

# GES-2200F

## Reliability Prediction Report (MTBF)

|         |   |
|---------|---|
| Summary | Failure Rate: 8.070596 ppm<br>MTBF: 123,907 Hours |
|---------|---|

|            |            |               |
|------------|------------|---------------|
| Issue date | Approval   | Test Engineer |
| 2011/01/25 | Jansin Lee | Jessica Chou  |

## Reliability Prediction (MTBF)

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**I . Model Name:** TF-GES-2200F-A10

**II . Prediction Date:** Jan. 25, 2011

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

**IV . Predicted by:** Jessica Chou

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

**VI . Simulation Environment:**

- Temperature: 24.9 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:

TF-GES-2200F-A10(Not include Adapter and RAM):

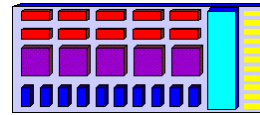
- Failure Rate: 8.070596 ppm
- MTBF: 123,907 Hours

Below components value were provided by the suppliers:

- (TF)Power Adapter.100/240V.12V.5A.60W.DC.With Lock.FSP.FSP060-DBAB1  
MTBF: The subject adapter have a minimum predicted MTBF of 60,000 hours of continuous operation at 25°C , maximum-output load, and nominal AC input voltage.
- (TF)1G DDRII.667MHz.200PIN Samsung(128MX8).DSL.D2SS28081XH30AB  
MTBF: 9.36E+6 Hrs

### AAEON Reliability Prediction Report

**Part Number** System  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description** Top-level assembly  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.070596  
**MTBF** 123,907

| Assembly Name           | Part Number  | Model             | Method          | Environment                        | Duty Cycle | Qty  | Failure Rate | MTBF        |
|-------------------------|--------------|-------------------|-----------------|------------------------------------|------------|------|--------------|-------------|
| TF-GES-2200F-A10        | System       | Telcordia Issue 1 | Method I Case 3 | GB, GC - Ground Benign, Controlled | 100.00     | 1.00 | 8.07         | 123906.58   |
| ASS'Y PER-T204.Rev.A1.0 | 9697T20402-D | Telcordia Issue 1 | Method I Case 3 | GB, GC - Ground Benign, Controlled | 100.00     | 1.00 | .01          | 75929290.56 |
| ASS'Y EMB-LN9T.Rev.A1.0 | 9697LN9T06-D | Telcordia Issue 1 | Method I Case 3 | GB, GC - Ground Benign, Controlled | 100.00     | 1.00 | 8.06         | 124109.11   |





**AAEON Reliability Prediction Report**

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category  | Location  | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate,% | MTBF, Unit   |
|-------------|-----------|---|-------------------|---------|-----------|----------|--------------------|----------------|--------------|
| 1129701790  | Capacitor | C101,C107,C111,<br>C149,C15,C16,C219,<br>C223,C269,C27,C270,<br>C271,C272,C273,<br>C274,C275,C276,C28,<br>C349,C370,C41,C433,C94  | Telcordia Issue 1 | Level I |           | 23.00    | 0.002263           | .6461          | 441839332.19 |
| 1129610051  | Capacitor | C104,C201,C206,<br>C207,C208,C209,<br>C210,C211,C212,<br>C231,C238,C239,<br>C243,C254,C295,C30,<br>C31,C324,C325,C326,<br>C36,C37,C386,C395,<br>C405,C417,C423,<br>C426,C427,C432,<br>C462,C466,C495,C50,<br>C507,C511,C520,<br>C521,C538,C588,<br>C590,C610,C611,  | Telcordia Issue 1 | Level I |           | 44.00    | 0.002263           | 1.2359         | 441839332.19 |
| 11E9501090  | Capacitor | C112,C148,C182,<br>C183,C205,C217,<br>C245,C248,C249,<br>C252,C256,C280,<br>C282,C32,C323,C332,<br>C340,C347,C351,<br>C356,C359,C428,<br>C429,C44,C449,C457,<br>C458,C459,C463,<br>C465,C47,C470,C471,<br>C472,C475,C476,<br>C478,C48,C480,C484,<br>C485,C487,C499, | Telcordia Issue 1 | Level I |           | 60.00    | 0.002263           | 1.6854         | 441839332.19 |
| 1129710390  | Capacitor | C103,C329,C33,C34,<br>C345,C346,C35,C366,<br>C40,C49,C593,C596,C605,C67   | Telcordia Issue 1 | Level I |           | 14.00    | 0.002263           | .3932          | 441839332.19 |
| 1121610060  | Capacitor | C510,C57  | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562          | 441839332.19 |
| 1129622050  | Capacitor | C115,C116,C117,<br>C118,C121,C193,<br>C233,C416,C441,C493,C84   | Telcordia Issue 1 | Level I |           | 11.00    | 0.002263           | .3090          | 441839332.19 |
| 1124427080  | Capacitor | C106,C134,C135,<br>C155,C157,C194,C199,C599   | Telcordia Issue 1 | Level I |           | 8.00     | 0.002263           | .2247          | 441839332.19 |
| 1124533280  | Capacitor | C129,C328   | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562          | 441839332.19 |

### AAEON Reliability Prediction Report

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category      | Location  | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit   |
|-------------|---------------|---|-------------------|---------|-----------|----------|--------------------|-----------------|--------------|
| 11C1647780  | Capacitor     | C214  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002263           | .0281           | 441839332.19 |
| 1129622690  | Capacitor     | C266,C310,C311,<br>C331,C338,C341,<br>C344,C360,C362,<br>C422,C445,C460,<br>C477,C535,C536,<br>C565,C570,C574 | Telcordia Issue 1 | Level I |           | 18.00    | 0.002263           | .5056           | 441839332.19 |
| 1189633160  | Capacitor     | C284,C339,C438,<br>C452,C488,C572   | Telcordia Issue 1 | Level I |           | 6.00     | 0.002263           | .1685           | 441839332.19 |
| 11C1522650  | Capacitor     | C286,C300,C327  | Telcordia Issue 1 | Level I |           | 3.00     | 0.002263           | .0843           | 441839332.19 |
| 1189610151  | Capacitor     | C287,C439,C517  | Telcordia Issue 1 | Level I |           | 3.00     | 0.002263           | .0843           | 441839332.19 |
| 11C2510480  | Capacitor     | C343,C350,C357,<br>C385,C388,C389,<br>C396,C509,C553,<br>C564,C579,C582, C602,C607                            | Telcordia Issue 1 | Level I |           | 14.00    | 0.002263           | .3932           | 441839332.19 |
| 11E9647680  | Capacitor     | C421,C442   | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562           | 441839332.19 |
| 1124522881  | Capacitor     | C454,C503   | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562           | 441839332.19 |
| 1121647780  | Capacitor     | C479,C506   | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562           | 441839332.19 |
| 1124522280  | Capacitor     | C527  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002263           | .0281           | 441839332.19 |
| 1124522680  | Capacitor     | C528  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002263           | .0281           | 441839332.19 |
| 1124582180  | Capacitor     | C573  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002263           | .0281           | 441839332.19 |
| 11E2501080  | Capacitor     | C584,C615   | Telcordia Issue 1 | Level I |           | 2.00     | 0.002263           | .0562           | 441839332.19 |
| 1124447180  | Capacitor     | C598  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002263           | .0281           | 441839332.19 |
| 1301400642  | Semiconductor | D1,D14,D15,D16,D19,<br>D22,D25,D29,D4   | Telcordia Issue 1 | Level I |           | 9.00     | 0.011906           | 1.3299          | 83989774.79  |
| 1301400541  | Semiconductor | D2,D20,D21,D23,D24, D27,D28,D30   | Telcordia Issue 1 | Level I |           | 8.00     | 0.011906           | 1.1821          | 83989774.79  |
| 1305100541  | Semiconductor | D10,D11,D12,D26,<br>D31,D32,D33,D34,<br>D35,D36,D37,D38,D5, D6,D7,D8,D9                                       | Telcordia Issue 1 | Level I |           | 17.00    | 0.011906           | 2.5120          | 83989774.79  |
| 1305099140  | Semiconductor | D17,D18   | Telcordia Issue 1 | Level I |           | 2.00     | 0.039687           | .9851           | 25196932.44  |
| 1300001440  | Semiconductor | D39,D40,D41   | Telcordia Issue 1 | Level I |           | 3.00     | 0.011906           | .4433           | 83989774.79  |
| 1301400440  | Semiconductor | D42,D43,D44,D45, D46  | Telcordia Issue 1 | Level I |           | 5.00     | 0.011906           | .7388           | 83989774.79  |
| 1752001601  | Miscellaneous | FS1,FS3,FS4   | Telcordia Issue 1 | Level I |           | 3.00     | 0.001500           | .0558           | 66666666.67  |
| 1752000501  | Miscellaneous | FS2   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001500           | .0186           | 66666666.67  |
| 1304101340  | Semiconductor | LED1  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002416           | .0300           | 413895232.27 |
| 1304001340  | Semiconductor | LED2  | Telcordia Issue 1 | Level I |           | 1.00     | 0.002416           | .0300           | 413895232.27 |
| 165321320E  | Connection    | LPT1  | Telcordia Issue 1 | Level I |           | 1.00     | 0.007358           | .0913           | 135905514.10 |
| 12123C0006  | Inductor      | L1,L10,L11,L12,L13,<br>L15,L2,L20,L3,L4, L5,L6  | Telcordia Issue 1 | Level I |           | 12.00    | 0.001132           | .1685           | 883678664.39 |



**AAEON Reliability Prediction Report**

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

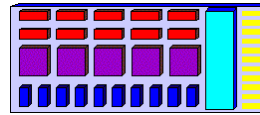
| Part Number | Category           | Location  | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit   |
|-------------|--------------------|---|-------------------|---------|-----------|----------|--------------------|-----------------|--------------|
| 12123D0001  | Inductor           | L57,L58,L59,L7,L8, L9   | Telcordia Issue 1 | Level I |           | 6.00     | 0.001132           | .0843           | 883678664.39 |
| 12123C0010  | Inductor           | L14,L16,L17,L19,<br>L22,L27,L31,L32,<br>L33,L34,L37,L41,<br>L43,L45,L48,L50, L52,L55,L56                            | Telcordia Issue 1 | Level I |           | 19.00    | 0.001132           | .2668           | 883678664.39 |
| 12123D0000  | Inductor           | L24,L38,L40   | Telcordia Issue 1 | Level I |           | 3.00     | 0.001132           | .0421           | 883678664.39 |
| 121110106D  | Inductor           | L28,L29,L46,L51, L53,L54  | Telcordia Issue 1 | Level I |           | 6.00     | 0.001132           | .0843           | 883678664.39 |
| 121110106F  | Inductor           | L35   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 12123C0003  | Inductor           | L47,L49   | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 1654262300  | Connection         | MPC11   | Telcordia Issue 1 | Level I |           | 1.00     | 0.035092           | .4355           | 28496317.47  |
| 1315700216  | Semiconductor      | Q1,Q17,Q2,Q21,Q22,<br>Q23,Q24,Q26,Q27,<br>Q28,Q3,Q33,Q42,Q43,<br>Q46,Q47,Q48,Q5,Q8                                  | Telcordia Issue 1 | Level I |           | 19.00    | 0.039687           | 9.3586          | 25196932.44  |
| 1315230511  | Semiconductor      | Q18,Q4,Q7   | Telcordia Issue 1 | Level I |           | 3.00     | 0.039687           | 1.4777          | 25196932.44  |
| 1310390413  | Semiconductor      | Q10,Q16,Q25,Q38, Q44,Q6,Q9  | Telcordia Issue 1 | Level I |           | 7.00     | 0.011906           | 1.0344          | 83989774.79  |
| 1315441012  | Semiconductor      | Q11,Q12,Q13,Q14,<br>Q19,Q20,Q30,Q32,<br>Q35,Q36,Q37,Q39, Q40,Q41  | Telcordia Issue 1 | Level I |           | 14.00    | 0.039687           | 6.8958          | 25196932.44  |
| 1311390612  | Semiconductor      | Q15,Q45   | Telcordia Issue 1 | Level I |           | 2.00     | 0.011906           | .2955           | 83989774.79  |
| 1315R30310  | Integrated Circuit | Q29   | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35  |
| 1315050311  | Integrated Circuit | Q31   | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35  |
| 1315443510  | Semiconductor      | Q34   | Telcordia Issue 1 | Level I |           | 1.00     | 0.039687           | .4926           | 25196932.44  |
| 1540782282  | Resistor           | RN1,RN23,RN24,RN25, RN26,RN27   | Telcordia Issue 1 | Level I |           | 6.00     | 0.006217           | .4630           | 160836724.71 |
| 1540710382  | Resistor           | RN16,RN17,RN20  | Telcordia Issue 1 | Level I |           | 3.00     | 0.003109           | .1157           | 321673449.43 |
| 1540756081  | Resistor           | RN18,RN19,RN28,<br>RN29,RN30,RN31,<br>RN32,RN41,RN42,<br>RN43,RN44,RN49,<br>RN50,RN51,RN52,<br>RN53,RN54,RN55, RN56 | Telcordia Issue 1 | Level I |           | 19.00    | 0.003109           | .7331           | 321673449.43 |
| 1540733085  | Resistor           | RN21,RN22,RN45,<br>RN46,RN47,RN48   | Telcordia Issue 1 | Level I |           | 6.00     | 0.003109           | .2315           | 321673449.43 |
| 106B501032  | Resistor           | RT1,RT2   | Telcordia Issue 1 | Level I |           | 2.00     | 0.005660           | .1405           | 176677168.33 |
| 106B510030  | Resistor           | RT3   | Telcordia Issue 1 | Level I |           | 1.00     | 0.005660           | .0702           | 176677168.33 |





### AAEON Reliability Prediction Report

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category | Location   | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit   |
|-------------|----------|--|-------------------|---------|-----------|----------|--------------------|-----------------|--------------|
| 105A505123  | Resistor | R518,R65   | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A502033  | Resistor | R472,R678,R74  | Telcordia Issue 1 | Level I |           | 3.00     | 0.001132           | .0421           | 883678664.39 |
| 105A700003  | Resistor | R111,R118,R119,<br>R122,R308,R428,<br>R537,R540,R541,<br>R542,R544,R588,<br>R639,R686,R694 | Telcordia Issue 1 | Level I |           | 15.00    | 0.001132           | .2107           | 883678664.39 |
| 105A524913  | Resistor | R117,R120  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A501053  | Resistor | R125,R199,R201   | Telcordia Issue 1 | Level I |           | 3.00     | 0.001132           | .0421           | 883678664.39 |
| 105A540213  | Resistor | R149   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A501533  | Resistor | R174,R177,R429   | Telcordia Issue 1 | Level I |           | 3.00     | 0.001132           | .0421           | 883678664.39 |
| 1059703623  | Resistor | R183,R184  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 1059710001  | Resistor | R185,R556  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A502133  | Resistor | R187   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A524963  | Resistor | R200,R570,R576, R620   | Telcordia Issue 1 | Level I |           | 4.00     | 0.001132           | .0562           | 883678664.39 |
| 105A533033  | Resistor | R215,R226  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A506803  | Resistor | R216,R221  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A505109  | Resistor | R232,R244,R250, R565,R566  | Telcordia Issue 1 | Level I |           | 5.00     | 0.001132           | .0702           | 883678664.39 |
| 105A500233  | Resistor | R238,R271,R280, R396,R574  | Telcordia Issue 1 | Level I |           | 5.00     | 0.001132           | .0702           | 883678664.39 |
| 105A545303  | Resistor | R247   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A501133  | Resistor | R249   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A532413  | Resistor | R256   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A549963  | Resistor | R284,R579,R590   | Telcordia Issue 1 | Level I |           | 3.00     | 0.001132           | .0421           | 883678664.39 |
| 105A514023  | Resistor | R289   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A515033  | Resistor | R362,R474  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A580663  | Resistor | R371,R372  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A501413  | Resistor | R393   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A505133  | Resistor | R427   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A702263  | Resistor | R431,R433,R437,<br>R476,R630,R635  | Telcordia Issue 1 | Level I |           | 6.00     | 0.001132           | .0843           | 883678664.39 |
| 105A507533  | Resistor | R439,R478  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A501553  | Resistor | R440   | Telcordia Issue 1 | Level I |           | 1.00     | 0.006790           | .0843           | 147279777.40 |
| 105A590923  | Resistor | R443   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A523713  | Resistor | R456,R599  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A501233  | Resistor | R457   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |
| 105A711033  | Resistor | R459,R491  | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39 |
| 105A549913  | Resistor | R470   | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39 |

### AAEON Reliability Prediction Report

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category           | Location                                 | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit    |
|-------------|--------------------|--|-------------------|---------|-----------|----------|--------------------|-----------------|---------------|
| 1059702033  | Resistor           | R471                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A575033  | Resistor           | R475                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 1059705633  | Resistor           | R480                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A502039  | Resistor           | R506                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A539223  | Resistor           | R519                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A507523  | Resistor           | R539,R543                                | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39  |
| 1059722001  | Resistor           | R545                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A700103  | Resistor           | R561,R573,R619, R623                     | Telcordia Issue 1 | Level I |           | 4.00     | 0.001132           | .0562           | 883678664.39  |
| 105A510053  | Resistor           | R562                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.006790           | .0843           | 147279777.40  |
| 105A556263  | Resistor           | R564                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 1059775003  | Resistor           | R580                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A566503  | Resistor           | R597                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A522663  | Resistor           | R622                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A554923  | Resistor           | R626                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 1059501001  | Resistor           | R627                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A584523  | Resistor           | R628                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A513033  | Resistor           | R631                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A504763  | Resistor           | R677,R692                                | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39  |
| 105A517423  | Resistor           | R683,R693                                | Telcordia Issue 1 | Level I |           | 2.00     | 0.001132           | .0281           | 883678664.39  |
| 105A586603  | Resistor           | R685                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A580623  | Resistor           | R687                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 105A536533  | Resistor           | R688                                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883678664.39  |
| 1654907009  | Connection         | SATA1,SATA2                              | Telcordia Issue 1 | Level I |           | 2.00     | 0.000566           | .0140           | 1766771683.29 |
| 16515A0996  | Connection         | SODIMM1                                  | Telcordia Issue 1 | Level I |           | 1.00     | 0.056600           | .7025           | 17667716.83   |
| 14S1230400  | Integrated Circuit | U1                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S5A00401  | Integrated Circuit | U2                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S5812502  | Integrated Circuit | U3                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S4048503  | Integrated Circuit | U10,U4                                   | Telcordia Issue 1 | Level I |           | 2.00     | 0.029467           | .7314           | 33936754.35   |
| 14S2200900  | Integrated Circuit | U5                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S4021301  | Integrated Circuit | U36,U37,U40,U41, U47,U49,U51,U53, U54,U6 | Telcordia Issue 1 | Level I |           | 10.00    | 0.029467           | 3.6571          | 33936754.35   |
| 14S5A12506  | Integrated Circuit | U7                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S3524700  | Integrated Circuit | U8                                       | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S3170800  | Integrated Circuit | U9                                       | Telcordia Issue 1 | Level I | 33.90     | 1.00     | 0.273514           | 3.3946          | 3656125.88    |
| 1315686110  | Semiconductor      | U11                                      | Telcordia Issue 1 | Level I | 36.60     | 1.00     | 0.101336           | 1.2577          | 9868142.26    |
| 1315686110  | Semiconductor      | U12,U35,U52                              | Telcordia Issue 1 | Level I |           | 3.00     | 0.039687           | 1.4777          | 25196932.44   |

### AAEON Reliability Prediction Report

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90

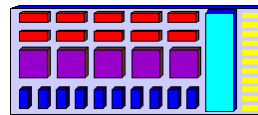


**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category           | Location    | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit    |
|-------------|--------------------|-------------|-------------------|---------|-----------|----------|--------------------|-----------------|---------------|
| 14S2041500  | Integrated Circuit | U15         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S4811100  | Integrated Circuit | U16,U17     | Telcordia Issue 1 | Level I |           | 2.00     | 0.013015           | .3230           | 76837233.10   |
| 14S5A00821  | Integrated Circuit | U18,U19,U20 | Telcordia Issue 1 | Level I |           | 3.00     | 0.013015           | .4846           | 76837233.10   |
| 14S6334610  | Integrated Circuit | U21,U22     | Telcordia Issue 1 | Level I |           | 2.00     | 0.011388           | .2827           | 87812987.67   |
| 14S5A00704  | Integrated Circuit | U24         | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S3033800  | Integrated Circuit | U25         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S3050100  | Integrated Circuit | U26         | Telcordia Issue 1 | Level I | 43.70     | 1.00     | 0.479652           | 5.9529          | 2084843.48    |
| 14S4362706  | Integrated Circuit | U27         | Telcordia Issue 1 | Level I | 34.60     | 1.00     | 0.080610           | 1.0004          | 12405413.27   |
| 14S4166012  | Integrated Circuit | U28         | Telcordia Issue 1 | Level I | 43.40     | 1.00     | 0.120837           | 1.4997          | 8275626.59    |
| 14S4280121  | Integrated Circuit | U29         | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S5A00703  | Integrated Circuit | U32         | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S4195710  | Integrated Circuit | U33         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S4121602  | Integrated Circuit | U38         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S3128421  | Integrated Circuit | U39         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S4081102  | Integrated Circuit | U43         | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 14S2048800  | Integrated Circuit | U44         | Telcordia Issue 1 | Level I |           | 1.00     | 0.015883           | .1971           | 62959302.26   |
| 14S2538000  | Integrated Circuit | U45         | Telcordia Issue 1 | Level I |           | 1.00     | 0.029467           | .3657           | 33936754.35   |
| 14S5912300  | Integrated Circuit | U48         | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |
| 123132505D  | Miscellaneous      | Y2,Y3       | Telcordia Issue 1 | Level I |           | 2.00     | 0.075000           | 1.8616          | 13333333.33   |
| 123131435J  | Miscellaneous      | Y4          | Telcordia Issue 1 | Level I |           | 1.00     | 0.075000           | .9308           | 13333333.33   |
| 1231332721  | Miscellaneous      | Y5          | Telcordia Issue 1 | Level I |           | 1.00     | 0.075000           | .9308           | 13333333.33   |
| 121110336X  | Inductor           | L18,L25     | Telcordia Issue 1 | Level I |           | 2.00     | 0.043002           | 1.0674          | 23254701.69   |
| 121110336Y  | Inductor           | L36,L39,L42 | Telcordia Issue 1 | Level I |           | 3.00     | 0.043002           | 1.6011          | 23254701.69   |
| 121110476V  | Inductor           | L23,L44     | Telcordia Issue 1 | Level I |           | 2.00     | 0.043002           | 1.0674          | 23254701.69   |
| 16515A0980  | Connection         | SODIMM2     | Telcordia Issue 1 | Level I |           | 1.00     | 0.000566           | .0070           | 1766771683.29 |
| 175011901H  | Miscellaneous      | BATTERY1    | Telcordia Issue 1 | Level I |           | 1.00     | 0.450000           | 5.5849          | 2222222.22    |
| 165300520L  | Connection         | CN11        | Telcordia Issue 1 | Level I |           | 1.00     | 0.000566           | .0070           | 1766771683.29 |
| 1750220323  | Connection         | BT1         | Telcordia Issue 1 | Level I |           | 1.00     | 0.000566           | .0070           | 1766771683.29 |
| 1759100007  | Miscellaneous      | BUZZ1       | Telcordia Issue 1 | Level I |           | 1.00     | 0.075000           | .9308           | 13333333.33   |
| 1655303020  | Connection         | CN2         | Telcordia Issue 1 | Level I |           | 1.00     | 0.000849           | .0105           | 1177847788.86 |
| 1655004020  | Connection         | CN3         | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883385841.65  |
| 1652514210  | Connection         | AUDIO1      | Telcordia Issue 1 | Level I |           | 1.00     | 0.011320           | .1405           | 88338584.16   |
| 1655906032  | Connection         | CN5         | Telcordia Issue 1 | Level I |           | 1.00     | 0.001698           | .0211           | 588923894.43  |
| 1655003010  | Connection         | CN6         | Telcordia Issue 1 | Level I |           | 1.00     | 0.000849           | .0105           | 1177847788.86 |
| 1655305020  | Connection         | CN7         | Telcordia Issue 1 | Level I |           | 1.00     | 0.001415           | .0176           | 706708673.32  |
| 1655004017  | Connection         | CN8         | Telcordia Issue 1 | Level I |           | 1.00     | 0.000566           | .0070           | 1766771683.29 |

### AAEON Reliability Prediction Report

**Part Number** 9697LN9T06-D  
**Reference Des**  
**Date** 01. 24, 2011  
**Environment** GB, GC - Ground Benign, Controlled  
**Temp. (°C)** 24.90



**Description**  
**File Name** TF-GES-2200F-A10.RPJ  
**Time** 14:18  
**Failure Rate** 8.057426  
**MTBF** 124,109

| Part Number | Category           | Location                 | Calculation Model | Quality | Tem. Rise | Quantity | Failure Rate, Unit | Failure Rate, % | MTBF, Unit    |
|-------------|--------------------|--------------------------|-------------------|---------|-----------|----------|--------------------|-----------------|---------------|
| 1655404020  | Connection         | CN9                      | Telcordia Issue 1 | Level I |           | 1.00     | 0.001132           | .0140           | 883385841.65  |
| 1654418103  | Connection         | COM1                     | Telcordia Issue 1 | Level I |           | 1.00     | 0.005094           | .0632           | 196307964.81  |
| 1119622196  | Capacitor          | C58,C59                  | Telcordia Issue 1 | Level I |           | 2.00     | 0.035375           | .8781           | 28268346.93   |
| 1112610102  | Capacitor          | C110,C139,C322           | Telcordia Issue 1 | Level I |           | 3.00     | 0.021225           | .7903           | 47113911.55   |
| 1112647110  | Capacitor          | C348,C367                | Telcordia Issue 1 | Level I |           | 2.00     | 0.035375           | .8781           | 28268346.93   |
| 1653003101  | Connection         | JP1,JP4,JP5              | Telcordia Issue 1 | Level I |           | 3.00     | 0.000849           | .0316           | 1177847788.86 |
| 1653003201  | Connection         | JP2,JP3                  | Telcordia Issue 1 | Level I |           | 2.00     | 0.000566           | .0140           | 1766771683.29 |
| 1654612307  | Connection         | KBMS1                    | Telcordia Issue 1 | Level I |           | 1.00     | 0.000566           | .0070           | 1766771683.29 |
| 1652522202  | Connection         | USBRJ1,USBRJ2            | Telcordia Issue 1 | Level I |           | 2.00     | 0.006226           | .1545           | 160615607.57  |
| 111961029D  | Capacitor          | C136,C285,C368, C369,C88 | Telcordia Issue 1 | Level I |           | 5.00     | 0.035375           | 2.1952          | 28268346.93   |
| 111961029H  | Capacitor          | C354,C355                | Telcordia Issue 1 | Level I |           | 2.00     | 0.035375           | .8781           | 28268346.93   |
| 1654415308  | Connection         | DVI+VGA1                 | Telcordia Issue 1 | Level I |           | 1.00     | 0.004245           | .0527           | 235569557.77  |
| 14S6203201  | Integrated Circuit |                          | Telcordia Issue 1 | Level I |           | 1.00     | 0.013015           | .1615           | 76837233.10   |