

# **GENE-9655**

## **Reliability Prediction Report (MTBF)**

Report NO. : 10E070009

**03-26-2010**

**Issue Date**

**Jansin Lee**

**Sr. Manager**

**Jessica Chou**

**Test Engineer**

## Reliability Prediction (MTBF)

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**I . Model Name:** GENE-9655-A10

**II . Prediction Date:** Mar. 26, 2010

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

**IV . Predicted by:** Jessica Chou

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

### **VI. Simulation Environment:**

- Temperature: 25.3 degrees C
- Standard: Telcordia (Bellcore) Standard

### **VII. Term and Definition:**

- Unit : An assembly of device.
- Duty Cycle : 100%
- 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-9655-A10:  
Failure Rate: 17.328488 ppm  
MTBF: 57,708 Hours

### AAEON Reliability Prediction Report

**Part Number** 9697965504-D  
**Reference Des**  
**Date** 03. 26, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.30



**Description** Top-level assembly  
**File Name** GENE-9655.RPJ  
**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
GENE-9655	9697965504-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	17.33	57708.44





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**Description** Top-level assembly  
**File Name** GENE-9655.RPJ  
**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11E9647680	Capacitor	C110,C112,C113, C215,C230,C236, C245,C247,C357, C363,C366,C371, C372,C563,C656	Telcordia Issue 1	Level I		15.00	0.004562	.3949	219195994.91
1129710090	Capacitor	C186,C187,C267, C268,C269,C398, C452	Telcordia Issue 1	Level I		7.00	0.004562	.1843	219195994.91
11C2539290	Capacitor	C191,C192,C494, C495	Telcordia Issue 1	Level I		4.00	0.004562	.1053	219195994.91
11E4433090	Capacitor	C262,C263	Telcordia Issue 1	Level I		2.00	0.004562	.0527	219195994.91
11E9722090	Capacitor	C264,C265,C266	Telcordia Issue 1	Level I		3.00	0.004562	.0790	219195994.91
1124427091	Capacitor	C271,C272,C276, C277,C290,C307, C309,C354,C358	Telcordia Issue 1	Level I		9.00	0.004562	.2369	219195994.91
1121610061	Capacitor	C288	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124547190	Capacitor	C346,C348,C349, C368,C374,C378, C379,C386,C387, C394,C395	Telcordia Issue 1	Level I		11.00	0.004562	.2896	219195994.91
1129610080	Capacitor	C360,C365,C369, C375,C385	Telcordia Issue 1	Level I		5.00	0.004562	.1316	219195994.91
1124410191	Capacitor	C396,C397,C405, C406,C621,C622	Telcordia Issue 1	Level I		6.00	0.004562	.1580	219195994.91
1129747090	Capacitor	C428,C540,C620	Telcordia Issue 1	Level I		3.00	0.004562	.0790	219195994.91
1124522290	Capacitor	C441	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1121701081	Capacitor	C523,C550,C579, C580,C648	Telcordia Issue 1	Level I		5.00	0.004562	.1316	219195994.91
11C2522480	Capacitor	C526,C532,C542	Telcordia Issue 1	Level I		3.00	0.004562	.0790	219195994.91
1129747652	Capacitor	C529	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124447180	Capacitor	C533	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1121733380	Capacitor	C534	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124539180	Capacitor	C537	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1121733780	Capacitor	C538	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124515880	Capacitor	C541	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124518180	Capacitor	C546	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1121722651	Capacitor	C573,C583,C588	Telcordia Issue 1	Level I		3.00	0.004562	.0790	219195994.91
1124533191	Capacitor	C589	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
11E1647650	Capacitor	C591,C592	Telcordia Issue 1	Level I		2.00	0.004562	.0527	219195994.91
1124533282	Capacitor	C604	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
11E4522280	Capacitor	C641	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
1124468090	Capacitor	C655	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
11E1622060	Capacitor	C657,C658	Telcordia Issue 1	Level I		2.00	0.004562	.0527	219195994.91

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**Temp. (°C)** 25.30



**Description** Top-level assembly  
**File Name** GENE-9655.RPJ  
**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
16515A0996	Connection	DIMM1	Telcordia Issue 1	Level I		1.00	0.115590	.6671	8651254.04
1301005440	Semiconductor	D1,D12,D16,D17,D4, D5	Telcordia Issue 1	Level I		6.00	0.024088	.8340	41515203.19
1300001440	Semiconductor	D2,D3	Telcordia Issue 1	Level I		2.00	0.024088	.2780	41515203.19
1305099140	Semiconductor	D6,D7	Telcordia Issue 1	Level I		2.00	0.080292	.9267	12454560.96
1301053040	Semiconductor	D42,D43,D44,D8	Telcordia Issue 1	Level I		4.00	0.024088	.5560	41515203.19
1301005441	Semiconductor	D13,D14,D15	Telcordia Issue 1	Level I		3.00	0.027373	.4739	36532665.82
1301005442	Semiconductor	D20,D38,D39,D40, D41	Telcordia Issue 1	Level I		5.00	0.024088	.6950	41515203.19
1305080040	Semiconductor	D21,D22,D23,D24, D25,D26,D27,D28, D29,D30,D31,D32	Telcordia Issue 1			12.00	0.008029	.5560	124545609.56
1301003440	Semiconductor	D35,D36	Telcordia Issue 1	Level I		2.00	0.024088	.2780	41515203.19
1300560040	Integrated Circuit	D37	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
12123C0006	Inductor	FB1,FB4	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
12123C0007	Inductor	FB2,FB3	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
12123C0003	Inductor	FB5	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
121230603Z	Inductor	FB6	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
121230805L	Inductor	FB7	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
1212306030	Inductor	FB13,FB17,FB18, FB19,FB20,FB21, FB22,FB23,FB28, FB29,FB36,FB37, FB38,FB40,FB41, FB42,FB43,FB44, FB45,FB46,FB8,FB9	Telcordia Issue 1	Level I		22.00	0.002281	.2896	438391989.82
121230603T	Inductor	FB10,FB11,FB12	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
1212306033	Inductor	FB24,FB25,FB30, FB31,FB32,FB33, FB34,FB47,FB48	Telcordia Issue 1	Level I		9.00	0.002281	.1185	438391989.82
105A700003	Resistor	FB35,R281,R400, R417,R424,R447, R452,R462,R472, R550,R554,R624, R625,R626,R629,R84	Telcordia Issue 1	Level I		16.00	0.002281	.2106	438391989.82
1752001601	Miscellaneous	FS1,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0346	333333333.33
1304001340	Semiconductor	LED1	Telcordia Issue 1	Level I		1.00	0.005012	.0289	199519584.34
1304101340	Semiconductor	LED2	Telcordia Issue 1	Level I		1.00	0.005012	.0289	199519584.34
121110100P	Inductor	L1,L2,L7	Telcordia Issue 1	Level I		3.00	0.086680	1.5007	11536631.31
121110010F	Inductor	L3,L4,L6,L8	Telcordia Issue 1	Level I		4.00	0.086680	2.0009	11536631.31
1211100164	Inductor	L5	Telcordia Issue 1	Level I		1.00	0.086680	.5002	11536631.31

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**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1211105673	Inductor	L10	Telcordia Issue 1	Level I	21.30	1.00	0.127869	.7379	7820493.20
1211105673	Inductor	L9	Telcordia Issue 1	Level I		1.00	0.086680	.5002	11536631.31
121110226C	Inductor	L11	Telcordia Issue 1	Level I		1.00	0.086680	.5002	11536631.31
121110226C	Inductor	L15	Telcordia Issue 1	Level I	13.80	1.00	0.112187	.6474	8913695.23
121110336L	Inductor	L12	Telcordia Issue 1	Level I	13.20	1.00	0.110989	.6405	9009939.35
121110336L	Inductor	L13	Telcordia Issue 1	Level I	13.40	1.00	0.111387	.6428	8977702.23
1211000180	Inductor	L14	Telcordia Issue 1	Level I	16.50	1.00	0.003097	.0179	322903643.68
1654262306	Connection	MPC12	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
1315700211	Semiconductor	Q13,Q14,Q15,Q17, Q26,Q29,Q31,Q32, Q34,Q35,Q36,Q37, Q38,Q39,Q40,Q42, Q51,Q52,Q57,Q6	Telcordia Issue 1	Level I		20.00	0.080292	9.2670	12454560.96
1311390610	Semiconductor	Q30,Q7	Telcordia Issue 1	Level I		2.00	0.024088	.2780	41515203.19
1315013810	Semiconductor	Q12	Telcordia Issue 1	Level I		1.00	0.080292	.4634	12454560.96
1315230114	Semiconductor	Q16	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
1310390410	Semiconductor	Q18,Q19,Q20,Q27, Q33,Q41	Telcordia Issue 1	Level I		6.00	0.024088	.8340	41515203.19
1311138610	Semiconductor	Q21,Q22,Q23,Q24	Telcordia Issue 1	Level I		4.00	0.024088	.5560	41515203.19
1315230111	Semiconductor	Q25	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
1315230300	Semiconductor	Q28	Telcordia Issue 1	Level I		1.00	0.080292	.4634	12454560.96
1315998410	Semiconductor	Q53	Telcordia Issue 1	Level I		1.00	0.080292	.4634	12454560.96
1315700310	Semiconductor	Q58	Telcordia Issue 1	Level I	9.70	1.00	0.105122	.6066	9512757.37
1540782282	Resistor	RP1,RP11,RP2,RP3, RP4,RP5	Telcordia Issue 1	Level I		6.00	0.012664	.4385	78961933.93
1540710280	Resistor	RP7,RP8	Telcordia Issue 1	Level I		2.00	0.006332	.0731	157923867.87
1540733085	Resistor	RP10,RP12,RP9	Telcordia Issue 1	Level I		3.00	0.006332	.1096	157923867.87
106B501032	Resistor	RT1,RT2,RT4	Telcordia Issue 1	Level I		3.00	0.011559	.2001	86512540.36
106B747030	Resistor	RT3	Telcordia Issue 1	Level I		1.00	0.011559	.0667	86512540.36









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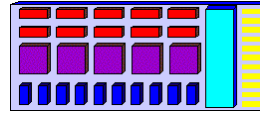


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Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A708229	Resistor	R147,R172,R174, R175,R176,R186, R191,R204,R333, R334,R335,R336	Telcordia Issue 1	Level I		12.00	0.002281	.1580	438391989.82
105A522663	Resistor	R161	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A751003	Resistor	R179	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A532413	Resistor	R222,R227	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A545303	Resistor	R223,R228	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A522669	Resistor	R237,R238,R239, R587	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A547503	Resistor	R243,R246,R265	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A507509	Resistor	R270,R271,R272	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A703903	Resistor	R279,R280	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A501223	Resistor	R298	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
1059700001	Resistor	R313,R485,R486, R506	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A549919	Resistor	R314,R315,R316	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A501413	Resistor	R331,R341,R466, R511	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A549969	Resistor	R348,R349,R350, R351,R352,R353, R354,R355	Telcordia Issue 1	Level I		8.00	0.002281	.1053	438391989.82
105A702209	Resistor	R372,R373,R421	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A501039	Resistor	R389,R390,R391, R395,R396,R397, R398,R399,R457, R476,R617,R618, R619,R620	Telcordia Issue 1	Level I		14.00	0.002281	.1843	438391989.82
105A506823	Resistor	R392,R394	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A503033	Resistor	R393	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A705133	Resistor	R402	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
1050547004	Resistor	R413,R414,R583	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A705139	Resistor	R436,R437,R438, R439	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A701003	Resistor	R443,R444,R445	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A514733	Resistor	R450	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A536513	Resistor	R454,R474	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A540213	Resistor	R455	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A549903	Resistor	R461	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A518213	Resistor	R465	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A500233	Resistor	R467	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A561923	Resistor	R469	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A501533	Resistor	R470,R533,R534, R552	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A526113	Resistor	R471	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82

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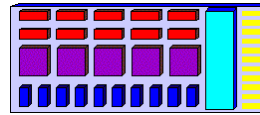


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105A544213	Resistor	R473	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A501133	Resistor	R475	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A500133	Resistor	R478,R513	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A500333	Resistor	R481	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A722033	Resistor	R490	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A702263	Resistor	R448,R460,R492, R495,R499,R504	Telcordia Issue 1	Level I		6.00	0.002281	.0790	438391989.82
105A704763	Resistor	R493,R497,R500	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A560423	Resistor	R494	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A502033	Resistor	R496,R507	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A533223	Resistor	R505	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A704733	Resistor	R509,R518,R526	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A705623	Resistor	R514	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A747039	Resistor	R522	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A733009	Resistor	R528,R530,R614, R615	Telcordia Issue 1	Level I		4.00	0.002281	.0527	438391989.82
105A710009	Resistor	R529,R606,R612	Telcordia Issue 1	Level I		3.00	0.002281	.0395	438391989.82
105A704739	Resistor	R605,R669	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A518223	Resistor	R636	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A532423	Resistor	R637	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A702039	Resistor	R661,R666	Telcordia Issue 1	Level I		2.00	0.002281	.0263	438391989.82
105A705129	Resistor	R670	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
1189633160	Capacitor	TC1,TC10,TC11,TC12, TC17,TC18,TC2,TC3, TC30,TC31,TC33,TC4, TC5,TC6,TC7,TC8, TC9	Telcordia Issue 1	Level I		17.00	0.004562	.4476	219195994.91
1189622850	Capacitor	TC13,TC14,TC15, TC16,TC19,TC20, TC34	Telcordia Issue 1	Level I		7.00	0.004562	.1843	219195994.91
1189615150	Capacitor	TC21,TC22,TC23, TC24,TC25,TC28, TC29,TC36,TC38, TC41,TC42,TC43	Telcordia Issue 1	Level I		12.00	0.004562	.3159	219195994.91
1189633193	Capacitor	TC26,TC27	Telcordia Issue 1	Level I		2.00	0.004562	.0527	219195994.91
1651611993	Connection	U1	Telcordia Issue 1	Level I		1.00	0.276261	1.5943	3619771.56
14S4296501	Integrated Circuit	U2	Telcordia Issue 1	Level I	15.30	1.00	0.062586	.3612	15978140.57
14S4280121	Integrated Circuit	U3	Telcordia Issue 1	Level I	15.20	1.00	0.062254	.3593	16063208.29
14S3950500	Integrated Circuit	U5	Telcordia Issue 1	Level I	23.50	1.00	0.297691	1.7179	3359183.52
14S2200900	Integrated Circuit	U6	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
14S3524700	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92

**AAEON Reliability Prediction Report**

**Part Number** 9697965504-D  
**Reference Des**  
**Date** 03. 26, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.30



**Description** Top-level assembly  
**File Name** GENE-9655.RPJ  
**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S4730701	Integrated Circuit	U8	Telcordia Issue 1	Level I	15.20	1.00	0.174439	1.0067	5732676.86
14S4825740	Integrated Circuit	U9	Telcordia Issue 1	Level I	5.80	1.00	0.037207	.2147	26876737.50
14S6308001	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.036678	.2117	27264461.71
14S3088800	Integrated Circuit	U12	Telcordia Issue 1	Level I	12.90	1.00	0.055045	.3177	18166925.94
14S4878100	Integrated Circuit	U13	Telcordia Issue 1	Level I	10.50	1.00	0.048317	.2788	20696801.05
14S9103200	Integrated Circuit	U14	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
14S4021301	Integrated Circuit	U15,U20,U23,U24	Telcordia Issue 1	Level I		4.00	0.060682	1.4007	16479361.92
14S5A12506	Integrated Circuit	U16	Telcordia Issue 1	Level I		1.00	0.026648	.1538	37526359.19
14S5A12503	Integrated Circuit	U17,U69	Telcordia Issue 1	Level I		2.00	0.060682	.7004	16479361.92
14S4048502	Integrated Circuit	U19,U21	Telcordia Issue 1	Level I		2.00	0.060682	.7004	16479361.92
14S5A00703	Integrated Circuit	U22	Telcordia Issue 1	Level I		1.00	0.026648	.1538	37526359.19
1315970211	Semiconductor	U25,U26,U27	Telcordia Issue 1	Level I		3.00	0.160584	2.7801	6227280.48
1315889611	Semiconductor	U28,U30,U31, U33,U34,U35,U36, U77	Telcordia Issue 1	Level I		8.00	0.080292	3.7068	12454560.96
1315889611	Semiconductor	U29	Telcordia Issue 1	Level I	18.10	1.00	0.130989	.7559	7634224.98
14S3626201	Integrated Circuit	U32	Telcordia Issue 1	Level I	29.60	1.00	0.433383	2.5010	2307430.37
1315669000	Semiconductor	U38,U40,U41	Telcordia Issue 1	Level I		3.00	0.080292	1.3901	12454560.96
1315669000	Semiconductor	U37	Telcordia Issue 1	Level I	21.90	1.00	0.144148	.8319	6937302.77
14S1564201	Integrated Circuit	U39	Telcordia Issue 1	Level I	13.30	1.00	0.153733	.8872	6504795.71
1315667910	Semiconductor	U42,U47	Telcordia Issue 1	Level I		2.00	0.160584	1.8534	6227280.48
1315667910	Semiconductor	U44	Telcordia Issue 1	Level I	17.90	1.00	0.260645	1.5041	3836637.91
14S4195710	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
1315422410	Semiconductor	U49	Telcordia Issue 1	Level I		1.00	0.080292	.4634	12454560.96
14S2041500	Integrated Circuit	U51	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
1315662210	Semiconductor	U52,U72	Telcordia Issue 1	Level I		2.00	0.080292	.9267	12454560.96
1315662810	Semiconductor	U54,U73	Telcordia Issue 1	Level I		2.00	0.080292	.9267	12454560.96
14S2591200	Integrated Circuit	U58,U80	Telcordia Issue 1	Level I		2.00	0.060682	.7004	16479361.92
14S5A00821	Integrated Circuit	U60,U61,U79	Telcordia Issue 1	Level I		3.00	0.026648	.4613	37526359.19
14S9951500	Integrated Circuit	U62	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
14S5A00702	Integrated Circuit	U63	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
14S5A00601	Integrated Circuit	U64	Telcordia Issue 1	Level I		1.00	0.026648	.1538	37526359.19
14S6340222	Integrated Circuit	U65	Telcordia Issue 1	Level I		1.00	0.023452	.1353	42641143.29
14S9811500	Integrated Circuit	U66	Telcordia Issue 1	Level I		1.00	0.060682	.3502	16479361.92
14S5A73200	Integrated Circuit	U70	Telcordia Issue 1	Level I		1.00	0.026648	.1538	37526359.19
14S5912300	Integrated Circuit	U71	Telcordia Issue 1	Level I		1.00	0.026648	.1538	37526359.19
14S2048800	Integrated Circuit	U74	Telcordia Issue 1	Level I		1.00	0.032709	.1888	30572432.40

### AAEON Reliability Prediction Report

**Part Number** 9697965504-D  
**Reference Des**  
**Date** 03. 26, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.30



**Description** Top-level assembly  
**File Name** GENE-9655.RPJ  
**Time** 11:39 上午  
**Failure Rate** 17.328488  
**MTBF** 57,708

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1231332721	Miscellaneous	Y1	Telcordia Issue 1	Level I		1.00	0.150000	.8656	6666666.67
123131435B	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.8656	6666666.67
1231325058	Miscellaneous	Y3,Y4	Telcordia Issue 1	Level I		2.00	0.150000	1.7313	6666666.67
14S4256610	Inductor	U11	Telcordia Issue 1	Level I	6.50	1.00	0.154994	.8944	6451846.66
14S6201601	Integrated Circuit	U4	Telcordia Issue 1	Level I		1.00	0.171779	.9913	5821421.22
11E2510060	Capacitor	C521,C530,C555, C565,C575	Telcordia Issue 1	Level I		5.00	0.004562	.1316	219195994.91
1181647080	Capacitor	TC37	Telcordia Issue 1	Level I		1.00	0.004562	.0263	219195994.91
105A703323	Resistor	R519	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
105A701823	Resistor	R527	Telcordia Issue 1	Level I		1.00	0.002281	.0132	438391989.82
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
1655305020	Connection	CN5	Telcordia Issue 1	Level I		1.00	0.002890	.0167	346050161.43
165251420B	Connection	CN22,CN7	Telcordia Issue 1	Level I		2.00	0.001156	.0133	865125403.57
1655003010	Connection	CN10	Telcordia Issue 1	Level I		1.00	0.001734	.0100	576750269.05
1654409103	Connection	CN11	Telcordia Issue 1	Level I		1.00	0.130039	.7504	7690003.59
1655909031	Connection	CN12,CN18,CN20	Telcordia Issue 1	Level I		3.00	0.005202	.0901	192250089.68
1654907004	Connection	CN15	Telcordia Issue 1	Level I		1.00	0.004046	.0233	247178686.73
1655306023	Connection	CN19	Telcordia Issue 1	Level I		1.00	0.003468	.0200	288375134.52
1654808309	Connection	CN21	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
1655306020	Connection	CN24	Telcordia Issue 1	Level I		1.00	0.086693	.5003	11535005.38
1652602105	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
1655905032	Connection	CN27,CN28,CN29, CN30	Telcordia Issue 1	Level I		4.00	0.023118	.5336	43256270.18
1655302020	Connection	CN36	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
1653003101	Connection	JP1,JP2,JP3,JP6	Telcordia Issue 1	Level I		4.00	0.001734	.0400	576750269.05
1653003201	Connection	JP4	Telcordia Issue 1	Level I		1.00	0.001156	.0067	865125403.57
175011901C	Miscellaneous	BAT1	Telcordia Issue 1	Level I		1.00	0.900000	5.1938	1111111.11
1653900034	Connection	CFD1	Telcordia Issue 1	Level I		1.00	0.013871	.0800	72093783.63
1654430301	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.017339	.1001	57675026.90