

# **EPIC-5536**

## **Reliability Prediction Report**

### **(MTBF)**

Report NO : 08E070021

**7-3-2008**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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**I . Model Name:** EPIC-5536

**II . Prediction Date:** Jul. 3<sup>rd</sup>, 2008

**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: 26.1 degree 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:**

- EPIC-5536
  - Failure Rate: 16.255504 ppm
  - MTBF: 61,518 Hours

**AAEON Reliability Prediction Report**

**Part Number** 9697553600-DIP  
**Reference Des**  
**Date** 07. 3, 2008  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 26.10



**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
EPIC-5536	9697553600-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	16.255504	61,518

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**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653003101	Connection	JP1-JP3,JP5,JP7-JP9	Bellcore Issue 6	Level I		0.001808	7.00	.0778	0.012653	553245401.73
1653003201	Connection	JP4,JP6	Bellcore Issue 6	Level I		0.003615	2.00	.0445	0.007230	276622700.86
1653005100	Connection	CN11	Bellcore Issue 6	Level I		0.003013	1.00	.0185	0.003013	331947241.04
1653005201	Connection	CN15,CN16	Bellcore Issue 6	Level I		0.006025	2.00	.0741	0.012050	165973620.52
1653222220	Connection	CN26	Bellcore Issue 6	Level I		0.026510	1.00	.1631	0.026510	37721277.39
1654418100	Connection	CN5	Bellcore Issue 6	Level I		0.005423	1.00	.0334	0.005423	184415133.91
1655305020	Connection	CN18	Bellcore Issue 6	Level I		0.003013	1.00	.0185	0.003013	331947241.04
1653217204	Connection	CN19	Bellcore Issue 6	Level I		0.020485	1.00	.1260	0.020485	48815770.74
1653205203	Connection	CN12,CN13	Bellcore Issue 6	Level I		0.006025	2.00	.0741	0.012050	165973620.52
1655003010	Connection	CN14	Bellcore Issue 6	Level I		0.001808	1.00	.0111	0.001808	553245401.73
1653130424	Connection	CN4	Bellcore Issue 6	Level I		0.072301	1.00	.4448	0.072301	13831135.04
1653900034	Connection	CN25	Bellcore Issue 6	Level I		0.001205	1.00	.0074	0.001205	829868102.59
1654415305	Connection	CN29	Bellcore Issue 6	Level I		0.009038	1.00	.0556	0.009038	110649080.35
1653120229	Connection	CN3	Bellcore Issue 6	Level I		0.024100	1.00	.1483	0.024100	41493405.13
1653132228	Connection	CN3	Bellcore Issue 6	Level I		0.038560	1.00	.2372	0.038560	25933378.21
1655306023	Connection	CN10	Bellcore Issue 6	Level I		0.003615	1.00	.0222	0.003615	276622700.86
1655902030	Connection	CN24	Bellcore Issue 6	Level I		0.001205	1.00	.0074	0.001205	829868102.59
175011901C	Connection	CN24	Bellcore Issue 6	Level I		0.001205	1.00	.0074	0.001205	829868102.59
14S6200404	Integrated Circuit	U48	Bellcore Issue 6	Level I		0.177400	1.00	1.0913	0.177400	5636973.73
1652522203	Connection	CN7,CN8	Bellcore Issue 6	Level I		0.013255	2.00	.1631	0.026510	75442554.78
175910000B	Miscellaneous	BUZZ1	Bellcore Issue 6	Level I		0.150000	1.00	.9228	0.150000	6666666.67
1654907006	Connection	CN27,CN28	Bellcore Issue 6	Level I		0.004218	2.00	.0519	0.008435	237105172.17
105A512113	Resistor	R493	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A700003	Inductor	FB6,FB8,R422,R435,R494,R509,R-515,R517,R564,R568,R910	Bellcore Issue 6	Level I		0.002317	11.00	.1568	0.025486	431604896.39
105A722003	Resistor	R909	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A710053	Resistor	R523,R820	Bellcore Issue 6	Level I		0.013902	2.00	.1710	0.027803	71934149.40
105A503033	Resistor	R842,R857	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
105A503323	Resistor	R410	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A504763	Resistor	R565	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A505623	Resistor	R689,R718	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39

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**Temp. (°C)** 26.10

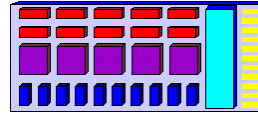


**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate,%	Failure Rate	MTBF, Unit
105A556003	Resistor	R394	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1212306030	Inductor	FB1,FB14,FB17,FB21-FB26,FB3,F-B4,FB7	Bellcore Issue 6	Level I		0.002317	12.00	.1710	0.027803	431604896.39
1212306032	Inductor	FB15,FB16,FB19,FB20,FB27-FB29	Bellcore Issue 6	Level I		0.002317	7.00	.0998	0.016219	431604896.39
1231332721	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	.9228	0.150000	6666666.67
1124533280	Capacitor	C555	Bellcore Issue 6	Level I		0.004634	1.00	.0285	0.004634	215802448.20
1124547280	Capacitor	C128,C84	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
1129747650	Capacitor	C252	Bellcore Issue 6	Level I		0.004634	1.00	.0285	0.004634	215802448.20
1301005440	Semiconductor	D1,D2,D25,D37,D8	Bellcore Issue 6	Level I		0.082150	5.00	2.5269	0.410752	12172784.30
1174510180	Capacitor	CP1-CP8	Bellcore Issue 6	Level I		0.004634	8.00	.2281	0.037071	215802448.20
1301005441	Semiconductor	D4,D5	Bellcore Issue 6	Level I		0.082150	2.00	1.0107	0.164301	12172784.30
1302001240	Semiconductor	D17,D20	Bellcore Issue 6	Level I		0.082150	2.00	1.0107	0.164301	12172784.30
14S4021301	Integrated Circuit	U51,U53,U58,U59	Bellcore Issue 6	Level I		0.064322	4.00	1.5828	0.257287	15546849.77
1314111712	Integrated Circuit	U21	Bellcore Issue 6	Level I	23.40	0.311026	1.00	1.9134	0.311026	3215165.52
1651203291	Connection	U48	Bellcore Issue 6	Level I		0.019280	1.00	.1186	0.019280	51866756.41
1653013202	Connection	CN2	Bellcore Issue 6	Level I		0.015665	1.00	.0964	0.015665	63836007.89
14S6334610	Integrated Circuit	U43	Bellcore Issue 6	Level I		0.033152	1.00	.2039	0.033152	30163853.14
14S6334610	Integrated Circuit	U41	Bellcore Issue 6	Level I	12.50	0.079236	1.00	.4874	0.079236	12620544.06
1301005442	Semiconductor	D21,D23,D36,D6,D7	Bellcore Issue 6	Level I		0.082150	5.00	2.5269	0.410752	12172784.30
1212306035	Inductor	FB10-FB13,FB39,FB40,FB9	Bellcore Issue 6	Level I		0.002317	7.00	.0998	0.016219	431604896.39
14S5A01400	Integrated Circuit	U61	Bellcore Issue 6	Level I		0.040410	1.00	.2486	0.040410	24746083.67
105A733033	Resistor	R525	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A503423	Resistor	R534	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1059703623	Resistor	R684,R715	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
1310390411	Semiconductor	Q44,Q51	Bellcore Issue 6	Level I		0.049290	2.00	.6064	0.098581	20287973.84
1315700212	Semiconductor	Q37,Q38,Q43,Q45-Q50,Q52,Q53	Bellcore Issue 6	Level I		0.082150	11.00	5.5591	0.903655	12172784.30
105A547003	Resistor	R569	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1540710382	Resistor	RP104-RP106,RP118-RP120,RP80-RP81	Bellcore Issue 6	Level I		0.002317	8.00	.1140	0.018535	431604896.39
1540733085	Resistor	RP100-RP103,RP97-RP99	Bellcore Issue 6	Level I		0.002317	7.00	.0998	0.016219	431604896.39
105A700103	Resistor	R508,R512,R516	Bellcore Issue 6	Level I		0.002317	3.00	.0428	0.006951	431604896.39
105A506823	Resistor	R841,R843	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39

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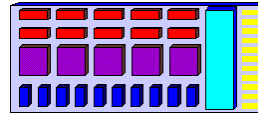


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**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1540722085	Resistor	RP122-RP129,RP131,RP133,RP13-5,RP137,RP27-RP42	Bellcore Issue 6	Level I		0.013134	28.00	2.2623	0.367749	76138888.55
1540700081	Resistor	RP77,RP78	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
105A708229	Resistor	R797-R803,R835-R838	Bellcore Issue 6	Level I		0.002317	11.00	.1568	0.025486	431604896.39
105A700139	Resistor	R496,R497,R500,R502,R503,R529-,R544,R545,R561,R567,R705,R723-,R780,R787-R795,R847,R854,R894-,R920,R936,R943,R946,R948	Bellcore Issue 6	Level I		0.002317	30.00	.4276	0.069508	431604896.39
105A704729	Resistor	R439,R446,R448,R449,R678,R700-,R706,R721,R724,R766-R770,R781-,R783,R796,R810,R812,R813,R815-,R817,R818,R827,R828,R830	Bellcore Issue 6	Level I		0.002317	27.00	.3848	0.062557	431604896.39
105A704729	Resistor	R846,R850,R864-R867,R889,R890-,R901,R925,R940,R941	Bellcore Issue 6	Level I		0.002317	12.00	.1710	0.027803	431604896.39
105A700009	Resistor	R247-R251,R387-R389,R392,R393-,R395,R404,R405,R408,R412,R414-,R418,R425,R426,R430,R431,R473-,R518,R521,R542,R571,R572	Bellcore Issue 6	Level I		0.002317	27.00	.3848	0.062557	431604896.39
105A700009	Resistor	R574,R577,R615-R643,R654,R659-,R699,R701,R707,R709,R712,R720-,R722,R725,R727,R741,R753,R763-,R771,R773,R774-R778,R786	Bellcore Issue 6	Level I		0.002317	53.00	.7554	0.122797	431604896.39
105A700009	Resistor	R807-R809,R814,R819,R824,R858-,R859,R86,R860,R868,R869,R88,R-89,R896,R90,R905,R908,R919,R92-2,R924,R928,R954,R955,R963	Bellcore Issue 6	Level I		0.002317	25.00	.3563	0.057923	431604896.39
105A701039	Resistor	R385,R452,R463,R476,R482,R489-,R505,R507,R510,R511,R513,R514-,R519,R520,R527,R530,R439-R541-,R547,R548,R551,R553-R558	Bellcore Issue 6	Level I		0.002317	28.00	.3991	0.064874	431604896.39
105A701039	Resistor	R560,R562,R648,R653,R657,R686-,R716,R717,R823,R825,R834,R893-,R913,R914,R917,R918,R930,R935-,R949,R952	Bellcore Issue 6	Level I		0.002317	20.00	.2851	0.046339	431604896.39
105A710009	Resistor	R440	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A703309	Resistor	R447,R451,R453-R456,R644,R779-,R852,R874,R877,R891,R892,R942-,R945	Bellcore Issue 6	Level I		0.002317	15.00	.2138	0.034754	431604896.39
105A701009	Resistor	R390,R401,R875,R876	Bellcore Issue 6	Level I		0.002317	4.00	.0570	0.009268	431604896.39
105A702239	Resistor	R883-R888	Bellcore Issue 6	Level I		0.002317	6.00	.0855	0.013902	431604896.39

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**Temp. (°C)** 26.10



**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A702229	Resistor	R420,R433,R546,R549,R897	Bellcore Issue 6	Level I		0.002317	5.00	.0713	0.011585	431604896.39
105A733009	Resistor	R406,R438,R443,R710,R713,R728-R743,R923	Bellcore Issue 6	Level I		0.002317	8.00	.1140	0.018535	431604896.39
1540782282	Resistor	RP107-RP113,RP117,RP121	Bellcore Issue 6	Level I		0.002317	9.00	.1283	0.020852	431604896.39
1129701690	Capacitor	C102,C104,C106-C109,C111,C114-C116,C118,C119,C122,C125,C127-C131,C133-C138,C153-C155,C157-C160,C162,C165,C167,C170	Bellcore Issue 6	Level I		0.004634	32.00	.9122	0.148284	215802448.20
1129701690	Capacitor	C171,C172,C248,C251,C155,C259-C260,C262,C286-C288,C291-C338-C342-C349,C374,C375,C381,C387-C391,C392,C396-C398,C403	Bellcore Issue 6	Level I		0.004634	77.00	2.1950	0.356808	215802448.20
1129701690	Capacitor	C404,C408-C415,C418-C421,C423-C431,C433-C440,C450-C464,C467-C471,C473,C474,C487,C490,C499-C501-C504,C508-C511,C513	Bellcore Issue 6	Level I		0.004634	64.00	1.8244	0.296568	215802448.20
1129701690	Capacitor	C519,C520,C523-C550,C553,C554-C559-C563,C567,C569,C571-C573-C584,C590,C592,C603,C612,C614-C629,C631,C632,C636,C637	Bellcore Issue 6	Level I		0.004634	52.00	1.4823	0.240961	215802448.20
1129701690	Capacitor	C640-C644,C647,C650,C651,C73-C76,C79,C83,C89,C92,C94-C98	Bellcore Issue 6	Level I		0.004634	19.00	.5416	0.088043	215802448.20
1129710090	Capacitor	C173,C245-C247,C483,C507,C522-C552,C582,C583	Bellcore Issue 6	Level I		0.004634	10.00	.2851	0.046339	215802448.20
1129722091	Capacitor	C242,C243,C389,C390,C400,C401-C605,C608,C609	Bellcore Issue 6	Level I		0.004634	9.00	.2566	0.041705	215802448.20
1129710390	Capacitor	C187-C194,C350-C357,C442,C444-C447,C448,C604,C606	Bellcore Issue 6	Level I		0.004634	22.00	.6271	0.101945	215802448.20
1129701790	Capacitor	C174,C175,C180,C181,C183,C184-C18-C204,C206,C217-C222,C230-C234,C253,C265-C268,C277-C280-C285,C441,C443,C445,C446	Bellcore Issue 6	Level I		0.004634	39.00	1.1118	0.180721	215802448.20
1129701790	Capacitor	C551,C624	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
1129715090	Capacitor	C186,C244,C250,C371-C373,C395-C402,C449,C465,C466,C481,C505-C506	Bellcore Issue 6	Level I		0.004634	14.00	.3991	0.064874	215802448.20
1129747090	Capacitor	C496-C498,C577,C578	Bellcore Issue 6	Level I		0.004634	5.00	.1425	0.023169	215802448.20
14S5A00401	Integrated Circuit	U54	Bellcore Issue 6	Level I		0.040410	1.00	.2486	0.040410	24746083.67
105A702263	Resistor	R396,R409	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39

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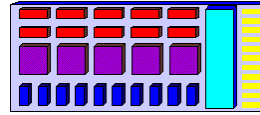
**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1121610060	Capacitor	C254,C75,C78,C88	Bellcore Issue 6	Level I		0.004634	4.00	.1140	0.018535	215802448.20
121230805D	Inductor	FB2	Bellcore Issue 6	Level I		0.088043	1.00	.5416	0.088043	11358023.59
1129710050	Capacitor	C103,C110,C112,C115,C117,C123-C124,C132,C164,C176,C182,C185-C257,C263,C264,C416,C422,C432-C472,C475,C488,C489,C564	Bellcore Issue 6	Level I		0.004634	23.00	.6556	0.106579	215802448.20
1129710050	Capacitor	C566,C570,C589,C591,C602,C615-C617,C628,C630,C82,C91,C93,C99	Bellcore Issue 6	Level I		0.004634	13.00	.3706	0.060240	215802448.20
14S5A12503	Integrated Circuit	U52	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
106B501031	Resistor	RT1,RT2	Bellcore Issue 6	Level I		0.012050	2.00	.1483	0.024100	82986810.26
15407822A0	Resistor	RP114-RP116	Bellcore Issue 6	Level I		0.013134	3.00	.2424	0.039402	76138888.55
1311119710	Semiconductor	Q41	Bellcore Issue 6	Level I	12.70	0.034888	1.00	.2146	0.034888	28663313.86
14S5801402	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.040410	1.00	.2486	0.040410	24746083.67
14S4820900	Integrated Circuit	U36	Bellcore Issue 6	Level I	13.00	0.086708	1.00	.5334	0.086708	11532914.01
14S4820900	Integrated Circuit	U40	Bellcore Issue 6	Level I	12.50	0.084412	1.00	.5193	0.084412	11846650.03
1122539980	Capacitor	C101,C120	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
1214309000	Capacitor	CH1-CH4	Bellcore Issue 6	Level I		0.004634	4.00	.1140	0.018535	215802448.20
1304101340	Semiconductor	D3,D33	Bellcore Issue 6	Level I		0.005391	2.00	.0663	0.010781	185508171.18
1305000140	Semiconductor	D10-D16,D9	Bellcore Issue 6	Level I		0.046339	8.00	2.2805	0.370709	21580244.82
105A710039	Resistor	R450,R878,R879,R934,R944,R947	Bellcore Issue 6	Level I		0.002317	6.00	.0855	0.013902	431604896.39
105A505109	Resistor	R573,R575,R576,R578-R614	Bellcore Issue 6	Level I		0.002317	40.00	.5701	0.092677	431604896.39
105A747009	Resistor	R655	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A507509	Resistor	R880-R882	Bellcore Issue 6	Level I		0.002317	3.00	.0428	0.006951	431604896.39
105A702209	Resistor	R461,R465,R469,R488,R524,R526-R59-R67,R679,R68,R680-R683,R69-R74,R861-R863	Bellcore Issue 6	Level I		0.002317	30.00	.4276	0.069508	431604896.39
1124433090	Capacitor	C574-C576,C579-C581	Bellcore Issue 6	Level I		0.004634	6.00	.1710	0.027803	215802448.20
1124547190	Capacitor	C514-C517	Bellcore Issue 6	Level I		0.004634	4.00	.1140	0.018535	215802448.20
105A549969	Resistor	R690-R693,R730-R733	Bellcore Issue 6	Level I		0.002317	8.00	.1140	0.018535	431604896.39
105A500139	Resistor	R407,R436,R437	Bellcore Issue 6	Level I		0.002317	3.00	.0428	0.006951	431604896.39
105A501039	Resistor	R55,R56,R685,R839,R840,R848,R849,R851,R855,R856	Bellcore Issue 6	Level I		0.002317	10.00	.1425	0.023169	431604896.39
14S5A00820	Integrated Circuit	U33	Bellcore Issue 6	Level I		0.040330	1.00	.2481	0.040330	24795626.87
1653925216	Connection	CN25	Bellcore Issue 6	Level I		0.030125	1.00	.1853	0.030125	33194724.10



**AAEON Reliability Prediction Report**

**Part Number** 9697553600-DIP  
**Reference Des**  
**Date** 07. 3, 2008  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 26.10



**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1121701080	Capacitor	C166,C258,C261,C500,C518,C585-,C586,C595-C598,C601,C613,C74-,C80,C86,C87	Bellcore Issue 6	Level I		0.005505	17.00	.5757	0.093583	181656644.94
1124410190	Capacitor	C100,C113,C195-C197,C205,C207-,C208,C214,C223-C226,C235-C240-,C249,C269-C272,C281-C284,C358-,C365,C587,C588,C593,C594	Bellcore Issue 6	Level I		0.005505	40.00	1.3546	0.220196	181656644.94
1124410190	Capacitor	C599,C600,C622,C623,C625	Bellcore Issue 6	Level I		0.005505	5.00	.1693	0.027524	181656644.94
105A701059	Resistor	R903	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A705139	Resistor	R784,R785,R853	Bellcore Issue 6	Level I		0.002317	3.00	.0428	0.006951	431604896.39
14S9820800	Integrated Circuit	U35	Bellcore Issue 6	Level I	19.60	0.122602	1.00	.7542	0.122602	8156445.95
1124522190	Capacitor	C105,C121,C177-C179	Bellcore Issue 6	Level I		0.004634	5.00	.1425	0.023169	215802448.20
14S4810001	Integrated Circuit	U44	Bellcore Issue 6	Level I	18.30	0.114647	1.00	.7053	0.114647	8722437.87
14S4810001	Integrated Circuit	U42	Bellcore Issue 6	Level I	12.60	0.084867	1.00	.5221	0.084867	11783144.75
105A510213	Resistor	R765	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A501133	Resistor	R391,R402	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
1121722090	Capacitor	C618,C77	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
14S5A12505	Integrated Circuit	U56	Bellcore Issue 6	Level I	23.50	0.143814	1.00	.8847	0.143814	6953448.71
14S4048502	Integrated Circuit	U55,U57	Bellcore Issue 6	Level I		0.064322	2.00	.7914	0.128643	15546849.77
14S2533100	Integrated Circuit	U23	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
14S4081110	Integrated Circuit	U27	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
16515A0995	Connection	CN1	Bellcore Issue 6	Level I		0.120501	1.00	.7413	0.120501	8298681.03
1315993311	Semiconductor	U60	Bellcore Issue 6	Level I		0.082150	1.00	.5054	0.082150	12172784.30
121230603S	Inductor	FB41,FB42	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
1315442910	Semiconductor	U72	Bellcore Issue 6	Level I	22.60	0.149606	1.00	.9203	0.149606	6684209.42
1315442910	Semiconductor	U71	Bellcore Issue 6	Level I		0.082150	1.00	.5054	0.082150	12172784.30
14S4888801	Integrated Circuit	U46	Bellcore Issue 6	Level I	12.00	0.082169	1.00	.5055	0.082169	12169970.69
14S3149103	Integrated Circuit	U28	Bellcore Issue 6	Level I	17.90	0.219285	1.00	1.3490	0.219285	4560283.10
14S4758300	Integrated Circuit	U62	Bellcore Issue 6	Level I	23.00	0.303342	1.00	1.8661	0.303342	3296611.34
123131435B	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	.9228	0.150000	6666666.67
1231325058	Miscellaneous	Y4,Y5,Y7	Bellcore Issue 6	Level I		0.150000	3.00	2.7683	0.450000	6666666.67
1231324555	Miscellaneous	Y6	Bellcore Issue 6	Level I		0.150000	1.00	.9228	0.150000	6666666.67

### AAEON Reliability Prediction Report

**Part Number** 9697553600-DIP  
**Reference Des**  
**Date** 07. 3, 2008  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 26.10

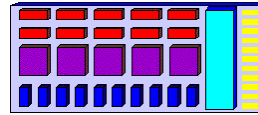


**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A551119	Resistor	R413,R424,R762	Bellcore Issue 6	Level I		0.002317	3.00	.0428	0.006951	431604896.39
14S4121601	Integrated Circuit	U50	Bellcore Issue 6	Level I		0.074030	1.00	.4554	0.074030	13508094.28
14S3020300	Integrated Circuit	U63	Bellcore Issue 6	Level I	20.20	0.254167	1.00	1.5636	0.254167	3934417.10
14S2921400	Integrated Circuit	U18	Bellcore Issue 6	Level I	13.60	0.165431	1.00	1.0177	0.165431	6044799.63
14S2921400	Integrated Circuit	U13	Bellcore Issue 6	Level I	13.50	0.164336	1.00	1.0110	0.164336	6085108.42
1314780512	Semiconductor	Q32	Bellcore Issue 6	Level I	18.90	0.081849	1.00	.5035	0.081849	12217648.48
1540722180	Resistor	RP144	Bellcore Issue 6	Level I		0.013134	1.00	.0808	0.013134	76138888.55
1189647180	Capacitor	C126	Bellcore Issue 6	Level I		0.004634	1.00	.0285	0.004634	215802448.20
1189647180	Capacitor	C619	Bellcore Issue 6	Level I	20.50	0.006730	1.00	.0414	0.006730	148589370.89
1129622050	Capacitor	C209-C213,C215,C216,C227-C229-C256,C273,C274,C289,C290,C339-C341,C366-C369,C626,C627	Bellcore Issue 6	Level I		0.004634	24.00	.6842	0.111213	215802448.20
1315970211	Integrated Circuit	U29,U30	Bellcore Issue 6	Level I		0.064322	2.00	.7914	0.128643	15546849.77
14S3128421	Integrated Circuit	U49	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
1189633192	Capacitor	C621,C648	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
14S4871204	Integrated Circuit	U47	Bellcore Issue 6	Level I	18.30	0.114647	1.00	.7053	0.114647	8722437.87
14S4553600	Integrated Circuit	U31	Bellcore Issue 6	Level I		0.041911	1.00	.2578	0.041911	23860196.21
14S4800002	Integrated Circuit	U12	Bellcore Issue 6	Level I	9.90	0.054834	1.00	.3373	0.054834	18236958.38
14S2362400	Integrated Circuit	U22	Bellcore Issue 6	Level I	13.80	0.167643	1.00	1.0313	0.167643	5965058.85
14S2362400	Integrated Circuit	U20	Bellcore Issue 6	Level I	14.40	0.174439	1.00	1.0731	0.174439	5732676.86
14S4642100	Integrated Circuit	U45	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
1189615150	Capacitor	C156,C161,C417,C611,C616	Bellcore Issue 6	Level I		0.004634	5.00	.1425	0.023169	215802448.20
105A530113	Resistor	R398	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1189647184	Capacitor	C81,C90	Bellcore Issue 6	Level I		0.004634	2.00	.0570	0.009268	215802448.20
1540751081	Resistor	RP79,RP82-RP96	Bellcore Issue 6	Level I		0.013134	16.00	1.2927	0.210142	76138888.55
1315889611	Semiconductor	U15	Bellcore Issue 6	Level I	29.30	0.175891	1.00	1.0820	0.175891	5685330.38
1315889611	Semiconductor	U14	Bellcore Issue 6	Level I	15.50	0.125081	1.00	.7695	0.125081	7994819.24
1752001601	Miscellaneous	FS1,FS2	Bellcore Issue 6	Level I		0.030000	2.00	.3691	0.060000	3333333.33
1654040002	Connection	CN17	Bellcore Issue 6	Level I		0.024100	1.00	.1483	0.024100	41493405.13
1654030003	Connection	CN9	Bellcore Issue 6	Level I		0.018075	1.00	.1112	0.018075	55324540.17
1655901000	Connection	CN20	Bellcore Issue 6	Level I		0.006025	1.00	.0371	0.006025	165973620.52

### AAEON Reliability Prediction Report

**Part Number** 9697553600-DIP  
**Reference Des**  
**Date** 07. 3, 2008  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 26.10



**Description** Top-level assembly  
**File Name** EPIC-5536.RPJ  
**Time** 2:35 下午  
**Failure Rate** 16.255504  
**MTBF** 61,518

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1121722650	Capacitor	C645	Bellcore Issue 6	Level I		0.004634	1.00	.0285	0.004634	215802448.20
1301053040	Semiconductor	D35	Bellcore Issue 6	Level I	24.30	0.046793	1.00	.2879	0.046793	21370621.59
1301053040	Semiconductor	D34	Bellcore Issue 6	Level I		0.024645	1.00	.1516	0.024645	40575947.67
121110336H	Inductor	L2	Bellcore Issue 6	Level I	12.20	0.110591	1.00	.6803	0.110591	9042334.50
121110336L	Inductor	L4-L6	Bellcore Issue 6	Level I		0.088043	3.00	1.6249	0.264130	11358023.59
1315731310	Semiconductor	Q34,Q35,U19	Bellcore Issue 6	Level I		0.082150	3.00	1.5161	0.246451	12172784.30
1315230300	Semiconductor	Q42	Bellcore Issue 6	Level I		0.082150	1.00	.5054	0.082150	12172784.30
105A566519	Resistor	R415	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A502839	Resistor	R417,R429	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
1050525524	Resistor	R419	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1050512124	Resistor	R427	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1050584514	Resistor	R432	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A703909	Resistor	R458-R460,R462,R464,R466,R467-R47-R472,R522,R645	Bellcore Issue 6	Level I		0.002317	12.00	.1710	0.027803	431604896.39
105A703039	Resistor	R475,R481	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
1050702704	Resistor	R672-R676	Bellcore Issue 6	Level I		0.002317	5.00	.0713	0.011585	431604896.39
14S3524700	Integrated Circuit	U64	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
14S9811500	Integrated Circuit	U68	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
14S5812300	Integrated Circuit	U69	Bellcore Issue 6	Level I		0.040940	1.00	.2519	0.040940	24425843.05
1314111711	Integrated Circuit	U24	Bellcore Issue 6	Level I	22.70	0.297691	1.00	1.8313	0.297691	3359182.72
105A705629	Resistor	R902	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
105A705639	Resistor	R911,R912	Bellcore Issue 6	Level I		0.002317	2.00	.0285	0.004634	431604896.39
105A704739	Resistor	R926,R927,R929,R931	Bellcore Issue 6	Level I		0.002317	4.00	.0570	0.009268	431604896.39
105A747039	Resistor	R933	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
1315002010	Semiconductor	Q9	Bellcore Issue 6	Level I		0.082150	1.00	.5054	0.082150	12172784.30
14S4070500	Integrated Circuit	U73	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77
1129722680	Capacitor	C568	Bellcore Issue 6	Level I		0.004634	1.00	.0285	0.004634	215802448.20
1300414840	Semiconductor	D38	Bellcore Issue 6	Level I		0.024645	1.00	.1516	0.024645	40575947.67
1540710084	Inductor	LN1-LN8	Bellcore Issue 6	Level I		0.088043	8.00	4.3330	0.704348	11358023.59
105A704709	Resistor	R566	Bellcore Issue 6	Level I		0.002317	1.00	.0143	0.002317	431604896.39
14S2200900	Integrated Circuit	U74	Bellcore Issue 6	Level I		0.064322	1.00	.3957	0.064322	15546849.77

