

# AEC-6612

## Reliability Prediction Report

### (MTBF)

Summary	Failure Rate: 19.899623 ppm MTBF: 50,252 Hours
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Issue date	Approval	Test Engineer
2010/10/27	Jansin Lee	Jessica Chou

## Reliability Prediction (MTBF)

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**I . Model Name:** TF-AEC-6612-A2-1010

**II . Prediction Date:** Oct. 27, 2010

**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: 25.1 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-AEC-6612-A2-1010

- Failure Rate: 19.899623 ppm

- MTBF: 50,252 Hours

### AAEON Reliability Prediction Report

**Part Number** System  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description** Top-level assembly  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-AEC-6612-A2-1010	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	19.90	50252.21
ASS'Y GENE-LN05	9697LN050A-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	19.90	50252.21



**AAEON Reliability Prediction Report**

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1129701791	Capacitor	C13,C178,C179,C189, C19,C191,C20,C21, C22,C372,C39,C40, C41,C42,C43,C449, C454,C455,C461, C468,C469,C471, C478	Telcordia Issue 1	Level I		23.00	0.004544	.5252	220055560.52
11E1510050	Capacitor	C14,C15,C16,C213, C222	Telcordia Issue 1	Level I		5.00	0.004544	.1142	220055560.52
1124547190	Capacitor	C18,C199,C284,C436, C437,C443,C451, C463,C474	Telcordia Issue 1	Level I		9.00	0.004544	.2055	220055560.52
1129710091	Capacitor	C188,C216,C37,C38, C483,C484,C485	Telcordia Issue 1	Level I		7.00	0.004544	.1599	220055560.52
1124410191	Capacitor	C196,C198,C207, C438,C439,C440, C441,C45,C460	Telcordia Issue 1	Level I		9.00	0.004544	.2055	220055560.52
11E9647680	Capacitor	C131,C184,C203, C242,C292,C302, C366,C389,C423, C434,C46	Telcordia Issue 1	Level I		11.00	0.004544	.2512	220055560.52
11C2539290	Capacitor	C47	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
11E9501091	Capacitor	C122,C132,C156, C174,C175,C176, C181,C182,C190, C201,C210,C218, C237,C247,C249, C278,C305,C308, C317,C319,C322, C323,C324,C326, C327,C328,C329, C332,C333,C338, C341,C345,C353, C354,C357,C358, C369,C370,C371,	Telcordia Issue 1	Level I		55.00	0.004544	1.2560	220055560.52
1129622690	Capacitor	C104,C110,C115, C119,C121,C217, C234,C246,C250, C321,C330,C337, C349,C356,C392,C64	Telcordia Issue 1	Level I		16.00	0.004544	.3654	220055560.52
1124427091	Capacitor	C118,C140,C208, C416,C420,C430, C458,C479,C480, C481,C66,C77	Telcordia Issue 1	Level I		12.00	0.004544	.2740	220055560.52
11C1547890	Capacitor	C296,C76,C79	Telcordia Issue 1	Level I		3.00	0.004544	.0685	220055560.52
1129710391	Capacitor	C138,C221,C225, C243,C282,C304, C435,C80	Telcordia Issue 1	Level I		8.00	0.004544	.1827	220055560.52
1124533282	Capacitor	C82	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52

**AAEON Reliability Prediction Report**

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1129622050	Capacitor	C180,C230,C239, C240,C309,C360, C367,C395,C425, C444,C445	Telcordia Issue 1	Level I		11.00	0.004544	.2512	220055560.52
11C1501080	Capacitor	C209	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
1122522890	Capacitor	C275	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
11C4522190	Capacitor	C285,C291	Telcordia Issue 1	Level I		2.00	0.004544	.0457	220055560.52
1124522290	Capacitor	C300,C311,C320	Telcordia Issue 1	Level I		3.00	0.004544	.0685	220055560.52
11C4582190	Capacitor	C306	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
1129522790	Capacitor	C462,C486,C496	Telcordia Issue 1	Level I		3.00	0.004544	.0685	220055560.52
11E4433090	Capacitor	C491,C492	Telcordia Issue 1	Level I		2.00	0.004544	.0457	220055560.52
16515A0997	Connection	DIMM1	Telcordia Issue 1	Level I		1.00	0.114390	.5748	8742017.77
1305080040	Semiconductor	D1,D10,D2,D29,D3, D30,D32,D33,D34, D35,D36,D37,D39,D4, D40,D41,D42,D45, D47,D48,D49,D5,D50	Telcordia Issue 1	Level I		23.00	0.023950	2.7681	41754194.40
1301005444	Semiconductor	D25,D7	Telcordia Issue 1	Level I		2.00	0.023950	.2407	41754194.40
1304300140	Semiconductor	D19,D8	Telcordia Issue 1	Level I		2.00	0.004921	.0495	203197151.95
1301005442	Semiconductor	D11,D12,D26,D38	Telcordia Issue 1	Level I		4.00	0.023950	.4814	41754194.40
1301005443	Semiconductor	D13,D18	Telcordia Issue 1	Level I		2.00	0.027266	.2740	36675926.75
1300001440	Semiconductor	D15,D16	Telcordia Issue 1	Level I		2.00	0.023950	.2407	41754194.40
1304001340	Semiconductor	D20	Telcordia Issue 1	Level I		1.00	0.004921	.0247	203197151.95
1304101340	Semiconductor	D21	Telcordia Issue 1	Level I		1.00	0.004921	.0247	203197151.95
1301005441	Semiconductor	D31	Telcordia Issue 1	Level I		1.00	0.027266	.1370	36675926.75
1301053040	Semiconductor	D43,D44,D46	Telcordia Issue 1	Level I		3.00	0.023950	.3611	41754194.40
1212306030	Inductor	FB10,FB11,FB12, FB13,FB15,FB17, FB18,FB2,FB22,FB23, FB24,FB25,FB26, FB27,FB28,FB3,FB33, FB34,FB35,FB36,FB5, FB6,FB7,FB8,FB9	Telcordia Issue 1	Level I		25.00	0.002272	.2855	440111121.05
12123C0003	Inductor	FB21,FB4	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
1212306035	Inductor	FB14,FB16,FB19, FB20,FB29,FB30, FB31,FB32,FB37, FB38,FB39	Telcordia Issue 1	Level I		11.00	0.002272	.1256	440111121.05
1752000501	Miscellaneous	FS1	Telcordia Issue 1	Level I		1.00	0.003000	.0151	333333333.33
1752001601	Miscellaneous	FS2,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0302	333333333.33
121110106D	Inductor	L10,L11,L12,L7,L8, L9	Telcordia Issue 1	Level I		6.00	0.086342	2.6033	11581871.61

**AAEON Reliability Prediction Report**

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1654226300	Connection	PCIE1A,PCIE2A	Telcordia Issue 1	Level I		2.00	0.029741	.2989	33623145.27
1654926900	Connection	PCIE1B,PCIE2B	Telcordia Issue 1	Level I		2.00	0.029741	.2989	33623145.27
1315700216	Semiconductor	Q1,Q10,Q11,Q13,Q17, Q2,Q20,Q21,Q22,Q23, Q28,Q29,Q3,Q34,Q35, Q36,Q39,Q40,Q41,Q6, Q8	Telcordia Issue 1	Level I		21.00	0.079832	8.4247	12526258.32
1310390413	Semiconductor	Q18,Q19,Q25,Q26, Q27,Q37,Q4	Telcordia Issue 1	Level I		7.00	0.023950	.8425	41754194.40
1315030110	Semiconductor	Q14,Q16	Telcordia Issue 1	Level I		2.00	0.000000	.0000	.00
1311390612	Semiconductor	Q24	Telcordia Issue 1	Level I		1.00	0.023950	.1204	41754194.40
1311138610	Semiconductor	Q30,Q32,Q33	Telcordia Issue 1	Level I		3.00	0.023950	.3611	41754194.40
1540710382	Resistor	RP1,RP10,RP9	Telcordia Issue 1	Level I		3.00	0.006275	.0946	159372657.61
1540782282	Resistor	RP13,RP2,RP3,RP4, RP5,RP6	Telcordia Issue 1	Level I		6.00	0.012549	.3784	79686328.81
1540733085	Resistor	RP14,RP7,RP8	Telcordia Issue 1	Level I		3.00	0.006275	.0946	159372657.61
1540710280	Resistor	RP11,RP12	Telcordia Issue 1	Level I		2.00	0.006275	.0631	159372657.61
106B501032	Resistor	RT1	Telcordia Issue 1	Level I		1.00	0.011439	.0575	87420177.69
106B510030	Resistor	RT2	Telcordia Issue 1	Level I		1.00	0.011439	.0575	87420177.69
105A704729	Resistor	R1,R169,R170,R172, R174,R18,R196,R218, R221,R227,R235, R291,R300,R341, R344,R372,R377, R398,R408,R470,R48, R483,R484,R487, R494,R495,R502, R526,R536,R537,R56, R598,R600,R65	Telcordia Issue 1	Level I		34.00	0.002272	.3882	440111121.05
105A503309	Resistor	R2,R228,R232,R278, R283,R288,R290, R302,R529,R534,R59, R602,R603,R70,R78, R81,R88,R92	Telcordia Issue 1	Level I		18.00	0.002272	.2055	440111121.05
105A733009	Resistor	R11,R16,R3,R320, R321,R322	Telcordia Issue 1	Level I		6.00	0.002272	.0685	440111121.05
105A705139	Resistor	R24,R25,R26,R32, R33,R358,R381,R394, R4,R405,R410	Telcordia Issue 1	Level I		11.00	0.002272	.1256	440111121.05
105A556269	Resistor	R214,R350,R5	Telcordia Issue 1	Level I		3.00	0.002272	.0343	440111121.05





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**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A700139	Resistor	R119,R157,R191, R195,R199,R206, R208,R223,R23,R233, R234,R236,R237, R238,R239,R240, R242,R244,R262, R274,R282,R298,R30, R31,R317,R327,R362, R387,R404,R411, R428,R429,R438,R47, R474,R485,R517, R545,R562,R567, R568,R601,R605,	Telcordia Issue 1	Level I		46.00	0.002272	.5252	440111121.05
105A511333	Resistor	R28	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A701069	Resistor	R37,R482	Telcordia Issue 1	Level I		2.00	0.013633	.1370	73351853.51
1050524904	Resistor	R175,R337,R352,R39	Telcordia Issue 1	Level I		4.00	0.002272	.0457	440111121.05
105A545303	Resistor	R46	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A532413	Resistor	R50	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1050502204	Resistor	R141,R246,R369, R447,R448,R466,R51, R57	Telcordia Issue 1	Level I		8.00	0.002272	.0913	440111121.05
1050505124	Resistor	R52,R548	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
1050702734	Resistor	R296,R55	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A702229	Resistor	R137,R147,R342, R359,R379,R380,R61, R63,R85	Telcordia Issue 1	Level I		9.00	0.002272	.1028	440111121.05
105A502039	Resistor	R251,R550,R566, R569,R66	Telcordia Issue 1	Level I		5.00	0.002272	.0571	440111121.05
105A500139	Resistor	R189,R194,R216, R275,R285,R426, R498,R519,R535,R67	Telcordia Issue 1	Level I		10.00	0.002272	.1142	440111121.05
105A549919	Resistor	R303,R305,R551, R552,R553,R554,R68	Telcordia Issue 1	Level I		7.00	0.002272	.0799	440111121.05
105A704709	Resistor	R116,R121,R127, R135,R140,R148, R153,R156,R159, R162,R164,R166, R176,R178,R179, R180,R182,R183, R185,R187,R192, R197,R201,R391, R399,R76,R83,R90, R94	Telcordia Issue 1	Level I		29.00	0.002272	.3311	440111121.05
105A768009	Resistor	R114,R120,R125, R133,R82,R89,R93	Telcordia Issue 1	Level I		7.00	0.002272	.0799	440111121.05

**AAEON Reliability Prediction Report**

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10

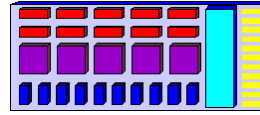


**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A501039	Resistor	R100,R102,R335, R338,R406,R499, R505,R506,R508, R509,R510,R547	Telcordia Issue 1	Level I		12.00	0.002272	.1370	440111121.05
105A706829	Resistor	R104,R105	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A515009	Resistor	R106,R107,R108, R578,R580,R582	Telcordia Issue 1	Level I		6.00	0.002272	.0685	440111121.05
105A580623	Resistor	R111	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A505109	Resistor	R115,R126,R134, R149,R184,R186, R190,R503,R513, R518,R521,R523, R531	Telcordia Issue 1	Level I		13.00	0.002272	.1484	440111121.05
105A515033	Resistor	R117	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A536533	Resistor	R122	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1050501004	Resistor	R123,R181,R247, R249,R279,R284, R299,R375,R376, R386,R435,R436, R473,R475,R478, R574,R575	Telcordia Issue 1	Level I		17.00	0.002272	.1941	440111121.05
105A575033	Resistor	R129	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A568163	Resistor	R136	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A513033	Resistor	R144	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A580663	Resistor	R150,R151	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A700003	Resistor	R258,R349,R351, R401,R449,R450, R451,R530	Telcordia Issue 1	Level I		8.00	0.002272	.0913	440111121.05
105A522669	Resistor	R168	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A502003	Resistor	R177	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A500239	Resistor	R198,R497	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
1050547004	Resistor	R203,R210,R373	Telcordia Issue 1	Level I		3.00	0.002272	.0343	440111121.05
105A549969	Resistor	R492	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A507523	Resistor	R219,R259	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A556213	Resistor	R264	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1059700001	Resistor	R286,R325	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A501233	Resistor	R287,R385	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A523713	Resistor	R310,R465	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A747039	Resistor	R328	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A701009	Resistor	R332,R353,R467, R471	Telcordia Issue 1	Level I		4.00	0.002272	.0457	440111121.05
105A702263	Resistor	R346,R446,R462	Telcordia Issue 1	Level I		3.00	0.002272	.0343	440111121.05
1050533034	Resistor	R348,R368	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05

### AAEON Reliability Prediction Report

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A513723	Resistor	R360	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1059702261	Resistor	R453,R454	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A566503	Resistor	R458	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A554923	Resistor	R459	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A584523	Resistor	R460	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A501539	Resistor	R493	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A503039	Resistor	R507	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A701003	Resistor	R511	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A575003	Resistor	R512	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A501413	Resistor	R515	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A534823	Resistor	R543	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A568123	Resistor	R544	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A722009	Resistor	R556,R557,R558, R560,R563,R564	Telcordia Issue 1	Level I		6.00	0.002272	.0685	440111121.05
105A700239	Resistor	R570,R571	Telcordia Issue 1	Level I		2.00	0.002272	.0228	440111121.05
105A507509	Resistor	R579,R581,R583	Telcordia Issue 1	Level I		3.00	0.002272	.0343	440111121.05
1189633193	Capacitor	TC1,TC12,TC2,TC6, TC9	Telcordia Issue 1	Level I		5.00	0.004544	.1142	220055560.52
1189627150	Capacitor	TC10,TC15,TC16, TC17,TC18,TC20, TC21,TC3,TC7	Telcordia Issue 1	Level I		9.00	0.004544	.2055	220055560.52
1189633160	Capacitor	TC22,TC23,TC24,TC4	Telcordia Issue 1	Level I		4.00	0.004544	.0913	220055560.52
1189615151	Capacitor	TC11,TC13,TC14, TC19,TC25,TC26, TC27,TC28	Telcordia Issue 1	Level I		8.00	0.004544	.1827	220055560.52
1182622080	Capacitor	TC8	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
14S9811500	Integrated Circuit	U1	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
1315667910	Semiconductor	U2,U74,U75	Telcordia Issue 1	Level I		3.00	0.159665	2.4070	6263129.16
1315441012	Semiconductor	U4,U45	Telcordia Issue 1	Level I		2.00	0.079832	.8023	12526258.32
1315970211	Semiconductor	U18,U20,U6,U63	Telcordia Issue 1	Level I		4.00	0.159665	3.2094	6263129.16
14S4021301	Integrated Circuit	U13,U17,U25,U29, U64,U7	Telcordia Issue 1	Level I		6.00	0.059802	1.8031	16721916.86
1315422410	Semiconductor	U9	Telcordia Issue 1	Level I		1.00	0.079832	.4012	12526258.32
14S2362400	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S4280121	Integrated Circuit	U11	Telcordia Issue 1	Level I	43.10	1.00	0.240593	1.2090	4156405.51
14S5A00821	Integrated Circuit	U12,U38,U69	Telcordia Issue 1	Level I		3.00	0.026337	.3970	37969565.62
14S2538000	Integrated Circuit	U14	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S3050100	Integrated Circuit	U15	Telcordia Issue 1	Level I	48.50	1.00	1.262133	6.3425	792309.64
14S4600004	Integrated Circuit	U16	Telcordia Issue 1	Level I	46.00	1.00	1.101447	5.5350	907896.56
14S4166012	Integrated Circuit	U19	Telcordia Issue 1	Level I	32.40	1.00	0.146607	.7367	6820933.68
14S4121601	Integrated Circuit	U21	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62

### AAEON Reliability Prediction Report

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
14S5A12506	Integrated Circuit	U22	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62
14S2591200	Integrated Circuit	U23	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S5A00601	Integrated Circuit	U24	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62
14S4362707	Integrated Circuit	U26	Telcordia Issue 1	Level I	40.40	1.00	0.212952	1.0701	4695902.20
14S4048503	Integrated Circuit	U27,U30	Telcordia Issue 1	Level I		2.00	0.059802	.6010	16721916.86
14S5A12503	Integrated Circuit	U28,U35	Telcordia Issue 1	Level I		2.00	0.059802	.6010	16721916.86
14S2041500	Integrated Circuit	U31	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S2048800	Integrated Circuit	U32	Telcordia Issue 1	Level I	40.50	1.00	0.436907	2.1956	2288817.82
14S4256701	Integrated Circuit	U33	Telcordia Issue 1	Level I	36.50	1.00	0.177915	.8941	5620648.75
14S4258300	Integrated Circuit	U34	Telcordia Issue 1	Level I	40.70	1.00	0.215880	1.0848	4632210.06
14S5A73200	Integrated Circuit	U36	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62
14S3088800	Integrated Circuit	U37	Telcordia Issue 1	Level I	32.90	1.00	0.150148	.7545	6660110.47
1315155510	Semiconductor	U39,U40,U41	Telcordia Issue 1	Level I		3.00	0.159665	2.4070	6263129.16
14S5912300	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62
14S4081110	Integrated Circuit	U46	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
1315446310	Semiconductor	U47,U48	Telcordia Issue 1	Level I		2.00	0.079832	.8023	12526258.32
14S9103200	Integrated Circuit	U50	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S4911216	Integrated Circuit	U52	Telcordia Issue 1	Level I	49.10	1.00	1.303684	6.5513	767057.22
1315482410	Semiconductor	U53,U62	Telcordia Issue 1	Level I		2.00	0.079832	.8023	12526258.32
1315482110	Semiconductor	U54,U58	Telcordia Issue 1	Level I		2.00	0.079832	.8023	12526258.32
14S4195710	Integrated Circuit	U55	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
1315997510	Semiconductor	U59,U60	Telcordia Issue 1	Level I		2.00	0.079832	.8023	12526258.32
14S3156500	Semiconductor	U61	Telcordia Issue 1	Level I	41.10	1.00	0.135164	.6792	7398439.61
14S3524700	Integrated Circuit	U65	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S3128421	Integrated Circuit	U66	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
14S4751100	Integrated Circuit	U67	Telcordia Issue 1	Level I		1.00	0.026337	.1323	37969565.62
14S2200900	Integrated Circuit	U68	Telcordia Issue 1	Level I		1.00	0.059802	.3005	16721916.86
1231332721	Miscellaneous	Y1	Telcordia Issue 1	Level I		1.00	0.150000	.7538	6666666.67
123131435J	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.7538	6666666.67
123132505D	Miscellaneous	Y3,Y4	Telcordia Issue 1	Level I		2.00	0.150000	1.5076	6666666.67
14S6308002	Integrated Circuit	U57	Telcordia Issue 1	Level I		1.00	0.036146	.1816	27665759.41
11C9501050	Capacitor	C343	Telcordia Issue 1	Level I		1.00	0.004544	.0228	22005560.52
105A705629	Resistor	R409	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1214309008	Inductor	CH2,CH3,CH4,CH5, CH6,CH7,CH8	Telcordia Issue 1	Level I		7.00	0.002272	.0799	440111121.05
121110226J	Inductor	L1	Telcordia Issue 1	Level I	51.20	1.00	0.203153	1.0209	4922401.34

### AAEON Reliability Prediction Report

**Part Number** 9697LN050A-D  
**Reference Des**  
**Date** 10. 27, 2010  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.10



**Description**  
**File Name** TF-AEC-6612-A2-1010.RPJ  
**Time** 10:37  
**Failure Rate** 19.899623  
**MTBF** 50,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
121110156K	Inductor	L2	Telcordia Issue 1	Level I	54.60	1.00	0.213147	1.0711	4691594.56
121110156K	Inductor	L4	Telcordia Issue 1	Level I		1.00	0.086342	.4339	11581871.61
121110156J	Inductor	L3	Telcordia Issue 1	Level I	47.00	1.00	0.191202	.9608	5230081.48
121110226K	Inductor	L5	Telcordia Issue 1	Level I	42.90	1.00	0.179954	.9043	5556976.55
121110226K	Inductor	L6	Telcordia Issue 1	Level I		1.00	0.086342	.4339	11581871.61
1050586604	Resistor	R143	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
105A531613	Resistor	R250	Telcordia Issue 1	Level I		1.00	0.002272	.0114	440111121.05
1655902030	Connection	BAT1A	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
175011901M	Miscellaneous	BAT1B	Telcordia Issue 1	Level I		1.00	0.900000	4.5227	11111111.11
1653900039	Connection	CFD1B	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
1655003022	Connection	CN3	Telcordia Issue 1	Level I		1.00	0.001716	.0086	582801184.63
1654907004	Connection	CN5,CN6	Telcordia Issue 1	Level I		2.00	0.004004	.0402	249771936.27
1652602105	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
1655302020	Connection	CN10	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
1653005201	Connection	CN11	Telcordia Issue 1	Level I		1.00	0.005720	.0287	174840355.39
1655905032	Connection	CN14,CN16,CN17, CN19,CN20	Telcordia Issue 1	Level I		5.00	0.022878	.5748	43710088.85
1655909031	Connection	CN13,CN15,CN18, CN21,CN22	Telcordia Issue 1	Level I		5.00	0.005148	.1293	194267061.54
165251420B	Connection	CN24,CN25	Telcordia Issue 1	Level I		2.00	0.001144	.0115	874201776.95
1654808309	Connection	CN30	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
1654409103	Connection	CN32	Telcordia Issue 1	Level I		1.00	0.128689	.6467	7770682.46
1654415308	Connection	CN33	Telcordia Issue 1	Level I		1.00	0.008579	.0431	116560236.93
1181627191	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.004544	.0228	220055560.52
1653002101	Connection	JP1	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
1653003101	Connection	JP2,JP4,JP5,JP6, JP7	Telcordia Issue 1	Level I		5.00	0.001716	.0431	582801184.63
1653003201	Connection	JP3	Telcordia Issue 1	Level I		1.00	0.001144	.0057	874201776.95
175910000B	Miscellaneous	SP1	Telcordia Issue 1	Level I		1.00	0.150000	.7538	6666666.67