

# GENE-QM67

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 19.255203 ppm MTBF: 51,934 Hours
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Issue date

Approval

Test Engineer

2011/12/12

Jansin Lee

Jessica Chou

# Reliability Prediction (MTBF)

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**I . Model Name:** GENE-QM67 (9697QM6722-D)

**II . Prediction Date:** Dec. 12, 2011

**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 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.

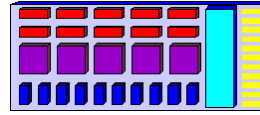
**VIII. Prediction Result:**

GENE-QM67(9697QM6722-D):

- Failure Rate: 19.255203ppm
- MTBF: 51,934 Hours

### AAEON Reliability Prediction Report

**Part Number** 9697QM6722-D  
**Reference Des**  
**Date** 12. 12, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
**MTBF** 51,934

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
GENE-QM67	9697QM6722-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	19.26	51934.01





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**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11C2501790	Capacitor	C131,C132,C135, C137,C141,C145, C151,C153,C163, C277,C30,C314,C357, C378,C390,C396, C397,C398,C399, C416,C417,C429, C463,C590,C593, C594,C602,C607,C79	Telcordia Issue 1	Level I		29.00	0.004535	.6831	220487045.01
1129710090	Capacitor	C183,C184,C185, C217,C42	Telcordia Issue 1	Level I		5.00	0.004535	.1178	220487045.01
11E9522680	Capacitor	C164,C168,C45,C66	Telcordia Issue 1	Level I		4.00	0.004535	.0942	220487045.01
1129522790	Capacitor	C140,C308,C321, C323,C336,C354, C368,C369,C370, C407,C64	Telcordia Issue 1	Level I		11.00	0.004535	.2591	220487045.01
1124418090	Capacitor	C125,C127,C616, C617,C69,C70	Telcordia Issue 1	Level I		6.00	0.004535	.1413	220487045.01
11C4522290	Capacitor	C305,C306,C310, C373,C99	Telcordia Issue 1	Level I		5.00	0.004535	.1178	220487045.01
1124427091	Capacitor	C149,C155,C186, C190,C201,C202, C203	Telcordia Issue 1	Level I		7.00	0.004535	.1649	220487045.01
1124547190	Capacitor	C170,C181,C191, C193,C195,C196, C221,C222,C223, C224,C225,C226, C227,C230,C231, C233,C234,C236, C239,C382,C552, C553,C589,C610	Telcordia Issue 1	Level I		24.00	0.004535	.5653	220487045.01
11E1647650	Capacitor	C232	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
11E1622060	Capacitor	C242,C249	Telcordia Issue 1	Level I		2.00	0.004535	.0471	220487045.01
11E9547680	Capacitor	C288,C554,C598	Telcordia Issue 1	Level I		3.00	0.004535	.0707	220487045.01
1124533191	Capacitor	C301,C319,C379	Telcordia Issue 1	Level I		3.00	0.004535	.0707	220487045.01
11C4515190	Capacitor	C302,C381	Telcordia Issue 1	Level I		2.00	0.004535	.0471	220487045.01
11E4433090	Capacitor	C307,C349,C361	Telcordia Issue 1	Level I		3.00	0.004535	.0707	220487045.01
11E9547790	Capacitor	C372	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
11C1501080	Capacitor	C400	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
11C1547890	Capacitor	C418	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
1122522890	Capacitor	C536,C537,C575, C611,C614	Telcordia Issue 1	Level I		5.00	0.004535	.1178	220487045.01
11E9647680	Capacitor	C603	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
11C4568190	Capacitor	C609	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01
1301005444	Semiconductor	D1,D2,D27,D28,D29, D31,D37,D38	Telcordia Issue 1	Level I		8.00	0.023881	.9922	41874327.58

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**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
1301053040	Semiconductor	D25,D3	Telcordia Issue 1	Level I		2.00	0.023881	.2480	41874327.58
1304500240	Semiconductor	D4	Telcordia Issue 1	Level I		1.00	0.004877	.0253	205063180.81
1304300140	Semiconductor	D11,D5	Telcordia Issue 1	Level I		2.00	0.004877	.0507	205063180.81
1305080040	Semiconductor	D13,D14,D15,D16, D17,D18,D19,D20, D21,D22,D23,D24, D32,D33,D34,D35, D36,D39,D40,D41, D42,D43,D44,D6,D7, D8,D9	Telcordia Issue 1	Level I		27.00	0.023881	3.3486	41874327.58
1304001340	Semiconductor	D10	Telcordia Issue 1	Level I		1.00	0.004877	.0253	205063180.81
1301400642	Semiconductor	D30	Telcordia Issue 1	Level I		1.00	0.023881	.1240	41874327.58
1189633194	Capacitor	EC2,EC3	Telcordia Issue 1	Level I		2.00	0.004535	.0471	220487045.01
1212306030	Resistor	FB10,FB11,FB12, FB13,FB14,FB15, FB16,FB17,FB18, FB19,FB2,FB20,FB21, FB23,FB24,FB26,FB3, FB31,FB5,FB9	Telcordia Issue 1	Level I		20.00	0.011379	1.1820	87878027.07
12123C0007	Inductor	FB4	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
12123D0001	Inductor	FB22,FB25,FB27, FB28,FB29,FB30, FB32,FB33,FB6,FB7, FB8	Telcordia Issue 1	Level I		11.00	0.002268	.1295	440974090.03
1212308054	Resistor	FB34,FB35	Telcordia Issue 1	Level I		2.00	0.011379	.1182	87878027.07
1752001601	Miscellaneous	FS1,FS2,FS3	Telcordia Issue 1	Level I		3.00	0.003000	.0467	333333333.33
121110156K	Inductor	L1,L3	Telcordia Issue 1	Level I		2.00	0.086173	.8951	11604581.32
1211103671	Inductor	L2,L4,L6	Telcordia Issue 1	Level I		3.00	0.086173	1.3426	11604581.32
1211103671	Inductor	L5	Telcordia Issue 1	Level I	12.20	1.00	0.108420	.5631	9223363.10
121110106G	Inductor	L7	Telcordia Issue 1	Level I		1.00	0.086173	.4475	11604581.32
1211106874	Inductor	L8,L9	Telcordia Issue 1	Level I		2.00	0.086173	.8951	11604581.32
121110336Y	Inductor	L10	Telcordia Issue 1	Level I		1.00	0.086173	.4475	11604581.32
1211100113	Inductor	L11,L12,L13,L15	Telcordia Issue 1	Level I		4.00	0.086173	1.7901	11604581.32
1211100160	Inductor	L14	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
121110476Q	Inductor	L16	Telcordia Issue 1	Level I		1.00	0.086173	.4475	11604581.32
1315230511	Semiconductor	Q1,Q16,Q17,Q18,Q24, Q25	Telcordia Issue 1	Level I		6.00	0.079603	2.4805	12562298.27



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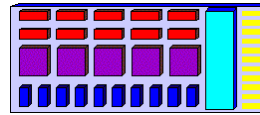


**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
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**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315700216	Semiconductor	Q10,Q11,Q13,Q15, Q19,Q2,Q20,Q21,Q22, Q23,Q26,Q27,Q3,Q30, Q32,Q33,Q34,Q35, Q36,Q37,Q38,Q39,Q4, Q40,Q41,Q42,Q43, Q44,Q45,Q5,Q6	Telcordia Issue 1	Level I		31.00	0.079603	12.8158	12562298.27
1310390413	Semiconductor	Q12,Q28,Q29,Q46, Q47,Q48,Q7	Telcordia Issue 1	Level I		7.00	0.023881	.8682	41874327.58
1311390612	Semiconductor	Q49,Q9	Telcordia Issue 1	Level I		2.00	0.023881	.2480	41874327.58
1540733085	Resistor	RP1	Telcordia Issue 1	Level I		1.00	0.006246	.0324	160102772.00
1540722281	Resistor	RP2	Telcordia Issue 1	Level I		1.00	0.006246	.0324	160102772.00
106B747030	Resistor	RT1,RT3	Telcordia Issue 1	Level I		2.00	0.011379	.1182	87878027.07
106B501032	Resistor	RT2,RT4	Telcordia Issue 1	Level I		2.00	0.011379	.1182	87878027.07
1050505134	Resistor	R2,R41,R656,R657, R658,R659,R660, R661,R662,R663	Telcordia Issue 1	Level I		10.00	0.002268	.1178	440974090.03
105A701059	Resistor	R109,R262,R272, R367,R504,R6,R640, R711,R714	Telcordia Issue 1	Level I		9.00	0.002268	.1060	440974090.03
105A700009	Resistor	R128,R152,R155, R157,R159,R162, R164,R166,R171, R176,R177,R179, R186,R188,R192, R194,R195,R203, R210,R212,R213, R215,R230,R251, R252,R280,R281, R296,R301,R306, R311,R318,R32,R320, R321,R323,R329, R332,R335,R350,	Telcordia Issue 1	Level I		108.00	0.002268	1.2719	440974090.03
105A702229	Resistor	R100,R101,R102, R103,R104,R105, R106,R16,R17,R187, R190,R191,R234, R241,R244,R249, R454,R455,R516, R528,R559,R566, R572,R606,R95,R96, R97,R98,R99	Telcordia Issue 1	Level I		29.00	0.002268	.3415	440974090.03
1050507530	Resistor	R18,R259,R305,R309, R633	Telcordia Issue 1	Level I		5.00	0.002268	.0589	440974090.03

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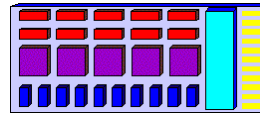


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105A703309	Resistor	R110,R112,R113, R129,R149,R168, R184,R207,R22,R27, R433,R45,R51,R60, R691	Telcordia Issue 1	Level I		15.00	0.002268	.1767	440974090.03
105A700003	Resistor	R174,R175,R185, R211,R226,R235, R258,R300,R315, R326,R38,R44,R453, R525,R527,R600, R618,R628,R723,R82	Telcordia Issue 1	Level I		20.00	0.002268	.2355	440974090.03
105A501139	Resistor	R317,R415,R49,R587	Telcordia Issue 1	Level I		4.00	0.002268	.0471	440974090.03
105A500139	Resistor	R165,R172,R189, R198,R199,R20,R246, R254,R266,R270, R273,R291,R295, R297,R298,R31,R33, R340,R359,R360, R361,R362,R363, R364,R378,R382, R383,R394,R432, R456,R457,R461,R48, R5,R519,R520,R537, R54,R540,R541,R549, R574,R577,R592,	Telcordia Issue 1	Level I		61.00	0.002268	.7184	440974090.03
105A730009	Resistor	R55	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050584514	Resistor	R57,R619,R620	Telcordia Issue 1	Level I		3.00	0.002268	.0353	440974090.03
105A501539	Resistor	R499,R58,R602,R61	Telcordia Issue 1	Level I		4.00	0.002268	.0471	440974090.03
1050520034	Resistor	R59,R631	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
105A501039	Resistor	R123,R124,R125, R132,R133,R135, R139,R145,R160, R167,R180,R182, R260,R271,R274, R276,R28,R287,R313, R316,R341,R345, R347,R348,R349,R35, R37,R386,R39,R42, R426,R43,R434,R441, R443,R448,R47,R474, R476,R477,R478, R482,R485,R486,	Telcordia Issue 1	Level I		95.00	0.002268	1.1188	440974090.03
105A566519	Resistor	R342,R612,R615,R68	Telcordia Issue 1	Level I		4.00	0.002268	.0471	440974090.03

**AAEON Reliability Prediction Report**

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**Reference Des**  
**Date** 12. 12, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
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Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A747009	Resistor	R700,R701,R74,R79	Telcordia Issue 1	Level I		4.00	0.002268	.0471	440974090.03
1054700289	Resistor	R94	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A502039	Resistor	R107,R142,R147, R275,R307,R568, R651,R669,R672, R693,R694,R708	Telcordia Issue 1	Level I		12.00	0.002268	.1413	440974090.03
105A702209	Resistor	R111,R115,R116	Telcordia Issue 1	Level I		3.00	0.002268	.0353	440974090.03
105A515009	Resistor	R117,R118,R119, R220,R221,R222, R237	Telcordia Issue 1	Level I		7.00	0.002268	.0824	440974090.03
105A580623	Resistor	R120	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A708229	Resistor	R121,R122,R127, R131,R134,R136, R137,R151,R154, R156,R158,R333, R337,R338,R500, R508,R513,R522, R585,R589,R590, R595,R703	Telcordia Issue 1	Level I		23.00	0.002268	.2709	440974090.03
105A549969	Resistor	R138,R532	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
105A575009	Resistor	R140,R578	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
105A503039	Resistor	R141,R632,R647, R668,R673	Telcordia Issue 1	Level I		5.00	0.002268	.0589	440974090.03
1050540224	Resistor	R143,R146	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
1050533214	Resistor	R144	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050505633	Resistor	R148	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A701069	Resistor	R150	Telcordia Issue 1	Level I		1.00	0.013606	.0707	73495681.67
1050520004	Resistor	R169,R437,R706	Telcordia Issue 1	Level I		3.00	0.002268	.0353	440974090.03
105A525563	Resistor	R173	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A747039	Resistor	R209,R327	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
105A733009	Resistor	R214,R219,R227, R229,R231,R255, R256,R529,R642, R675	Telcordia Issue 1	Level I		10.00	0.002268	.1178	440974090.03
105A524913	Resistor	R233	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A562034	Resistor	R261	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050505124	Resistor	R269,R285	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
1050505164	Resistor	R288	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050527424	Resistor	R303,R419	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
105A700109	Resistor	R304,R346,R427, R442	Telcordia Issue 1	Level I		4.00	0.002268	.0471	440974090.03
1050518714	Resistor	R312	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A526114	Resistor	R314,R428	Telcordia Issue 1	Level I		2.00	0.002268	.0236	440974090.03
1050542204	Resistor	R319	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03



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**Temp. (°C)** 25.00



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**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050510034	Resistor	R1,R10,R11,R114, R12,R126,R163,R19, R196,R202,R205,R21, R23,R24,R25,R257, R26,R263,R264,R265, R267,R268,R284,R29, R290,R292,R293, R294,R3,R30,R308, R330,R339,R351, R352,R353,R354,R36, R4,R459,R46,R469, R471,R535,R544,R56, R562,R608,R609,	Telcordia Issue 1	Level I		58.00	0.002268	.6831	440974090.03
1050524934	Resistor	R610	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050504724	Resistor	R153,R161,R206, R217,R218,R223, R224,R225,R228, R232,R238,R239, R240,R242,R243, R245,R282,R286, R289,R322,R381, R629,R643,R684	Telcordia Issue 1	Level I		24.00	0.002268	.2827	440974090.03
105A507509	Resistor	R372,R388,R654, R664,R665	Telcordia Issue 1	Level I		5.00	0.002268	.0589	440974090.03
105A536513	Resistor	R667	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1059710001	Resistor	R677	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050502234	Resistor	R685	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1050502734	Resistor	R687	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1059520001	Resistor	R690	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
105A700239	Resistor	R707	Telcordia Issue 1	Level I		1.00	0.002268	.0118	440974090.03
1189633193	Capacitor	TC1,TC11	Telcordia Issue 1	Level I		2.00	0.004535	.0471	220487045.01
1189633160	Capacitor	TC14,TC15,TC16,TC2, TC25,TC5,TC6,TC7	Telcordia Issue 1	Level I		8.00	0.004535	.1884	220487045.01
1189622150	Capacitor	TC24,TC3,TC4	Telcordia Issue 1	Level I		3.00	0.004535	.0707	220487045.01
1189615151	Capacitor	TC10,TC12,TC13, TC26,TC8,TC9	Telcordia Issue 1	Level I		6.00	0.004535	.1413	220487045.01
1189656180	Capacitor	TC19,TC20,TC22, TC23	Telcordia Issue 1	Level I		4.00	0.004535	.0942	220487045.01
1315422410	Semiconductor	U1	Telcordia Issue 1	Level I		1.00	0.079603	.4134	12562298.27
14S2321900	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
1314111715	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
1315446310	Semiconductor	U14,U4	Telcordia Issue 1	Level I		2.00	0.079603	.8268	12562298.27

**AAEON Reliability Prediction Report**

**Part Number** 9697QM6722-D  
**Reference Des**  
**Date** 12. 12, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S5A00704	Integrated Circuit	U104,U39,U5,U56, U57,U67,U74,U90	Telcordia Issue 1	Level I		8.00	0.026183	1.0878	38193355.79
14S5A00601	Integrated Circuit	U15,U6	Telcordia Issue 1	Level I		2.00	0.026183	.2720	38193355.79
14S634022E	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.026372	.1370	37918485.54
14S3111701	Integrated Circuit	U8	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S3524700	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S3524701	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S3089200	Integrated Circuit	U11	Telcordia Issue 1	Level I	14.80	1.00	0.059977	.3115	16673094.56
1315482410	Semiconductor	U12,U21,U23,U29, U35,U37,U38,U52, U64,U70,U79,U81, U85	Telcordia Issue 1	Level I		13.00	0.079603	5.3744	12562298.27
1315482110	Semiconductor	U13,U16,U17,U19, U24,U28,U36,U40, U41,U55	Telcordia Issue 1	Level I		10.00	0.079603	4.1341	12562298.27
14S4872800	Semiconductor	U18	Telcordia Issue 1	Level I		1.00	0.159207	.8268	6281149.14
14S5A12506	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S4021301	Integrated Circuit	U22,U25,U30	Telcordia Issue 1	Level I		3.00	0.059366	.9249	16844654.92
14S4021301	Integrated Circuit	U50	Telcordia Issue 1	Level I	11.90	1.00	0.137119	.7121	7292957.20
14S9108500	Integrated Circuit	U26,U32,U33,U92, U93	Telcordia Issue 1	Level I		5.00	0.059366	1.5416	16844654.92
1651609883	Connection	U27	Telcordia Issue 1	Level I	11.20	1.00	0.002000	.0104	499940072.32
14S4QM6700	Integrated Circuit	U31	Telcordia Issue 1	Level I	16.00	1.00	0.063927	.3320	15642873.64
14S6206402	Integrated Circuit	U34	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
1315667910	Semiconductor	U42,U61	Telcordia Issue 1	Level I		2.00	0.159207	1.6536	6281149.14
14S5912300	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S9811500	Integrated Circuit	U44	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S2200900	Integrated Circuit	U45	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S6336600	Integrated Circuit	U46	Telcordia Issue 1	Level I		1.00	0.030663	.1592	32612948.43
14S4811102	Integrated Circuit	U47	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S4257900	Integrated Circuit	U48	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S3E00100	Integrated Circuit	U49,U51	Telcordia Issue 1	Level I		2.00	0.059366	.6166	16844654.92
1315970211	Semiconductor	U105,U53,U54,U58	Telcordia Issue 1	Level I		4.00	0.159207	3.3073	6281149.14
14S9751100	Integrated Circuit	U59	Telcordia Issue 1	Level I	15.90	1.00	0.063589	.3302	15725943.75
14S3111600	Integrated Circuit	U60	Telcordia Issue 1	Level I		1.00	0.032000	.1662	31250122.20
14S4963500	Integrated Circuit	U62	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S3128421	Integrated Circuit	U63	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
1314880510	Semiconductor	U65,U76	Telcordia Issue 1	Level I		2.00	0.079603	.8268	12562298.27
14S6399040	Integrated Circuit	U66	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S4048502	Integrated Circuit	U68,U72	Telcordia Issue 1	Level I		2.00	0.059366	.6166	16844654.92

### AAEON Reliability Prediction Report

**Part Number** 9697QM6722-D  
**Reference Des**  
**Date** 12. 12, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** GENE-QM67.RPJ  
**Time** 16:27  
**Failure Rate** 19.255203  
**MTBF** 51,934

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
14S5A01402	Integrated Circuit	U107,U69,U89	Telcordia Issue 1	Level I		3.00	0.026183	.4079	38193355.79
14S2083100	Integrated Circuit	U71	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S5A03200	Integrated Circuit	U73	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S4121601	Integrated Circuit	U75	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S9620800	Integrated Circuit	U77	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S5A00821	Integrated Circuit	U106,U78	Telcordia Issue 1	Level I		2.00	0.026183	.2720	38193355.79
14S2591200	Integrated Circuit	U80	Telcordia Issue 1	Level I	29.00	1.00	0.410383	2.1313	2436748.16
14S5A00702	Integrated Circuit	U82	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S3587000	Integrated Circuit	U83,U84	Telcordia Issue 1	Level I		2.00	0.059366	.6166	16844654.92
14S3121800	Integrated Circuit	U86	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
14S4081110	Integrated Circuit	U87	Telcordia Issue 1	Level I		1.00	0.059366	.3083	16844654.92
1315155510	Semiconductor	U88,U91,U94	Telcordia Issue 1	Level I		3.00	0.159207	2.4805	6281149.14
14S4600004	Integrated Circuit	U95	Telcordia Issue 1	Level I		1.00	0.026183	.1360	38193355.79
14S5A00802	Integrated Circuit	U102,U103,U96,U97	Telcordia Issue 1	Level I		4.00	0.026183	.5439	38193355.79
14S9341101	Integrated Circuit	U98,U99	Telcordia Issue 1	Level I		2.00	0.026183	.2720	38193355.79
123132505D	Miscellaneous	Y1,Y3,Y4	Telcordia Issue 1	Level I		3.00	0.150000	2.3370	6666666.67
1231332721	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.7790	6666666.67
1231327053	Miscellaneous	Y5	Telcordia Issue 1	Level I		1.00	0.150000	.7790	6666666.67
1311071710	Semiconductor	Q14	Telcordia Issue 1	Level I		1.00	0.023881	.1240	41874327.58
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
1655305020	Connection	CN1,CN7	Telcordia Issue 1	Level I		2.00	0.002845	.0295	351512108.28
1652602105	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
1655003022	Connection	CN6	Telcordia Issue 1	Level I		1.00	0.001707	.0089	585853513.81
1655910031	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
1655909033	Connection	CN11,CN13,CN15	Telcordia Issue 1	Level I		3.00	0.001138	.0177	878780270.71
165321320G	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.014793	.0768	67598482.36
1655306023	Connection	CN17	Telcordia Issue 1	Level I		1.00	0.003414	.0177	292926756.90
1655306020	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.003414	.0177	292926756.90
1655003010	Connection	CN20	Telcordia Issue 1	Level I		1.00	0.001707	.0089	585853513.81
165321020C	Connection	CN21	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
1655302020	Connection	CN22	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
165251420B	Connection	CN23,CN24	Telcordia Issue 1	Level I		2.00	0.001138	.0118	878780270.71
1654818301	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.001138	.0059	878780270.71
1654445300	Connection	CN26	Telcordia Issue 1	Level I		1.00	0.025604	.1330	39056900.92
1654409103	Connection	CN27	Telcordia Issue 1	Level I		1.00	0.128018	.6649	7811380.18
1181610192	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.004535	.0236	220487045.01



