

# AEC-6637

## Reliability Prediction Report

### (MTBF)

Summary	Failure Rate: 20.381834 ppm MTBF: 49,063 Hours
---------	---

Issue date	Approval	Test Engineer
2012/09/17	Tom Lin	Jessica Chou

# Reliability Prediction (MTBF)

---

**I . Model Name:** TF-AEC-6637-A2M-1010

**II . Prediction Date:** Sep. 17, 2012

**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: 25.1 degrees C
- Standard: Telcordia (Bellcore) Standard

## VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used in 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 in 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-AEC-6637-A2M-1010:

- Failure Rate: 20.381834ppm

- MTBF: 49,063 Hours

### AAEON Reliability Prediction Report

**Part Number** System  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description** Top-level assembly  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 20.381834  
**MTBF** 49,063

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-AEC-6637-A2M-1010	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	20.38	49063.30
ASS'Y GENE-QM77.Rev.A1.0	9697QM7715-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	19.05	52485.34
ASS'Y Power Board PER-P17D.Rev.B1.0	9697P17D03-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	1.30	768394.79







**AAEON Reliability Prediction Report**

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

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	0.004544	.6917	220055560.52
1129710090	Capacitor	C183,C184,C185, C217,C42	Telcordia Issue 1	Level I		5.00	0.004544	.1193	220055560.52
11E9522680	Capacitor	C164,C168,C45,C66	Telcordia Issue 1	Level I		4.00	0.004544	.0954	220055560.52
1129522790	Capacitor	C140,C308,C321, C323,C336,C354, C368,C369,C370, C407,C64	Telcordia Issue 1	Level I		11.00	0.004544	.2624	220055560.52
1124418090	Capacitor	C125,C127,C616, C617,C69,C70	Telcordia Issue 1	Level I		6.00	0.004544	.1431	220055560.52
11C4522290	Capacitor	C305,C306,C310, C373,C99	Telcordia Issue 1	Level I		5.00	0.004544	.1193	220055560.52
1124427091	Capacitor	C149,C155,C186, C190,C201,C202, C203	Telcordia Issue 1	Level I		7.00	0.004544	.1670	220055560.52
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	0.004544	.5724	220055560.52
11E1647650	Capacitor	C232	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
11E1622060	Capacitor	C242,C249	Telcordia Issue 1	Level I		2.00	0.004544	.0477	220055560.52
11E9547680	Capacitor	C288,C554	Telcordia Issue 1	Level I		2.00	0.004544	.0477	220055560.52
1124533191	Capacitor	C301,C319,C379	Telcordia Issue 1	Level I		3.00	0.004544	.0716	220055560.52
11C4515190	Capacitor	C302,C381	Telcordia Issue 1	Level I		2.00	0.004544	.0477	220055560.52
11E4433090	Capacitor	C307,C349,C361	Telcordia Issue 1	Level I		3.00	0.004544	.0716	220055560.52
11E9547790	Capacitor	C372	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
11C1501080	Capacitor	C400	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
11C1547890	Capacitor	C418	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
1122522890	Capacitor	C536,C537,C614	Telcordia Issue 1	Level I		3.00	0.004544	.0716	220055560.52
11E9647680	Capacitor	C603	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
11C4568190	Capacitor	C609	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
1301005444	Semiconductor	D1,D2,D27,D28,D29, D31,D37,D38	Telcordia Issue 1	Level I		8.00	0.023950	1.0056	41754194.40



### AAEON Reliability Prediction Report

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

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	0.023950	.2514	41754194.40
1304500240	Semiconductor	D4	Telcordia Issue 1	Level I		1.00	0.004921	.0258	203197151.95
1304300140	Semiconductor	D11,D5	Telcordia Issue 1	Level I		2.00	0.004921	.0517	203197151.95
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	0.023950	3.3939	41754194.40
1301400642	Semiconductor	D30	Telcordia Issue 1	Level I		1.00	0.023950	.1257	41754194.40
1189633194	Capacitor	EC2,EC3	Telcordia Issue 1	Level I		2.00	0.004544	.0477	220055560.52
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	0.011439	1.2008	87420177.69
12123C0007	Inductor	FB4	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
12123D0001	Inductor	FB22,FB25,FB27, FB28,FB29,FB30, FB32,FB33,FB6,FB7, FB8	Telcordia Issue 1	Level I		11.00	0.002272	.1312	440111121.05
1212308054	Resistor	FB34,FB35	Telcordia Issue 1	Level I		2.00	0.011439	.1201	87420177.69
121110156K	Inductor	L1,L3	Telcordia Issue 1	Level I		2.00	0.086342	.9063	11581871.61
1211103671	Inductor	L2,L4,L6	Telcordia Issue 1	Level I		3.00	0.086342	1.3595	11581871.61
1211103671	Inductor	L5	Telcordia Issue 1	Level I	34.30	1.00	0.157697	.8277	6341291.52
121110106G	Inductor	L7	Telcordia Issue 1	Level I		1.00	0.086342	.4532	11581871.61
1211106874	Inductor	L8,L9	Telcordia Issue 1	Level I		2.00	0.086342	.9063	11581871.61
121110336Y	Inductor	L10	Telcordia Issue 1	Level I		1.00	0.086342	.4532	11581871.61
1211100113	Inductor	L11,L12,L13,L15	Telcordia Issue 1	Level I		4.00	0.002272	.0477	440111121.05
1211100160	Inductor	L14	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
121110476Q	Inductor	L16	Telcordia Issue 1	Level I		1.00	0.086342	.4532	11581871.61
1315230511	Semiconductor	Q1,Q14,Q16,Q17,Q18, Q24,Q25	Telcordia Issue 1	Level I		7.00	0.079832	2.9330	12526258.32
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	0.079832	12.9891	12526258.32





**AAEON Reliability Prediction Report**

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A502039	Resistor	R107,R142,R147, R275,R307,R651, R669,R672,R693, R694,R708	Telcordia Issue 1	Level I		11.00	0.002272	.1312	440111121.05
105A702209	Resistor	R111,R115,R116	Telcordia Issue 1	Level I		3.00	0.002272	.0358	440111121.05
105A515009	Resistor	R117,R118,R119, R220,R221,R222, R237	Telcordia Issue 1	Level I		7.00	0.002272	.0835	440111121.05
105A580623	Resistor	R120	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
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	0.002272	.2743	440111121.05
105A549969	Resistor	R138,R532	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A575009	Resistor	R140,R578	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A503039	Resistor	R141,R632,R647, R668,R673	Telcordia Issue 1	Level I		5.00	0.002272	.0596	440111121.05
1050540224	Resistor	R143,R146	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
1050533214	Resistor	R144	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050505633	Resistor	R148	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A701069	Resistor	R150	Telcordia Issue 1	Level I		1.00	0.013633	.0716	73351853.51
1050520004	Resistor	R169,R437,R706	Telcordia Issue 1	Level I		3.00	0.002272	.0358	440111121.05
105A525563	Resistor	R173	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A747039	Resistor	R209,R327	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A733009	Resistor	R214,R219,R227, R229,R231,R255, R256,R529,R642, R675	Telcordia Issue 1	Level I		10.00	0.002272	.1193	440111121.05
105A524913	Resistor	R233	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A562034	Resistor	R261	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050505124	Resistor	R269,R285	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
1050505164	Resistor	R288	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050527424	Resistor	R303,R419	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A700109	Resistor	R304,R346,R427, R442	Telcordia Issue 1	Level I		4.00	0.002272	.0477	440111121.05
1050518714	Resistor	R312	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A526114	Resistor	R314,R428	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
1050542204	Resistor	R319	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050538314	Resistor	R324,R429	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
1050580614	Resistor	R325,R414	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05



### AAEON Reliability Prediction Report

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

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,R626, R59,R610	Telcordia Issue 1	Level I		57.00	0.002272	.6798	440111121.05
1050524934	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	0.002272	.2862	440111121.05
105A507509	Resistor	R372,R388,R654, R664,R665	Telcordia Issue 1	Level I		5.00	0.002272	.0596	440111121.05
105A536513	Resistor	R667	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1059710001	Resistor	R677	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050502234	Resistor	R685	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050502734	Resistor	R687	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1059520001	Resistor	R690	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A700239	Resistor	R707	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1189633193	Capacitor	TC1,TC11	Telcordia Issue 1	Level I		2.00	0.004544	.0477	220055560.52
1189622150	Capacitor	TC24,TC3,TC4	Telcordia Issue 1	Level I		3.00	0.004544	.0716	220055560.52
1189615151	Capacitor	TC10,TC12,TC13, TC26,TC8,TC9	Telcordia Issue 1	Level I		6.00	0.004544	.1431	220055560.52
1189656180	Capacitor	TC19,TC20,TC22, TC23	Telcordia Issue 1	Level I		4.00	0.004544	.0954	220055560.52
1315422410	Semiconductor	U1	Telcordia Issue 1	Level I		1.00	0.079832	.4190	12526258.32
14S2321900	Semiconductor	U2	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
1314111715	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S5A00704	Integrated Circuit	U104,U39,U5,U56, U57,U67,U74,U90	Telcordia Issue 1	Level I		8.00	0.026337	1.1058	37969565.62
14S5A00601	Integrated Circuit	U15,U6	Telcordia Issue 1	Level I		2.00	0.026337	.2765	37969565.62
14S634022E	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.026566	.1394	37642193.67

### AAEON Reliability Prediction Report

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S3111701	Integrated Circuit	U8	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S3524700	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S3524701	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S3089200	Integrated Circuit	U11	Telcordia Issue 1	Level I	44.30	1.00	0.253846	1.3323	3939399.69
1315482410	Semiconductor	U12,U21,U23,U29, U35,U37,U38,U52, U64,U70,U79,U81, U85	Telcordia Issue 1	Level I		13.00	0.079832	5.4470	12526258.32
1315482110	Semiconductor	U13,U16,U17,U19, U24,U28,U36,U40, U41,U55	Telcordia Issue 1	Level I		10.00	0.079832	4.1900	12526258.32
14S4872800	Semiconductor	U18	Telcordia Issue 1	Level I		1.00	0.159665	.8380	6263129.16
14S5A12506	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S4021301	Integrated Circuit	U22,U25,U30,U50	Telcordia Issue 1	Level I		4.00	0.059802	1.2555	16721916.86
14S9108500	Integrated Circuit	U26,U32,U33,U92, U93	Telcordia Issue 1	Level I		5.00	0.059802	1.5694	16721916.86
1651609883	Connection	U27	Telcordia Issue 1	Level I	37.00	1.00	0.006380	.0335	156732446.03
14S4QM7700	Integrated Circuit	U31	Telcordia Issue 1	Level I	32.90	1.00	0.150148	.7881	6660110.47
1315667910	Semiconductor	U14,U4,U42,U61	Telcordia Issue 1	Level I		4.00	0.159665	3.3520	6263129.16
14S5912300	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S9811500	Integrated Circuit	U44	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S2200900	Integrated Circuit	U45	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S4811102	Integrated Circuit	U47	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S4257900	Integrated Circuit	U48	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S3E00100	Integrated Circuit	U49,U51	Telcordia Issue 1	Level I		2.00	0.059802	.6277	16721916.86
1315970211	Semiconductor	U53,U54,U58	Telcordia Issue 1	Level I		3.00	0.159665	2.5140	6263129.16
14S3111600	Integrated Circuit	U60	Telcordia Issue 1	Level I		1.00	0.032235	.1692	31022419.16
1314880510	Semiconductor	U65,U76	Telcordia Issue 1	Level I		2.00	0.079832	.8380	12526258.32
14S4048502	Integrated Circuit	U68,U72	Telcordia Issue 1	Level I		2.00	0.059802	.6277	16721916.86
14S5A01402	Integrated Circuit	U107,U69,U89	Telcordia Issue 1	Level I		3.00	0.026337	.4147	37969565.62
14S2083100	Integrated Circuit	U71	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S5A03200	Integrated Circuit	U73	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S4121601	Integrated Circuit	U75	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S9620800	Integrated Circuit	U77	Telcordia Issue 1	Level I	45.60	1.00	0.268915	1.4114	3718649.24
14S5A00821	Integrated Circuit	U106,U78	Telcordia Issue 1	Level I		2.00	0.026337	.2765	37969565.62
14S2591200	Integrated Circuit	U80	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S5A00702	Integrated Circuit	U82	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S3587000	Integrated Circuit	U83,U84	Telcordia Issue 1	Level I		2.00	0.059802	.6277	16721916.86
14S3121800	Integrated Circuit	U86	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
14S4081110	Integrated Circuit	U87	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86

### AAEON Reliability Prediction Report

**Part Number** 9697QM7715-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 19.052939  
**MTBF** 52,485

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315155510	Semiconductor	U88,U91,U94	Telcordia Issue 1	Level I		3.00	0.159665	2.5140	6263129.16
14S4600004	Integrated Circuit	U95	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
14S5A00802	Integrated Circuit	U102,U103,U96,U97	Telcordia Issue 1	Level I		4.00	0.026337	.5529	37969565.62
14S9341101	Integrated Circuit	U99	Telcordia Issue 1	Level I		1.00	0.026337	.1382	37969565.62
1315190100	Semiconductor	U105	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
123132505D	Miscellaneous	Y1,Y3,Y4	Telcordia Issue 1	Level I		3.00	0.150000	2.3618	6666666.67
1231332721	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.7873	6666666.67
1231327053	Miscellaneous	Y5	Telcordia Issue 1	Level I		1.00	0.150000	.7873	6666666.67
14S3128422	Integrated Circuit	U63	Telcordia Issue 1	Level I		1.00	0.059802	.3139	16721916.86
1304000043	Semiconductor	D10	Telcordia Issue 1	Level I		1.00	0.004921	.0258	203197151.95
105A521039	Resistor	R609	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
1050525524	Resistor	R580,R586	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A519629	Resistor	R568	Telcordia Issue 1	Level I		1.00	0.002272	.0119	440111121.05
105A500239	Resistor	R537,R613	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
105A505629	Resistor	R536,R614	Telcordia Issue 1	Level I		2.00	0.002272	.0239	440111121.05
1189633196	Capacitor	TC14,TC15,TC16,TC2, TC25,TC5,TC6,TC7	Telcordia Issue 1	Level I		8.00	0.004544	.1908	220055560.52
14S3104500	Integrated Circuit	U100,U101	Telcordia Issue 1	Level I		2.00	0.059802	.6277	16721916.86
1752001603	Miscellaneous	FS1,FS2,FS3	Telcordia Issue 1	Level I		3.00	0.003000	.0472	33333333.33
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
1655910131	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
1655305020	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.002860	.0150	349680710.78
1652602105	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
1655003022	Connection	CN6	Telcordia Issue 1	Level I		1.00	0.001716	.0090	582801184.63
165321320G	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.014871	.0780	67246290.53
1655306023	Connection	CN17	Telcordia Issue 1	Level I		1.00	0.003432	.0180	291400592.32
1655306020	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.003432	.0180	291400592.32
1655003010	Connection	CN20	Telcordia Issue 1	Level I		1.00	0.001716	.0090	582801184.63
1655302020	Connection	CN22	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
165251420B	Connection	CN23,CN24	Telcordia Issue 1	Level I		2.00	0.001144	.0120	874201776.95
1654818301	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
1654409103	Connection	CN27	Telcordia Issue 1	Level I		1.00	0.128689	.6754	7770682.46
1181610192	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.004544	.0239	220055560.52
1653002101	Connection	JP1	Telcordia Issue 1	Level I		1.00	0.001144	.0060	874201776.95
1653003101	Connection	JP11,JP3,JP5,JP6	Telcordia Issue 1	Level I		4.00	0.001716	.0360	582801184.63
1653003201	Connection	JP10&JP12,JP8	Telcordia Issue 1	Level I		2.00	0.001144	.0120	874201776.95





### AAEON Reliability Prediction Report

**Part Number** 9697P17D03-D  
**Reference Des**  
**Date** 09. 17, 2012  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6637-A2M-1010.RPJ  
**Time** 11:43  
**Failure Rate** 1.301414  
**MTBF** 768,395

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11C4547690	Capacitor	C1,C2,C29,C3,C34, C35,C36	Telcordia Issue 1	Level I		7.00	0.004544	2.4443	220055560.52
11C4501650	Capacitor	C11,C15,C17,C19, C22,C27,C4,C7	Telcordia Issue 1	Level I		8.00	0.004544	2.7935	220055560.52
1129610051	Capacitor	C20,C6	Telcordia Issue 1	Level I		2.00	0.004544	.6984	220055560.52
11E1522680	Capacitor	C8	Telcordia Issue 1	Level I		1.00	0.004544	.3492	220055560.52
11C1547890	Capacitor	C9	Telcordia Issue 1	Level I		1.00	0.004544	.3492	220055560.52
11C1522480	Capacitor	C10,C26	Telcordia Issue 1	Level I		2.00	0.004544	.6984	220055560.52
1124410190	Capacitor	C13,C21	Telcordia Issue 1	Level I		2.00	0.004544	.6984	220055560.52
1129701790	Capacitor	C14,C18,C28	Telcordia Issue 1	Level I		3.00	0.004544	1.0475	220055560.52
1129747090	Capacitor	C16	Telcordia Issue 1	Level I		1.00	0.004544	.3492	220055560.52
11E2510060	Capacitor	C25,C31	Telcordia Issue 1	Level I		2.00	0.004544	.6984	220055560.52
1121501690	Capacitor	C30	Telcordia Issue 1	Level I		1.00	0.004544	.3492	220055560.52
1300414841	Semiconductor	D1,D2	Telcordia Issue 1	Level I		2.00	0.023950	3.6806	41754194.40
1301003440	Semiconductor	D3,D4,D5,D6,D8	Telcordia Issue 1	Level I		5.00	0.023950	9.2014	41754194.40
130533CA40	Semiconductor	D7	Telcordia Issue 1	Level I		1.00	0.023950	1.8403	41754194.40
1752001900	Miscellaneous	F1,F2	Telcordia Issue 1	Level I		2.00	0.003000	.4610	333333333.33
1211101504	Inductor	L1	Telcordia Issue 1	Level I		1.00	0.086342	6.6345	11581871.61
1310390410	Semiconductor	Q1	Telcordia Issue 1	Level I		1.00	0.023950	1.8403	41754194.40
1315567011	Semiconductor	Q2,Q3,Q5,Q7	Telcordia Issue 1	Level I		4.00	0.079832	24.5371	12526258.32
1315889612	Semiconductor	Q4,Q6	Telcordia Issue 1	Level I		2.00	0.079832	12.2685	12526258.32
105A501539	Resistor	R1	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
1053502579	Resistor	R2,R3	Telcordia Issue 1	Level I		2.00	0.002272	.3492	440111121.05
105A701009	Resistor	R15,R20,R4,R6	Telcordia Issue 1	Level I		4.00	0.002272	.6984	440111121.05
105A501053	Resistor	R18,R5	Telcordia Issue 1	Level I		2.00	0.002272	.3492	440111121.05
105A502039	Resistor	R7	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
105A512039	Resistor	R10,R13	Telcordia Issue 1	Level I		2.00	0.002272	.3492	440111121.05
1050510034	Resistor	R11,R14,R19,R23, R24,R29,R31	Telcordia Issue 1	Level I		7.00	0.002272	1.2221	440111121.05
105A700009	Resistor	R12,R28,R30	Telcordia Issue 1	Level I		3.00	0.002272	.5238	440111121.05
105A549919	Resistor	R16	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
1059700201	Resistor	R17	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
1050512124	Resistor	R21	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
1050539214	Resistor	R22	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
105A501139	Resistor	R25,R27	Telcordia Issue 1	Level I		2.00	0.002272	.3492	440111121.05
105A515433	Resistor	R26	Telcordia Issue 1	Level I		1.00	0.002272	.1746	440111121.05
14S2543000	Integrated Circuit	U1	Telcordia Issue 1	Level I		1.00	0.059802	4.5951	16721916.86
14S3435600	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.059802	4.5951	16721916.86

