

AEC-6636

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 20.106578 ppm MTBF: 49,735 Hours
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Issue date	Approval	Test Engineer
2012/05/04	Vincent Chen	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TF-AEC-6636-A1M-1010

II . Prediction Date: May 4th, 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 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-6636-A1M-1010:

- Failure Rate: 20.106578ppm

- MTBF: 49,735 Hours

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description Top-level assembly
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 20.106578
MTBF 49,735

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-AEC-6636-A1M-1010	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	20.11	49734.97
PER-P17D	9697P17D03-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	1.42	703026.60
ASS'Y GENE-QM67 Rev.A1.0_0_0	9697QM6724-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	18.66	53600.12

AAEON Reliability Prediction Report

Part Number 9697P17D03-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 1.422421
MTBF 703,027

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	2.2363	220055560.52
11C4501650	Capacitor	C11,C15,C17,C19, C22,C27,C4,C7	Telcordia Issue 1	Level I		8.00	0.004544	2.5558	220055560.52
1129610051	Capacitor	C20,C6	Telcordia Issue 1	Level I		2.00	0.004544	.6390	220055560.52
11E1522680	Capacitor	C8	Telcordia Issue 1	Level I		1.00	0.004544	.3195	220055560.52
11C1547890	Capacitor	C9	Telcordia Issue 1	Level I		1.00	0.004544	.3195	220055560.52
11C1522480	Capacitor	C10,C26	Telcordia Issue 1	Level I		2.00	0.004544	.6390	220055560.52
1124410190	Capacitor	C13,C21	Telcordia Issue 1	Level I		2.00	0.004544	.6390	220055560.52
1129701790	Capacitor	C14,C18,C28	Telcordia Issue 1	Level I		3.00	0.004544	.9584	220055560.52
1129747090	Capacitor	C16	Telcordia Issue 1	Level I		1.00	0.004544	.3195	220055560.52
11E2510060	Capacitor	C25,C31	Telcordia Issue 1	Level I		2.00	0.004544	.6390	220055560.52
1121501690	Capacitor	C30	Telcordia Issue 1	Level I		1.00	0.004544	.3195	220055560.52
1300414841	Semiconductor	D1,D2	Telcordia Issue 1	Level I		2.00	0.023950	3.3675	41754194.40
1301003440	Semiconductor	D3,D4,D5,D6,D8	Telcordia Issue 1	Level I		5.00	0.023950	8.4186	41754194.40
130533CA40	Semiconductor	D7	Telcordia Issue 1	Level I		1.00	0.023950	1.6837	41754194.40
1752001900	Miscellaneous	F1,F2	Telcordia Issue 1	Level I		2.00	0.003000	.4218	333333333.33
1211101504	Inductor	L1	Telcordia Issue 1	Level I		1.00	0.086342	6.0701	11581871.61
1310390410	Semiconductor	Q1	Telcordia Issue 1	Level I		1.00	0.023950	1.6837	41754194.40
1315567011	Semiconductor	Q2,Q3,Q5	Telcordia Issue 1	Level I		3.00	0.079832	16.8373	12526258.32
1315567011	Semiconductor	Q7	Telcordia Issue 1	Level I	35.30	1.00	0.197634	13.8942	5059856.18
1315889612	Semiconductor	Q4,Q6	Telcordia Issue 1	Level I		2.00	0.079832	11.2248	12526258.32
105A501539	Resistor	R1	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1053502579	Resistor	R2,R3	Telcordia Issue 1	Level I		2.00	0.002272	.3195	440111121.05
105A701009	Resistor	R15,R20,R4,R6	Telcordia Issue 1	Level I		4.00	0.002272	.6390	440111121.05
105A501053	Resistor	R18,R5	Telcordia Issue 1	Level I		2.00	0.002272	.3195	440111121.05
105A502039	Resistor	R7	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
105A512039	Resistor	R10,R13	Telcordia Issue 1	Level I		2.00	0.002272	.3195	440111121.05
1050510034	Resistor	R11,R14,R19,R23, R24,R29,R31	Telcordia Issue 1	Level I		7.00	0.002272	1.1182	440111121.05
105A700009	Resistor	R12,R28,R30	Telcordia Issue 1	Level I		3.00	0.002272	.4792	440111121.05
105A549919	Resistor	R16	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1059700201	Resistor	R17	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1050512124	Resistor	R21	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1050539214	Resistor	R22	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
105A501139	Resistor	R25,R27	Telcordia Issue 1	Level I		2.00	0.002272	.3195	440111121.05
105A515433	Resistor	R26	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
14S2543000	Integrated Circuit	U1	Telcordia Issue 1	Level I		1.00	0.059802	4.2042	16721916.86

AAEON Reliability Prediction Report

Part Number 9697P17D03-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 1.422421
MTBF 703,027

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S3435600	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.059802	4.2042	16721916.86
14S3378000	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.059802	4.2042	16721916.86
1054700289	Resistor	R32	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1652003101	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.001716	.1206	582801184.63
1655004011	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.022878	1.6084	43710088.85
1655104004	Connection	CN3	Telcordia Issue 1	Level I		1.00	0.001144	.0804	874201776.95
1114633130	Capacitor	C23,C5	Telcordia Issue 1	Level I		2.00	0.042896	6.0314	23312047.39
1169656132	Capacitor	C24	Telcordia Issue 1	Level I		1.00	0.005469	.3845	182842274.63
1181633112	Capacitor	C32	Telcordia Issue 1	Level I	30.00	1.00	0.007749	.5448	129041122.78
1181633112	Capacitor	C33	Telcordia Issue 1	Level I		1.00	0.004544	.3195	220055560.52
1211100110	Inductor	L2	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05
1214216190	Inductor	L3	Telcordia Issue 1	Level I		1.00	0.002272	.1597	440111121.05

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	.7064	220055560.52
1129710090	Capacitor	C183,C184,C185, C217,C42	Telcordia Issue 1	Level I		5.00	0.004544	.1218	220055560.52
11E9522680	Capacitor	C164,C168,C45,C66	Telcordia Issue 1	Level I		4.00	0.004544	.0974	220055560.52
1129522790	Capacitor	C140,C308,C321, C323,C336,C354, C368,C369,C370, C407,C64	Telcordia Issue 1	Level I		11.00	0.004544	.2679	220055560.52
1124418090	Capacitor	C125,C127,C616, C617,C69,C70	Telcordia Issue 1	Level I		6.00	0.004544	.1461	220055560.52
11C4522290	Capacitor	C305,C306,C310, C373,C99	Telcordia Issue 1	Level I		5.00	0.004544	.1218	220055560.52
1124427091	Capacitor	C149,C155,C186, C190,C201,C202, C203	Telcordia Issue 1	Level I		7.00	0.004544	.1705	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	.5846	220055560.52
11E1647650	Capacitor	C232	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
11E1622060	Capacitor	C242,C249	Telcordia Issue 1	Level I		2.00	0.004544	.0487	220055560.52
11E9547680	Capacitor	C288,C554,C598	Telcordia Issue 1	Level I		3.00	0.004544	.0731	220055560.52
1124533191	Capacitor	C301,C319,C379	Telcordia Issue 1	Level I		3.00	0.004544	.0731	220055560.52
11C4515190	Capacitor	C302,C381	Telcordia Issue 1	Level I		2.00	0.004544	.0487	220055560.52
11E4433090	Capacitor	C307,C349,C361	Telcordia Issue 1	Level I		3.00	0.004544	.0731	220055560.52
11E9547790	Capacitor	C372	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
11C1501080	Capacitor	C400	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
11C1547890	Capacitor	C418	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
1122522890	Capacitor	C536,C537,C614	Telcordia Issue 1	Level I		3.00	0.004544	.0731	220055560.52
11E9647680	Capacitor	C603	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
11C4568190	Capacitor	C609	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
1301005444	Semiconductor	D1,D2,D27,D28,D29, D31,D37,D38	Telcordia Issue 1	Level I		8.00	0.023950	1.0270	41754194.40

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	.2567	41754194.40
1304500240	Semiconductor	D4	Telcordia Issue 1	Level I		1.00	0.004921	.0264	203197151.95
1304300140	Semiconductor	D11,D5	Telcordia Issue 1	Level I		2.00	0.004921	.0528	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	3.4660	41754194.40
1304001340	Semiconductor	D10	Telcordia Issue 1	Level I		1.00	0.004921	.0264	203197151.95
1301400642	Semiconductor	D30	Telcordia Issue 1	Level I		1.00	0.023950	.1284	41754194.40
1189633194	Capacitor	EC2,EC3	Telcordia Issue 1	Level I		2.00	0.004544	.0487	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	1.2263	87420177.69
12123C0007	Inductor	FB4	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
12123D0001	Inductor	FB22,FB25,FB27, FB28,FB29,FB30, FB32,FB33,FB6,FB7, FB8	Telcordia Issue 1	Level I		11.00	0.002272	.1340	440111121.05
1212308054	Resistor	FB34,FB35	Telcordia Issue 1	Level I		2.00	0.011439	.1226	87420177.69
1752001601	Miscellaneous	FS1,FS2,FS3	Telcordia Issue 1	Level I		3.00	0.003000	.0482	333333333.33
121110156K	Inductor	L1,L3	Telcordia Issue 1	Level I		2.00	0.086342	.9256	11581871.61
1211103671	Inductor	L2,L4,L6	Telcordia Issue 1	Level I		3.00	0.086342	1.3884	11581871.61
1211103671	Inductor	L5	Telcordia Issue 1	Level I	28.60	1.00	0.143931	.7715	6947763.99
121110106G	Inductor	L7	Telcordia Issue 1	Level I		1.00	0.086342	.4628	11581871.61
1211106874	Inductor	L8,L9	Telcordia Issue 1	Level I		2.00	0.086342	.9256	11581871.61
121110336Y	Inductor	L10	Telcordia Issue 1	Level I		1.00	0.086342	.4628	11581871.61
1211100113	Inductor	L11,L12,L13,L15	Telcordia Issue 1	Level I		4.00	0.002272	.0487	440111121.05
1211100160	Inductor	L14	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
121110476Q	Inductor	L16	Telcordia Issue 1	Level I		1.00	0.086342	.4628	11581871.61
1315230511	Semiconductor	Q1,Q16,Q17,Q18,Q24, Q25	Telcordia Issue 1	Level I		6.00	0.079832	2.5674	12526258.32

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	0.079832	13.2650	12526258.32
1310390413	Semiconductor	Q12,Q28,Q29,Q46, Q47,Q48,Q7	Telcordia Issue 1	Level I		7.00	0.023950	.8986	41754194.40
1311390612	Semiconductor	Q49,Q9	Telcordia Issue 1	Level I		2.00	0.023950	.2567	41754194.40
1540733085	Resistor	RP1	Telcordia Issue 1	Level I		1.00	0.006275	.0336	159372657.61
1540722281	Resistor	RP2	Telcordia Issue 1	Level I		1.00	0.006275	.0336	159372657.61
106B747030	Resistor	RT1,RT3	Telcordia Issue 1	Level I		2.00	0.011439	.1226	87420177.69
106B501032	Resistor	RT2,RT4	Telcordia Issue 1	Level I		2.00	0.011439	.1226	87420177.69
1050505134	Resistor	R2,R41,R656,R657, R658,R659,R660, R661,R662,R663	Telcordia Issue 1	Level I		10.00	0.002272	.1218	440111121.05
105A701059	Resistor	R109,R262,R272, R367,R504,R6,R640, R711,R714	Telcordia Issue 1	Level I		9.00	0.002272	.1096	440111121.05
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	0.002272	1.3153	440111121.05
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	0.002272	.3532	440111121.05
1050507530	Resistor	R18,R259,R305,R309, R633	Telcordia Issue 1	Level I		5.00	0.002272	.0609	440111121.05

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A703309	Resistor	R110,R112,R113, R129,R149,R168, R184,R207,R22,R27, R433,R45,R51,R60, R691	Telcordia Issue 1	Level I		15.00	0.002272	.1827	440111121.05
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	0.002272	.2436	440111121.05
105A501139	Resistor	R317,R415,R49,R587	Telcordia Issue 1	Level I		4.00	0.002272	.0487	440111121.05
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	0.002272	.7429	440111121.05
105A730009	Resistor	R55	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050584514	Resistor	R57,R619,R620	Telcordia Issue 1	Level I		3.00	0.002272	.0365	440111121.05
105A501539	Resistor	R499,R58,R602,R61	Telcordia Issue 1	Level I		4.00	0.002272	.0487	440111121.05
1050520034	Resistor	R631	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
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		94.00	0.002272	1.1448	440111121.05
105A566519	Resistor	R342,R612,R615,R68	Telcordia Issue 1	Level I		4.00	0.002272	.0487	440111121.05

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	0.002272	.0487	440111121.05
1054700289	Resistor	R94	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A502039	Resistor	R107,R142,R147, R275,R307,R568, R651,R669,R672, R693,R694,R708	Telcordia Issue 1	Level I		12.00	0.002272	.1461	440111121.05
105A702209	Resistor	R111,R115,R116	Telcordia Issue 1	Level I		3.00	0.002272	.0365	440111121.05
105A515009	Resistor	R117,R118,R119, R220,R221,R222, R237	Telcordia Issue 1	Level I		7.00	0.002272	.0853	440111121.05
105A580623	Resistor	R120	Telcordia Issue 1	Level I		1.00	0.002272	.0122	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	.2801	440111121.05
105A549969	Resistor	R138,R532	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
105A575009	Resistor	R140,R578	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
105A503039	Resistor	R141,R632,R647, R668,R673	Telcordia Issue 1	Level I		5.00	0.002272	.0609	440111121.05
1050540224	Resistor	R143,R146	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
1050533214	Resistor	R144	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050505633	Resistor	R148	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A701069	Resistor	R150	Telcordia Issue 1	Level I		1.00	0.013633	.0731	73351853.51
1050520004	Resistor	R169,R437,R706	Telcordia Issue 1	Level I		3.00	0.002272	.0365	440111121.05
105A525563	Resistor	R173	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A747039	Resistor	R209,R327	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
105A733009	Resistor	R214,R219,R227, R229,R231,R255, R256,R529,R642, R675	Telcordia Issue 1	Level I		10.00	0.002272	.1218	440111121.05
105A524913	Resistor	R233	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A562034	Resistor	R261	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050505124	Resistor	R269,R285	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
1050505164	Resistor	R288	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050527424	Resistor	R303,R419	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
105A700109	Resistor	R304,R346,R427, R442	Telcordia Issue 1	Level I		4.00	0.002272	.0487	440111121.05
1050518714	Resistor	R312	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A526114	Resistor	R314,R428	Telcordia Issue 1	Level I		2.00	0.002272	.0244	440111121.05
1050542204	Resistor	R319	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050538314	Resistor	R324,R429	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050580614	Resistor	R325,R414	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050500334	Resistor	R328	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050586604	Resistor	R343,R416	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050536514	Resistor	R344,R425,R440	Telcordia Issue 1	Level I		3.00	0.002272	.0365	44011121.05
1050704304	Resistor	R358,R371,R399	Telcordia Issue 1	Level I		3.00	0.002272	.0365	44011121.05
105A505109	Resistor	R373,R374,R375, R376,R377	Telcordia Issue 1	Level I		5.00	0.002272	.0609	44011121.05
105A518229	Resistor	R379,R395	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050501004	Resistor	R384,R403,R510, R531,R542,R543	Telcordia Issue 1	Level I		6.00	0.002272	.0731	44011121.05
105A554969	Resistor	R387	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A513009	Resistor	R389,R401,R436	Telcordia Issue 1	Level I		3.00	0.002272	.0365	44011121.05
105A706209	Resistor	R390	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A702263	Resistor	R392,R431	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
105A705609	Resistor	R397	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A514009	Resistor	R404	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A510009	Resistor	R368,R407,R418	Telcordia Issue 1	Level I		3.00	0.002272	.0365	44011121.05
1050524924	Resistor	R408	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A730039	Resistor	R417	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050564904	Resistor	R420	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050539214	Resistor	R421,R536,R614	Telcordia Issue 1	Level I		3.00	0.002272	.0365	44011121.05
1050549904	Resistor	R423	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050590964	Resistor	R438	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A701003	Resistor	R447,R483	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
105A549919	Resistor	R450	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A523713	Resistor	R462	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
105A522663	Resistor	R470	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050700002	Resistor	R480	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1050524904	Resistor	R481,R517	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050514324	Resistor	R496,R571	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050533034	Resistor	R497,R502	Telcordia Issue 1	Level I		2.00	0.002272	.0244	44011121.05
1050501234	Resistor	R498,R580,R581, R586	Telcordia Issue 1	Level I		4.00	0.002272	.0487	44011121.05
105A537463	Resistor	R547	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05
1059700001	Resistor	R554	Telcordia Issue 1	Level I		1.00	0.002272	.0122	44011121.05

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
Date 05. 4, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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, R59,R610	Telcordia Issue 1	Level I		58.00	0.002272	.7064	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	.2923	440111121.05
105A507509	Resistor	R372,R388,R654, R664,R665	Telcordia Issue 1	Level I		5.00	0.002272	.0609	440111121.05
105A536513	Resistor	R667	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1059710001	Resistor	R677	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050502234	Resistor	R685	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1050502734	Resistor	R687	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1059520001	Resistor	R690	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
105A700239	Resistor	R707	Telcordia Issue 1	Level I		1.00	0.002272	.0122	440111121.05
1189633193	Capacitor	TC1,TC11	Telcordia Issue 1	Level I		2.00	0.004544	.0487	220055560.52
1189622150	Capacitor	TC24,TC3,TC4	Telcordia Issue 1	Level I		3.00	0.004544	.0731	220055560.52
1189615151	Capacitor	TC10,TC12,TC13, TC26,TC8,TC9	Telcordia Issue 1	Level I		6.00	0.004544	.1461	220055560.52
1189656180	Capacitor	TC19,TC20,TC22, TC23	Telcordia Issue 1	Level I		4.00	0.004544	.0974	220055560.52
1315422410	Semiconductor	U1	Telcordia Issue 1	Level I		1.00	0.079832	.4279	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	.3205	16721916.86
14S5A00704	Integrated Circuit	U104,U39,U5,U56, U57,U67,U74,U90	Telcordia Issue 1	Level I		8.00	0.026337	1.1293	37969565.62
14S5A00601	Integrated Circuit	U15,U6	Telcordia Issue 1	Level I		2.00	0.026337	.2823	37969565.62
14S634022E	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.026566	.1424	37642193.67

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
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Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	.3205	16721916.86
14S3524700	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S3524701	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S3089200	Integrated Circuit	U11	Telcordia Issue 1	Level I	26.70	1.00	0.111114	.5956	8999741.26
1315482410	Semiconductor	U12,U21,U23,U29, U35,U37,U38,U52, U64,U70,U79,U81, U85	Telcordia Issue 1	Level I		13.00	0.079832	5.5627	12526258.32
1315482110	Semiconductor	U13,U16,U17,U19, U24,U28,U36,U40, U41,U55	Telcordia Issue 1	Level I		10.00	0.079832	4.2790	12526258.32
14S4872800	Semiconductor	U18	Telcordia Issue 1	Level I		1.00	0.159665	.8558	6263129.16
14S5A12506	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S4021301	Integrated Circuit	U22,U25,U30,U50	Telcordia Issue 1	Level I		4.00	0.059802	1.2822	16721916.86
14S9108500	Integrated Circuit	U26,U32,U33,U92, U93	Telcordia Issue 1	Level I		5.00	0.059802	1.6027	16721916.86
1651609883	Connection	U27	Telcordia Issue 1	Level I	34.00	1.00	0.005630	.0302	177617527.37
14S4QM6700	Integrated Circuit	U31	Telcordia Issue 1	Level I	30.10	1.00	0.131245	.7035	7619342.39
1315667910	Semiconductor	U14,U4,U42,U61	Telcordia Issue 1	Level I		4.00	0.159665	3.4232	6263129.16
14S5912300	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S9811500	Integrated Circuit	U44	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S2200900	Integrated Circuit	U45	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S4811102	Integrated Circuit	U47	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S4257900	Integrated Circuit	U48	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S3E00100	Integrated Circuit	U49,U51	Telcordia Issue 1	Level I		2.00	0.059802	.6411	16721916.86
1315970211	Semiconductor	U105,U53,U54,U58	Telcordia Issue 1	Level I		4.00	0.159665	3.4232	6263129.16
14S3111600	Integrated Circuit	U60	Telcordia Issue 1	Level I		1.00	0.032235	.1728	31022419.16
1314880510	Semiconductor	U65,U76	Telcordia Issue 1	Level I		2.00	0.079832	.8558	12526258.32
14S4048502	Integrated Circuit	U68,U72	Telcordia Issue 1	Level I		2.00	0.059802	.6411	16721916.86
14S5A01402	Integrated Circuit	U107,U69,U89	Telcordia Issue 1	Level I		3.00	0.026337	.4235	37969565.62
14S2083100	Integrated Circuit	U71	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S5A03200	Integrated Circuit	U73	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S4121601	Integrated Circuit	U75	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S9620800	Integrated Circuit	U77	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S5A00821	Integrated Circuit	U106,U78	Telcordia Issue 1	Level I		2.00	0.026337	.2823	37969565.62
14S2591200	Integrated Circuit	U80	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S5A00702	Integrated Circuit	U82	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S3587000	Integrated Circuit	U83,U84	Telcordia Issue 1	Level I		2.00	0.059802	.6411	16721916.86
14S3121800	Integrated Circuit	U86	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S4081110	Integrated Circuit	U87	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86

AAEON Reliability Prediction Report

Part Number 9697QM6724-D
Reference Des
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Temp. (°C) 25.10



Description
File Name TF-AEC-6636-A1M-1010.RPJ
Time 17:41
Failure Rate 18.656676
MTBF 53,600

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	2.5674	6263129.16
14S4600004	Integrated Circuit	U95	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
14S5A00802	Integrated Circuit	U102,U103,U96,U97	Telcordia Issue 1	Level I		4.00	0.026337	.5647	37969565.62
14S9341101	Integrated Circuit	U99	Telcordia Issue 1	Level I		1.00	0.026337	.1412	37969565.62
123132505D	Miscellaneous	Y1,Y3,Y4	Telcordia Issue 1	Level I		3.00	0.150000	2.4120	6666666.67
1231332721	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.8040	6666666.67
1231327053	Miscellaneous	Y5	Telcordia Issue 1	Level I		1.00	0.150000	.8040	6666666.67
1311071710	Semiconductor	Q14	Telcordia Issue 1	Level I		1.00	0.023950	.1284	41754194.40
14S6399041	Integrated Circuit	U66	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S3128422	Integrated Circuit	U63	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
1189633163	Capacitor	TC14,TC15,TC16,TC2,TC25,TC5,TC6,TC7	Telcordia Issue 1	Level I		8.00	0.004544	.1949	220055560.52
14S6366B00	Integrated Circuit	U46	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
14S4963501	Integrated Circuit	U62	Telcordia Issue 1	Level I		1.00	0.059802	.3205	16721916.86
16515A2991	Connection	CN29	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
1655305020	Connection	CN1,CN7	Telcordia Issue 1	Level I		2.00	0.002860	.0307	349680710.78
1652602105	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
1655003022	Connection	CN6	Telcordia Issue 1	Level I		1.00	0.001716	.0092	582801184.63
1655910031	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
165321320G	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.014871	.0797	67246290.53
1655306023	Connection	CN17	Telcordia Issue 1	Level I		1.00	0.003432	.0184	291400592.32
1655306020	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.003432	.0184	291400592.32
1655003010	Connection	CN20	Telcordia Issue 1	Level I		1.00	0.001716	.0092	582801184.63
1655302020	Connection	CN22	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
165251420B	Connection	CN23,CN24	Telcordia Issue 1	Level I		2.00	0.001144	.0123	874201776.95
1654818301	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
1654409103	Connection	CN27	Telcordia Issue 1	Level I		1.00	0.128689	.6898	7770682.46
1181610192	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.004544	.0244	220055560.52
1653002101	Connection	JP1	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
1653003101	Connection	JP11	Telcordia Issue 1	Level I		1.00	0.001716	.0092	582801184.63
1653003201	Connection	JP10&JP12,JP3&JP4, JP8	Telcordia Issue 1	Level I		3.00	0.001144	.0184	874201776.95
1653005201	Connection	JP9	Telcordia Issue 1	Level I		1.00	0.005720	.0307	174840355.39
165390003B	Connection	CN28	Telcordia Issue 1	Level I		1.00	0.001144	.0061	874201776.95
175011901M	Miscellaneous	BAT1	Telcordia Issue 1	Level I		1.00	0.900000	4.8240	1111111.11
1654907004	Connection	SATA1,SATA2	Telcordia Issue 1	Level I		2.00	0.004004	.0429	249771936.27

