I		0.002371	15.00	.3542	0.035571	421686512.86
105A702209	Resistor	R369,R370,R393,R402,R408,R98	Bellcore Issue 6	Level I		0.002371	6.00	.1417	0.014229	421686512.86
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.032052	1.00	.3192	0.032052	31199286.18
1304900140	Semiconductor	LED2	Bellcore Issue 6	Level I		0.006008	1.00	.0598	0.006008	166435258.25
105A703909	Resistor	R222,R223,R239,R240,R262,R263-,R430-R433	Bellcore Issue 6	Level I		0.002371	10.00	.2361	0.023714	421686512.86
1189922180	Capacitor	C130	Bellcore Issue 6	Level I		0.004743	1.00	.0472	0.004743	210843256.43
1189922180	Capacitor	CE12	Bellcore Issue 6	Level I	8.40	0.005553	1.00	.0553	0.005553	180086440.37
1752001600	Miscellaneous	FS1	Bellcore Issue 6	Level I		0.030000	1.00	.2987	0.030000	33333333.33
14S5A12505	Integrated Circuit	U33,U49,U50	Bellcore Issue 6	Level I		0.044938	3.00	1.3424	0.134815	22252768.73
1653204203	Connection	CN12,CN4	Bellcore Issue 6	Level I		0.005128	2.00	.1021	0.010257	194995538.65
14S4048502	Integrated Circuit	U43	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
1315230111	Semiconductor	Q14,Q18,Q2,Q23	Bellcore Issue 6	Level I		0.170000	4.00	6.7710	0.679999	5882358.75
14S5A00830	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
105A534823	Resistor	R414	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
14S5A00702	Integrated Circuit	Q25	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
1301003440	Semiconductor	D8	Bellcore Issue 6	Level I		0.025500	1.00	.2539	0.025500	39215725.03
1301003440	Semiconductor	D9	Bellcore Issue 6	Level I	7.90	0.031707	1.00	.3157	0.031707	31539139.24
14S4081110	Integrated Circuit	U13,U18,U48,U8	Bellcore Issue 6	Level I		0.070154	4.00	2.7942	0.280616	14254376.78
105A505133	Resistor	R399	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A520033	Resistor	R490	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
105A503933	Resistor	R347	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
121230603S	Inductor	L12,L9,R274,R286,R500	Bellcore Issue 6	Level I		0.002371	5.00	.1181	0.011857	421686512.86
1315446310	Semiconductor	Q3,Q4	Bellcore Issue 6	Level I		0.085000	2.00	1.6927	0.170000	11764717.51
1121501690	Capacitor	C170,C172,C175-C178,C185,C187-,C188,C190-C193,C205,C208,C210-,C213,C216	Bellcore Issue 6	Level I		0.004743	18.00	.8501	0.085371	210843256.43
1121501690	Capacitor	C233,C246,C250,C87,C89	Bellcore Issue 6	Level I		0.004743	5.00	.2361	0.023714	210843256.43
1315943512	Semiconductor	Q10	Bellcore Issue 6	Level I	8.50	0.107403	1.00	1.0694	0.107403	9310720.71

AAEON Reliability Prediction Report

Part Number 9697127020
Reference Des
Date 08. 14, 2006
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 27.30



Description Top-level assembly
File Name GENE-1270B.RPJ
Time 1:31 下午
Failure Rate 10.042879
MTBF 99,573

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1315943512	Semiconductor	Q9	Bellcore Issue 6	Level I	8.30	0.106829	1.00	1.0637	0.106829	9360726.56
1314918310	Integrated Circuit	U29	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
14S5424500	Integrated Circuit	U3,U38,U4,U40,U5,U6	Bellcore Issue 6	Level I		0.044938	6.00	2.6848	0.269629	22252768.73
14S3140000	Integrated Circuit	U7	Bellcore Issue 6	Level I	8.10	0.123827	1.00	1.2330	0.123827	8075789.07
14S6343202	Integrated Circuit	U23	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
14S6832300	Integrated Circuit	U25	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
1231325058	Miscellaneous	Y4	Bellcore Issue 6	Level I		0.150000	1.00	1.4936	0.150000	6666666.67
14S4027001	Integrated Circuit	U20	Bellcore Issue 6	Level I	12.60	0.090497	1.00	.9011	0.090497	11050096.28
1231324555	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	1.4936	0.150000	6666666.67
1314515111	Integrated Circuit	U19	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
14S5A00802	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
14S5A03201	Integrated Circuit	U36,U41	Bellcore Issue 6	Level I		0.044938	2.00	.8949	0.089876	22252768.73
14S4900001	Integrated Circuit	U27	Bellcore Issue 6	Level I	8.20	0.071333	1.00	.7103	0.071333	14018747.13
1540710480	Resistor	RN14,RN27,RN29,RN5,RN8	Bellcore Issue 6	Level I		0.006933	5.00	.3452	0.034665	144237329.71
105A525533	Resistor	R269	Bellcore Issue 6	Level I		0.002371	1.00	.0236	0.002371	421686512.86
12313013A0	Miscellaneous	Y3,Y5	Bellcore Issue 6	Level I		0.150000	2.00	2.9872	0.300000	6666666.67
16540E0200	Connection	CN14	Bellcore Issue 6	Level I		0.089746	1.00	.8936	0.089746	11142602.21
1315970211	Semiconductor	U39,U51	Bellcore Issue 6	Level I		0.085000	2.00	1.6927	0.170000	11764717.51
14S3344500	Integrated Circuit	U47	Bellcore Issue 6	Level I	9.40	0.135275	1.00	1.3470	0.135275	7392361.39
1211102265	Inductor	L6	Bellcore Issue 6	Level I		0.090114	1.00	.8973	0.090114	11097013.50
1654040001	Connection	CN17,CN19	Bellcore Issue 6	Level I		0.025642	2.00	.5106	0.051283	38999107.73
14S4270001	Integrated Circuit	U24	Bellcore Issue 6	Level I		0.044938	1.00	.4475	0.044938	22252768.73
14S6816300	Integrated Circuit	U16,U22	Bellcore Issue 6	Level I		0.044938	2.00	.8949	0.089876	22252768.73
118961018B	Capacitor	CE10,CE11	Bellcore Issue 6	Level I		0.004743	2.00	.0945	0.009486	210843256.43
131411171C	Integrated Circuit	U15,U35	Bellcore Issue 6	Level I		0.070154	2.00	1.3971	0.140308	14254376.78
1654912303	Connection	CN24	Bellcore Issue 6	Level I		0.001282	1.00	.0128	0.001282	779982154.60
121110100J	Inductor	L4,L5	Bellcore Issue 6	Level I		0.002371	2.00	.0472	0.004743	421686512.86
14S9133900	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
14S1206800	Integrated Circuit	U37	Bellcore Issue 6	Level I		0.070154	1.00	.6985	0.070154	14254376.78
14S3545200	Integrated Circuit	U46	Bellcore Issue 6	Level I	11.70	0.157897	1.00	1.5722	0.157897	6333229.12
14S3712500	Integrated Circuit	U30	Bellcore Issue 6	Level I	16.00	0.209561	1.00	2.0867	0.209561	4771874.72

