



AAEON Technology INC.  
ISO-9001/ISO-14001 Certified  
Industrial Automation PCs

# Tiger Series

## Reliability Prediction Report

### (MTBF)

Release Date: OCT.17, 2001

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Issue Stamp

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QA Manager

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QE Manager

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Test Engineer

# Reliability Prediction (MTBF)

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**I . Model Name:** TBOX-3300/TBOX-3303/TBOX-3306/TD-3212(T/M/MT)/TD-3215(T/M/MT)

**II . Prediction Date:** OCT. 17, 2001

**III . Prediction Site:** AAEON QE Dept.

**IV . Predicted by :** Linda Sun

**V . Equipment:** Relex Ver.7.1 Visual Reliability Software

## **VI. Simulation Environment:**

- Temperature: 25 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:

### • Box PC

Model		MTBF(hr)	Failure Rate	Note
TBOX-3300	AC	25,080	39.872236	Not include HDD/FDD/CDROM
	DC	25,213	39.661703	Not include HDD/FDD/CDROM
TBOX-3303	AC	24,619	40.618692	Not include HDD/FDD/CDROM
	DC	24,747	40.408159	Not include HDD/FDD/CDROM
TBOX-3306	AC	22,925	43.620379	Not include HDD/FDD/CDROM
	DC	22,775	43.907179	Not include HDD/FDD/CDROM

### • Front Panel(All) :

Model		MTBF(hr)	Failure Rate	Note
TD-3212	T	11,545	86.616271	Not include Touch Screen
	M	11,545	86.616271	Not include Finger Mouse
	MT	11,545	86.616271	Not include Touch Screen/ Finger Mouse
TD-3215	T	11,545	86.616271	Not include Touch Screen
	M	11,545	86.616271	Not include Finger Mouse
	MT	11,545	86.616271	Not include Touch Screen/ Finger Mouse

### • Slim CD-ROM:

Part Number: 978A160000

MTTF: 70,000

### • 2.5" FDD:

Part Number: 9784666610

MTBF(hr): 15,000

### • 3.5" FDD:

Part Number: 9784023530

MTTF: 30,000

### • HDD:

Part Number: 9783220000

MTBF(hr): 300,000

### • Touch Screen:

No MTBF value.

A total of 35,687,452 touches were made at the same location during reliability test.

### • Finger Mouse:

N/A.( The vender can not provide the MTBF value.)

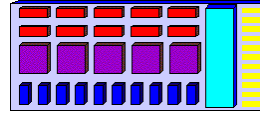
## IX. Key parts reference data :

Item	MTBF(hr)	Remark
Slim CD-ROM Part Number:978A160000	N/A	The MTTF is 70,000 power on hours(POH) when operated at 25°C temperature, nominal voltage, and other environmental limits, based on the following assumptions: -the operating duty cycle is 10% of power on time. During this time, the drive is either reading or seeking(random multiple block read) -the drive is in dormant mode(i.e. the laser diode is off and spindle motor not spinning, the drive is power on) for 90% of power on time.
2.5" FDD Part Number:9784666610	15,000	1. MTBF is defined as normal operation frequency. 2. Soft read test permits only one re-try. However, on-track permits three times re-try.
3.5" FDD Part Number:9784023530	N/A	The MTTF is 30,000 power on hours or more(for typical operation duty)
Slim HDD Part Number:9783220000	300,000	1. Power-on time: 250H/month or less 3000H/years or less. 2. Operating time: 20% or less of power-on time. 3. CSS operations: 50/day or less, Total 50,000 or less. 4. Power on/off: 1/day or more needed. 5. Environment: 5 to 55°C/8 to 90%. But humidity bulb temperature 29°C or less.
DC Power (for Small&Medium) Part Number:D36-8081	247,980	1. Test condition Ambient: 50°C/with 20CFM fan cooling, MIL-HDBK-217F 2. Environment: Ground Benign
AC Power (for Small&Medium) Part Number:1253900310	235,676	1. Test temperature: 25°C 2. Environment: Ground Benign
DC Power(for Large) Part Number: SDX-250-24	132,774	Test temperature: 25°C
AC Power(for Large) Part Number: SAP-6250P	138,030	Test temperature: 25°C
12"LCD Part Number:LTM12C275A	50,000	This value is not assurance time but inference value by following conditions. Conditions: 1. Ambient temperature: 25°C 2. Ambient humidity: 65%RH
15" LCD Part Number:L38XGC6V06	50,000	The life of the backlight is a minimum of 50,000 hours at the following conditions: 1. Working conditions 1.1 Ambient temperature: 25±5°C 1.2 Tube current(IL): 7mA or less 2. Definition of life 2.1 Brightness becomes 50% or below 50%of the minimum brightness value shown in optical specifications(Fujitsu) 2.2 The lamp cannot be lit by the breakdown voltage of 1500Vvms. 2.3 Lamp is flashing.
CPU FAN Part Number:COOLER FAN	43,371	1. Test condition: Input→5V DC, Temp→70°C 2. Failure Definition: 2.1 Fan not work 2.2 RPM Under 30% of original 2.3 Current=Over 30% of original
Touch Controller Board Part Number:CTR_BRD	65,000	Test temperature: 25°C
Touch Screen	N/A	A total of 35,687,452 touches were made at the same location during this test.

## X. Prediction Table:

### AAEON Reliability Prediction Report

**Part Number** TBOX-3300  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



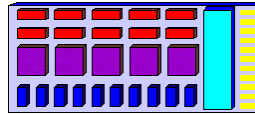
**Description** Top-level assembly  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 43.904812  
**MTBF** 22,777

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TBOX-3300	TBOX-3300	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	43.904812	22,777
MB-668_366CPU_64M-EM	9697668080	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	12.582258	79,477
MB-668 Riser Card	9691666624	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.179795	5,561,900



**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

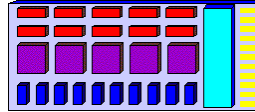


**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129701080	Capacitor	CO1-12,C10,C103,C17,C356,C48--50,C52,C72,C88	Bellcore Issue 6	Level I		0.005466	22.00	.9557	0.120244	182961702.19
1141601090	Capacitor	C69	Bellcore Issue 6	Level I		0.002357	1.00	.0187	0.002357	424256814.77
1129747650	Capacitor	C5,C7,CP1-12,CP25	Bellcore Issue 6	Level I		0.005466	15.00	.6516	0.081984	182961702.19
1174533080	Capacitor	CP16-24	Bellcore Issue 6	Level I		0.001060	36.00	.3033	0.038168	943198589.05
1124427080	Capacitor	C388-391	Bellcore Issue 6	Level I		0.001060	4.00	.0337	0.004241	943198589.05
1141610050	Capacitor	C224,C361,C392,C436,C51,C76-77-CT1-5,TC4-8	Bellcore Issue 6	Level I		0.002357	18.00	.3372	0.042427	424256814.77
1124410080	Capacitor	C1-2,C181-185,C187-194,C241-26-4,C438	Bellcore Issue 6	Level I		0.001060	40.00	.3371	0.042409	943198589.05
1142610060	Capacitor	C3,C6	Bellcore Issue 6	Level I		0.001587	2.00	.0252	0.003174	630075050.70
1124501780	Capacitor	C351-354,C365-366,C378,C38,C4,-C58,C67-68	Bellcore Issue 6	Level I		0.001060	12.00	.1011	0.012723	943198589.05
1122701680	Capacitor	C102,C108-111,C114-117,C11-13,-C144,C158-165,C167-C168,C170--178,C16,C186,C21,C217-222,C226--227,C229-232,C234-235,C239,C2-82-289,C298-341,C31-37,C363,C3-67-370,C374-376,C379-387,C39-47-,C393-394,C437,C446-451,C475-4-84,C487-496,C506-513,C61-62,C71-C79-80,C87,C9	Bellcore Issue 6	Level I		0.001598	179.00	2.2728	0.285964	625953979.55
1124420080	Capacitor	C134-135,C29	Bellcore Issue 6	Level I		0.001060	3.00	.0253	0.003181	943198589.05
1124601860	Capacitor	C19-20,C75,C78	Bellcore Issue 6	Level I		0.001060	4.00	.0337	0.004241	943198589.05
1124447080	Capacitor	C100,C145-148,C205-213,C97-99	Bellcore Issue 6	Level I		0.001060	17.00	.1432	0.018024	943198589.05
1124547180	Capacitor	C25-C28	Bellcore Issue 6	Level I		0.001060	4.00	.0337	0.004241	943198589.05
1125501760	Capacitor	C105,C74,C92	Bellcore Issue 6	Level I		0.000864	3.00	.0206	0.002591	1157799909.29
1124510180	Capacitor	C106,C107,C112,C113,C118-C133-C197-C204,C266-C281	Bellcore Issue 6	Level I		0.001060	44.00	.3708	0.046650	943198589.05
1124522180	Capacitor	C63	Bellcore Issue 6	Level I		0.001060	1.00	.0084	0.001060	943198589.05
1124547280	Capacitor	C64	Bellcore Issue 6	Level I		0.001060	1.00	.0084	0.001060	943198589.05
1141647080	Capacitor	C101,C104,C70,C73,C86,C89	Bellcore Issue 6	Level I		0.002357	6.00	.1124	0.014142	424256814.77
1149622180	Capacitor	C395-396,C81-84	Bellcore Issue 6	Level I		0.004535	6.00	.2163	0.027212	220487045.01
1124518180	Capacitor	C290-297,C342-350	Bellcore Issue 6	Level I		0.001060	17.00	.1432	0.018024	943198589.05
1124415080	Capacitor	C179-180,C214-215,C416	Bellcore Issue 6	Level I		0.001060	5.00	.0421	0.005301	943198589.05
1124433080	Capacitor	C195-196,C237-238,C29	Bellcore Issue 6	Level I		0.001060	5.00	.0421	0.005301	943198589.05

**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



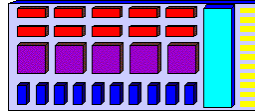
**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1141622060	Capacitor	C228	Bellcore Issue 6	Level I		0.002357	1.00	.0187	0.002357	424256814.77
1124527180	Capacitor	C410-411	Bellcore Issue 6	Level I		0.001060	2.00	.0169	0.002120	943198589.05
1122747880	Capacitor	C413	Bellcore Issue 6	Level I		0.001598	1.00	.0127	0.001598	625953979.55
1302000340	Semiconductor	D1	Bellcore Issue 6	Level I		0.027212	1.00	.2163	0.027212	36747840.84
1300581740	Semiconductor	D12-13,D3	Bellcore Issue 6	Level I		0.023881	3.00	.5694	0.071643	41874327.58
1301005440	Semiconductor	D4-5	Bellcore Issue 6	Level I		0.023881	2.00	.3796	0.047762	41874327.58
1300414840	Semiconductor	D8-11,D14,D18,D18-20,D6	Bellcore Issue 6	Level I		0.023881	9.00	1.7082	0.214929	41874327.58
1305099140	Semiconductor	D15-17	Bellcore Issue 6	Level I		0.023881	3.00	.5694	0.071643	41874327.58
1752000700	Miscellaneous	FS1	Bellcore Issue 6	Level I		0.030000	1.00	.2384	0.030000	33333333.33
1752311000	Miscellaneous	FS2-4	Bellcore Issue 6	Level I		0.030000	3.00	.7153	0.090000	33333333.33
1213130008	Inductor	LN1-9	Bellcore Issue 6	Level I		0.002268	36.00	.6488	0.081637	440974090.03
121308050	Inductor	FB1-7,L1-5,L7-9,L16-25,L27-33,L36-41,L46	Bellcore Issue 6	Level I		0.002268	39.00	.7029	0.088441	440974090.03
1212308057	Inductor	L38	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1212306035	Inductor	L48	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1212312063	Inductor	L34	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1212306034	Inductor	L26,R189	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
1212306031	Inductor	L10-12	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
1211102200	Inductor	L13	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1212306030	Inductor	L42-45	Bellcore Issue 6	Level I		0.002268	4.00	.0721	0.009071	440974090.03
1211102767	Inductor	L47	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1315500311	Semiconductor	Q2,Q3	Bellcore Issue 6	Level I	15.00	0.120000	2.00	1.9074	0.240000	8333333.33
1314838410	Integrated Circuit	Q4-6	Bellcore Issue 6	Level I	15.00	0.168759	3.00	4.0237	0.506276	5925622.25
1315700210	Semiconductor	Q7-8	Bellcore Issue 6	Level I		0.159207	2.00	2.5307	0.318413	6281149.14
1310390410	Semiconductor	Q1,Q9-10,Q13-14,Q16	Bellcore Issue 6	Level I		0.023881	6.00	1.1388	0.143286	41874327.58
1310222210	Semiconductor	Q11-12,Q15	Bellcore Issue 6	Level I		0.023881	3.00	.5694	0.071643	41874327.58
1540727280	Resistor	RN1-2,RN25,RN27,RN70-71	Bellcore Issue 6	Level I		0.006246	6.00	.2978	0.037476	160102772.00
1540782280	Resistor	RN12-24,RN26,RN3-9,RN61-62	Bellcore Issue 6	Level I		0.006246	23.00	1.1417	0.143658	160102772.00
1540756280	Resistor	RN10-11	Bellcore Issue 6	Level I		0.006246	2.00	.0993	0.012492	160102772.00
1540747282	Resistor	RN29-30,RN63-64,RN67-68,RN89--90,RN93-94	Bellcore Issue 6	Level I		0.006246	10.00	.4964	0.062460	160102772.00
1540756080	Resistor	RN31-58	Bellcore Issue 6	Level I		0.006246	28.00	1.3900	0.174888	160102772.00



**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

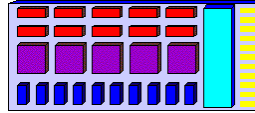


**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1540715380	Resistor	RN60	Bellcore Issue 6	Level I		0.006246	1.00	.0496	0.006246	160102772.00
1540733082	Resistor	RN65-66,RN69,RN72-77,RN80-86,-RN88,RN91-92,RN95	Bellcore Issue 6	Level I		0.006246	20.00	.9928	0.124920	160102772.00
1540701380	Resistor	RN78,RN87	Bellcore Issue 6	Level I		0.006246	2.00	.0993	0.012492	160102772.00
105A501033	Resistor	R142-143,R145-146,R149,R153,R-53	Bellcore Issue 6	Level I		0.002268	7.00	.1262	0.015874	440974090.03
105A705603	Resistor	R1,R87-88	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
105A700133	Resistor	R11,R122-128,R159-160,R17,R190-,R2,R202,R27,R284-285,R295-296-,R305,R31,R32,R353,R359,R38,R-52,R72-R74,R79	Bellcore Issue 6	Level I		0.002268	33.00	.5948	0.074834	440974090.03
105A700003	Resistor	R131,R133,R144,R191-192,R203,-R207,R22,R225-233,R235,R237,R-239,R241,R243,R282,R287,R299,-R3,R339-340,R360,R361,R363,R3-64,R83	Bellcore Issue 6	Level I		0.002268	33.00	.5948	0.074834	440974090.03
105A702723	Resistor	R18,R25-26,R29,R35,R4,R49,R57,-R61,R8-9	Bellcore Issue 6	Level I		0.002268	11.00	.1983	0.024945	440974090.03
105A704723	Resistor	R13,R132,R134,R136-137,R156,R-158,R187-188,R193,R20,R234,R2-70-274,R33,R368-R370,R5,R50,R5-1,R63	Bellcore Issue 6	Level I		0.002268	25.00	.4506	0.056693	440974090.03
105A733003	Resistor	R275-279,R288,R30,R300,R302,R-34,R36-37,R6-7,R77,R80,R85,R89-94,R97	Bellcore Issue 6	Level I		0.002268	24.00	.4326	0.054425	440974090.03
105A702203	Resistor	R106,R14,R351,R60	Bellcore Issue 6	Level I		0.002268	4.00	.0721	0.009071	440974090.03
105A710033	Resistor	R16,R309-310,R45	Bellcore Issue 6	Level I		0.002268	4.00	.0721	0.009071	440974090.03
105A702053	Resistor	R19	Bellcore Issue 6	Level I		0.013606	1.00	.1081	0.013606	73495681.67
105A701533	Resistor	R21,R292,R294,R58-59	Bellcore Issue 6	Level I		0.002268	5.00	.0901	0.011339	440974090.03
105A547033	Resistor	R114-115,R24	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
105A710003	Resistor	R157,R28,R47,R75-76,R81	Bellcore Issue 6	Level I		0.002268	6.00	.1081	0.013606	440974090.03
105A507503	Resistor	R40-41,R95	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
105A515003	Resistor	R43-44,R96	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
105A701033	Resistor	R101,R138-141,R152,R161,R217,-R221,R336,R46	Bellcore Issue 6	Level I		0.002268	11.00	.1983	0.024945	440974090.03
105A707503	Resistor	R212-215,R54-56	Bellcore Issue 6	Level I		0.002268	7.00	.1262	0.015874	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

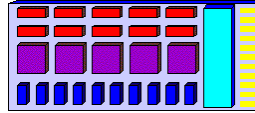


**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A703303	Resistor	R1,R216,R220,R267,R289-290,R3-73,R62,R66	Bellcore Issue 6	Level I		0.002268	9.00	.1622	0.020409	440974090.03
105A722003	Resistor	R268-269	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
105A556003	Resistor	R65	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A768003	Resistor	R68	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A715003	Resistor	R346-347,R70-71,R78	Bellcore Issue 6	Level I		0.002268	5.00	.0901	0.011339	440974090.03
105A701003	Resistor	R105,R130,R135,R148,R163-164,-R291,R293,R343,R98-99	Bellcore Issue 6	Level I		0.002268	11.00	.1983	0.024945	440974090.03
105A504763	Resistor	R102-103	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
105A549913	Resistor	R104	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A705623	Resistor	R107,R110,R219,R224,R304	Bellcore Issue 6	Level I		0.002268	5.00	.0901	0.011339	440974090.03
105A571533	Resistor	R108	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A528713	Resistor	R109	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A707523	Resistor	R111	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1059518701	Resistor	R112	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
1059511501	Resistor	R113	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A756033	Resistor	R116-117	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
1059512401	Resistor	R119-119,R121	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
1059524961	Resistor	R120	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A710053	Resistor	R129	Bellcore Issue 6	Level I		0.013606	1.00	.1081	0.013606	73495681.67
1059502831	Resistor	R147	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A521033	Resistor	R150	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A590923	Resistor	R151	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A560423	Resistor	R154-155	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
105A704703	Resistor	R176-177,R183-184,R186	Bellcore Issue 6	Level I		0.002268	5.00	.0901	0.011339	440974090.03
105A501723	Resistor	R198	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A751033	Resistor	R200-201,R204,R23	Bellcore Issue 6	Level I		0.002268	4.00	.0721	0.009071	440974090.03
105A505103	Resistor	R100,R208-211,R253-254,R256,-R259,R67	Bellcore Issue 6	Level I		0.002268	10.00	.1802	0.022677	440974090.03
105A747003	Resistor	R223	Bellcore Issue 6	Level I		0.002268	1.00	.0180	0.002268	440974090.03
105A705033	Resistor	R297,R301,R337	Bellcore Issue 6	Level I		0.002268	3.00	.0541	0.006803	440974090.03
105A702223	Resistor	R307,R344	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

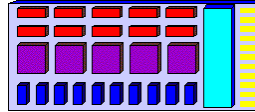


**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1059511001	Resistor	R349-350	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
1149633190	Capacitor	TC11-13	Bellcore Issue 6	Level I		0.004933	3.00	.1176	0.014799	202722669.92
14S4237120	Integrated Circuit	U1	Bellcore Issue 6	Level I	12.00	0.077420	1.00	.6153	0.077420	12916624.12
14S5801400	Integrated Circuit	U2	Bellcore Issue 6	Level I	3.00	0.045117	1.00	.3586	0.045117	22164547.86
14S5900700	Integrated Circuit	U3	Bellcore Issue 6	Level I	13.00	0.115258	1.00	.9160	0.115258	8676209.89
14S5500800	Integrated Circuit	U4	Bellcore Issue 6	Level I	7.00	0.088777	1.00	.7056	0.088777	11264182.63
14S4070600	Integrated Circuit	U5	Bellcore Issue 6	Level I	7.00	0.097911	1.00	.7782	0.097911	10213356.27
14S5207402	Integrated Circuit	U6	Bellcore Issue 6	Level I	3.00	0.075610	1.00	.6009	0.075610	13225687.84
14S5501400	Integrated Circuit	U9	Bellcore Issue 6	Level I	15.00	0.125285	1.00	.9957	0.125285	7981782.34
14S4244300	Integrated Circuit	U10	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9399	0.118260	8455912.86
14S4900000	Integrated Circuit	U12	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9399	0.118260	8455912.86
14S5512500	Integrated Circuit	U13	Bellcore Issue 6	Level I	9.00	0.096820	1.00	.7695	0.096820	10328441.13
14S3155300	Integrated Circuit	U15	Bellcore Issue 6	Level I	15.00	0.168759	1.00	1.3412	0.168759	5925622.25
14S9055500	Integrated Circuit	u16	Bellcore Issue 6	Level I	7.00	0.069574	1.00	.5530	0.069574	14373251.85
14S4021303	Integrated Circuit	U17-18,U34-35	Bellcore Issue 6	Level I	8.00	0.104969	4.00	3.3371	0.419877	9526603.44
14S4397703	Integrated Circuit	U19	Bellcore Issue 6	Level I	11.00	0.073313	1.00	.5827	0.073313	13640096.66
14S4378100	Integrated Circuit	U22	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.5302	0.192530	5193998.23
14S3924800	Integrated Circuit	U25	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.5302	0.192530	5193998.23
14S4813902	Integrated Circuit	U26	Bellcore Issue 6	Level I	14.00	0.086245	1.00	.6854	0.086245	11594908.63
14S6334600	Integrated Circuit	U27	Bellcore Issue 6	Level I	10.00	0.120485	1.00	.9576	0.120485	8299772.79
14S3200400	Integrated Circuit	U28	Bellcore Issue 6	Level I	13.00	0.147672	1.00	1.1737	0.147672	6771770.53
14S4866100	Integrated Circuit	U29	Bellcore Issue 6	Level I	9.00	0.065672	1.00	.5219	0.065672	15227088.64
14S4048500	Integrated Circuit	U20-21,U30-33	Bellcore Issue 6	Level I	9.00	0.112485	6.00	5.3640	0.674911	8890058.82
14S4911216	Integrated Circuit	U36	Bellcore Issue 6	Level I	16.00	0.180291	1.00	1.4329	0.180291	5546598.71
14S4881000	Integrated Circuit	U37	Bellcore Issue 6	Level I	18.00	0.205515	1.00	1.6334	0.205515	4865835.10
1315995610	Semiconductor	U40	Bellcore Issue 6	Level I	7.00	0.193788	1.00	1.5402	0.193788	5160285.71
14S3181900	Integrated Circuit	U41	Bellcore Issue 6	Level I	3.00	0.147672	1.00	1.1737	0.147672	6771770.53
1315995310	Semiconductor	U43	Bellcore Issue 6	Level I	11.00	0.215958	1.00	1.7164	0.215958	4630523.11
1233350050	Miscellaneous	Y5	Bellcore Issue 6	Level I		0.150000	1.00	1.1922	0.150000	6666666.67
1233349160	Miscellaneous	Y7	Bellcore Issue 6	Level I		0.150000	1.00	1.1922	0.150000	6666666.67
1653007204	Connection	CN28	Bellcore Issue 6	Level I		0.007966	1.00	.0633	0.007966	125540038.67

### AAEON Reliability Prediction Report

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



**Description** CPU Board  
**File Name** TBOX-3300.RPJ  
**Time** 6:41 PM  
**Failure Rate** 12.582258  
**MTBF** 79,477

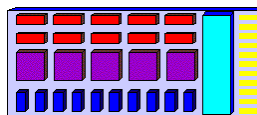
Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1651204493	Connection	U14_SKT	Bellcore Issue 6	Level I		0.025035	1.00	.1990	0.025035	39944557.76
1651203291	Connection	U8_SKT	Bellcore Issue 6	Level I		0.018207	1.00	.1447	0.018207	54923766.92
1059503001	Resistor	R179,R185	Bellcore Issue 6	Level I		0.002268	2.00	.0360	0.004535	440974090.03
14S5A24540	Integrated Circuit	U7	Bellcore Issue 6	Level I	6.00	0.091286	1.00	.7255	0.091286	10954631.16
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001138	1.00	.0090	0.001138	878780270.71
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	7.1529	0.900000	1111111.11
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.1922	0.150000	6666666.67
1655420020	Connection	CN2	Bellcore Issue 6	Level I		0.011379	1.00	.0904	0.011379	87878027.07
1653205200	Connection	CN5	Bellcore Issue 6	Level I		0.005690	1.00	.0452	0.005690	175756054.14
1654808300	Connection	CN6	Bellcore Issue 6	Level I		0.005690	1.00	.0452	0.005690	175756054.14
1653217202	Connection	CN7	Bellcore Issue 6	Level I		0.019345	1.00	.1537	0.019345	51692957.10
1653006100	Connection	CN8,JP16	Bellcore Issue 6	Level I		0.003414	2.00	.0543	0.006828	292926756.90
1654922600	Connection	CN9	Bellcore Issue 6	Level I		0.014793	1.00	.1176	0.014793	67598482.36
1654449501	Connection	CN10	Bellcore Issue 6	Level I		0.015931	1.00	.1266	0.015931	62770019.34
1654612300	Connection	CN11	Bellcore Issue 6	Level I		0.006828	1.00	.0543	0.006828	146463378.45
1653225200	Connection	CN12	Bellcore Issue 6	Level I		0.028449	1.00	.2261	0.028449	35151210.83
1653003100	Connection	JP1,JP6-7	Bellcore Issue 6	Level I		0.001707	3.00	.0407	0.005121	585853513.81
1655003000	Connection	CN13,CN24	Bellcore Issue 6	Level I		0.001707	2.00	.0271	0.003414	585853513.81
1652508202	Connection	CN14	Bellcore Issue 6	Level I		0.004552	1.00	.0362	0.004552	219695067.68
1653222200	Connection	CN15-16	Bellcore Issue 6	Level I		0.025035	2.00	.3979	0.050069	39944557.76
1653220203	Connection	CN17	Bellcore Issue 6	Level I		0.022759	1.00	.1809	0.022759	43939013.54
1654418500	Connection	CN20	Bellcore Issue 6	Level I		0.005121	1.00	.0407	0.005121	195284504.60
1654409001	Connection	CN19	Bellcore Issue 6	Level I		0.005121	1.00	.0407	0.005121	195284504.60
1653013200	Connection	CN21	Bellcore Issue 6	Level I		0.014793	1.00	.1176	0.014793	67598482.36
1654630200	Connection	CN23	Bellcore Issue 6	Level I		0.017069	1.00	.1357	0.017069	58585351.38
1655305020	Connection	CN25	Bellcore Issue 6	Level I		0.002845	1.00	.0226	0.002845	351512108.28
1655306020	Connection	CN26-27	Bellcore Issue 6	Level I		0.003414	2.00	.0543	0.006828	292926756.90
1651607920	Connection	CPU1	Bellcore Issue 6	Level I		0.210519	1.00	1.6731	0.210519	4750163.63
1189622110	Capacitor	C236	Bellcore Issue 6	Level I		0.042673	1.00	.3392	0.042673	23434140.55
1119610293	Capacitor	C53-54	Bellcore Issue 6	Level I		0.071121	2.00	1.1305	0.142243	14060484.33
1119610291	Capacitor	C371-373,C56-57,C59-60,C65-66	Bellcore Issue 6	Level I		0.075338	9.00	5.3889	0.678044	13273483.15





### AAEON Reliability Prediction Report

**Part Number** TBOX-3303  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



**Description** Top-level assembly  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 44.651270  
**MTBF** 22,396

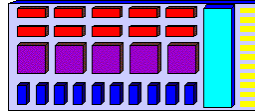
Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TBOX-3303	TBOX-3303	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	44.651270	22,396
MB-668_CPU_128MEM	9697668080	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	12.932295	77,326
MB-668 Riser Card	9691666624	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.179795	5,561,900
Power Board	96910P3K04	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.010241	97,642,252
FDD&CD-ROM(Input)Board	96910P3K05	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.114227	8,754,491
FDD&CD-ROM(Output)Board	9691666612	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.089328	11,194,653
96P PC to LCD Board	9691666605	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.112071	8,922,929
Retractable HDD Board Module	96910P3K00	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.053483	18,697,453
Power Board	96910P3K01	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.017069	58,585,351





**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

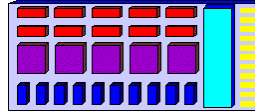


**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129701080	Capacitor	CO1-12,C10,C103,C17,C356,C48--50,C52,C72,C88	Bellcore Issue 6	Level I		0.005466	22.00	.9298	0.120244	182961702.19
1141601090	Capacitor	C69	Bellcore Issue 6	Level I		0.002357	1.00	.0182	0.002357	424256814.77
1129747650	Capacitor	C5,C7,CP1-12,CP25	Bellcore Issue 6	Level I		0.005466	15.00	.6340	0.081984	182961702.19
1174533080	Capacitor	CP16-24	Bellcore Issue 6	Level I		0.001060	36.00	.2951	0.038168	943198589.05
1124427080	Capacitor	C388-391	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1141610050	Capacitor	C224,C361,C392,C436,C51,C76-77-CT1-5,TC4-8	Bellcore Issue 6	Level I		0.002357	18.00	.3281	0.042427	424256814.77
1124410080	Capacitor	C1-2,C181-185,C187-194,C241-26-4,C438	Bellcore Issue 6	Level I		0.001060	40.00	.3279	0.042409	943198589.05
1142610060	Capacitor	C3,C6	Bellcore Issue 6	Level I		0.001587	2.00	.0245	0.003174	630075050.70
1124501780	Capacitor	C351-354,C365-366,C378,C38,C4,-C58,C67-68	Bellcore Issue 6	Level I		0.001060	12.00	.0984	0.012723	943198589.05
1122701680	Capacitor	C102,C108-111,C114-117,C11-13,-C144,C158-165,C167-C168,C170--178,C16,C186,C21,C217-222,C226--227,C229-232,C234-235,C239,C2-82-289,C298-341,C31-37,C363,C3-67-370,C374-376,C379-387,C39-47-,C393-394,C437,C446-451,C475-4-84,C487-496,C506-513,C61-62,C71-C79-80,C87,C9	Bellcore Issue 6	Level I		0.001598	179.00	2.2112	0.285964	625953979.55
1124420080	Capacitor	C134-135,C29	Bellcore Issue 6	Level I		0.001060	3.00	.0246	0.003181	943198589.05
1124601860	Capacitor	C19-20,C75,C78	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1124447080	Capacitor	C100,C145-148,C205-213,C97-99	Bellcore Issue 6	Level I		0.001060	17.00	.1394	0.018024	943198589.05
1124547180	Capacitor	C25-C28	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1125501760	Capacitor	C105,C74,C92	Bellcore Issue 6	Level I		0.000864	3.00	.0200	0.002591	1157799909.29
1124510180	Capacitor	C106,C107,C112,C113,C118-C133-C197-C204,C266-C281	Bellcore Issue 6	Level I		0.001060	44.00	.3607	0.046650	943198589.05
1124522180	Capacitor	C63	Bellcore Issue 6	Level I		0.001060	1.00	.0082	0.001060	943198589.05
1124547280	Capacitor	C64	Bellcore Issue 6	Level I		0.001060	1.00	.0082	0.001060	943198589.05
1141647080	Capacitor	C101,C104,C70,C73,C86,C89	Bellcore Issue 6	Level I		0.002357	6.00	.1094	0.014142	424256814.77
1149622180	Capacitor	C395-396,C81-84	Bellcore Issue 6	Level I		0.004535	6.00	.2104	0.027212	220487045.01
1124518180	Capacitor	C290-297,C342-350	Bellcore Issue 6	Level I		0.001060	17.00	.1394	0.018024	943198589.05
1124415080	Capacitor	C179-180,C214-215,C416	Bellcore Issue 6	Level I		0.001060	5.00	.0410	0.005301	943198589.05
1124433080	Capacitor	C195-196,C237-238,C29	Bellcore Issue 6	Level I		0.001060	5.00	.0410	0.005301	943198589.05

**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

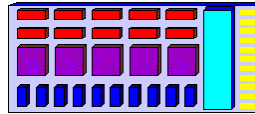


**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1141622060	Capacitor	C228	Bellcore Issue 6	Level I		0.002357	1.00	.0182	0.002357	424256814.77
1124527180	Capacitor	C410-411	Bellcore Issue 6	Level I		0.001060	2.00	.0164	0.002120	943198589.05
1122747880	Capacitor	C413	Bellcore Issue 6	Level I		0.001598	1.00	.0124	0.001598	625953979.55
1302000340	Semiconductor	D1	Bellcore Issue 6	Level I		0.027212	1.00	.2104	0.027212	36747840.84
1300581740	Semiconductor	D12-13,D3	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1301005440	Semiconductor	D4-5	Bellcore Issue 6	Level I		0.023881	2.00	.3693	0.047762	41874327.58
1300414840	Semiconductor	D8-11,D14,D18,D18-20,D6	Bellcore Issue 6	Level I		0.023881	9.00	1.6620	0.214929	41874327.58
1305099140	Semiconductor	D15-17	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1752000700	Miscellaneous	FS1	Bellcore Issue 6	Level I		0.030000	1.00	.2320	0.030000	33333333.33
1752311000	Miscellaneous	FS2-4	Bellcore Issue 6	Level I		0.030000	3.00	.6959	0.090000	33333333.33
1213130008	Inductor	LN1-9	Bellcore Issue 6	Level I		0.002268	36.00	.6313	0.081637	440974090.03
121308050	Inductor	FB1-7,L1-5,L7-9,L16-25,L27-33,L36-41,L46	Bellcore Issue 6	Level I		0.002268	39.00	.6839	0.088441	440974090.03
1212308057	Inductor	L38	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306035	Inductor	L48	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212312063	Inductor	L34	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306034	Inductor	L26,R189	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1212306031	Inductor	L10-12	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
1211102200	Inductor	L13	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306030	Inductor	L42-45	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
1211102767	Inductor	L47	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1315500311	Semiconductor	Q2,Q3	Bellcore Issue 6	Level I	15.00	0.120000	2.00	1.8558	0.240000	8333333.33
1314838410	Integrated Circuit	Q4-6	Bellcore Issue 6	Level I	15.00	0.168759	3.00	3.9148	0.506276	5925622.25
1315700210	Semiconductor	Q7-8	Bellcore Issue 6	Level I		0.159207	2.00	2.4622	0.318413	6281149.14
1310390410	Semiconductor	Q1,Q9-10,Q13-14,Q16	Bellcore Issue 6	Level I		0.023881	6.00	1.1080	0.143286	41874327.58
1310222210	Semiconductor	Q11-12,Q15	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1540727280	Resistor	RN1-2,RN25,RN27,RN70-71	Bellcore Issue 6	Level I		0.006246	6.00	.2898	0.037476	160102772.00
1540782280	Resistor	RN12-24,RN26,RN3-9,RN61-62	Bellcore Issue 6	Level I		0.006246	23.00	1.1108	0.143658	160102772.00
1540756280	Resistor	RN10-11	Bellcore Issue 6	Level I		0.006246	2.00	.0966	0.012492	160102772.00
1540747282	Resistor	RN29-30,RN63-64,RN67-68,RN89--90,RN93-94	Bellcore Issue 6	Level I		0.006246	10.00	.4830	0.062460	160102772.00
1540756080	Resistor	RN31-58	Bellcore Issue 6	Level I		0.006246	28.00	1.3523	0.174888	160102772.00

### AAEON Reliability Prediction Report

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

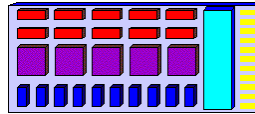


**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1540715380	Resistor	RN60	Bellcore Issue 6	Level I		0.006246	1.00	.0483	0.006246	160102772.00
1540733082	Resistor	RN65-66,RN69,RN72-77,RN80-86,-RN88,RN91-92,RN95	Bellcore Issue 6	Level I		0.006246	20.00	.9660	0.124920	160102772.00
1540701380	Resistor	RN78,RN87	Bellcore Issue 6	Level I		0.006246	2.00	.0966	0.012492	160102772.00
105A501033	Resistor	R142-143,R145-146,R149,R153,R-53	Bellcore Issue 6	Level I		0.002268	7.00	.1227	0.015874	440974090.03
105A705603	Resistor	R1,R87-88	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A700133	Resistor	R11,R122-128,R159-160,R17,R190-,R2,R202,R27,R284-285,R295-296-,R305,R31,R32,R353,R359,R38,R-52,R72-R74,R79	Bellcore Issue 6	Level I		0.002268	33.00	.5787	0.074834	440974090.03
105A700003	Resistor	R131,R133,R144,R191-192,R203,-R207,R22,R225-233,R235,R237,R-239,R241,R243,R282,R287,R299,-R3,R339-340,R360,R361,R363,R3-64,R83	Bellcore Issue 6	Level I		0.002268	33.00	.5787	0.074834	440974090.03
105A702723	Resistor	R18,R25-26,R29,R35,R4,R49,R57,-R61,R8-9	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A704723	Resistor	R13,R132,R134,R136-137,R156,R-158,R187-188,R193,R20,R234,R2-70-274,R33,R368-R370,R5,R50,R5-1,R63	Bellcore Issue 6	Level I		0.002268	25.00	.4384	0.056693	440974090.03
105A733003	Resistor	R275-279,R288,R30,R300,R302,R-34,R36-37,R6-7,R77,R80,R85,R89-94,R97	Bellcore Issue 6	Level I		0.002268	24.00	.4208	0.054425	440974090.03
105A702203	Resistor	R106,R14,R351,R60	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A710033	Resistor	R16,R309-310,R45	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A702053	Resistor	R19	Bellcore Issue 6	Level I		0.013606	1.00	.1052	0.013606	73495681.67
105A701533	Resistor	R21,R292,R294,R58-59	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A547033	Resistor	R114-115,R24	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A710003	Resistor	R157,R28,R47,R75-76,R81	Bellcore Issue 6	Level I		0.002268	6.00	.1052	0.013606	440974090.03
105A507503	Resistor	R40-41,R95	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A515003	Resistor	R43-44,R96	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A701033	Resistor	R101,R138-141,R152,R161,R217,-R221,R336,R46	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A707503	Resistor	R212-215,R54-56	Bellcore Issue 6	Level I		0.002268	7.00	.1227	0.015874	440974090.03

**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

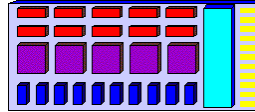


**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A703303	Resistor	R1,R216,R220,R267,R289-290,R3-73,R62,R66	Bellcore Issue 6	Level I		0.002268	9.00	.1578	0.020409	440974090.03
105A722003	Resistor	R268-269	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A556003	Resistor	R65	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A768003	Resistor	R68	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A715003	Resistor	R346-347,R70-71,R78	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A701003	Resistor	R105,R130,R135,R148,R163-164,-R291,R293,R343,R98-99	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A504763	Resistor	R102-103	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A549913	Resistor	R104	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A705623	Resistor	R107,R110,R219,R224,R304	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A571533	Resistor	R108	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A528713	Resistor	R109	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A707523	Resistor	R111	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1059518701	Resistor	R112	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1059511501	Resistor	R113	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A756033	Resistor	R116-117	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1059512401	Resistor	R119-119,R121	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
1059524961	Resistor	R120	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A710053	Resistor	R129	Bellcore Issue 6	Level I		0.013606	1.00	.1052	0.013606	73495681.67
1059502831	Resistor	R147	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A521033	Resistor	R150	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A590923	Resistor	R151	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A560423	Resistor	R154-155	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A704703	Resistor	R176-177,R183-184,R186	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A501723	Resistor	R198	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A751033	Resistor	R200-201,R204,R23	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A505103	Resistor	R100,R208-211,R253-254,R256,-R259,R67	Bellcore Issue 6	Level I		0.002268	10.00	.1754	0.022677	440974090.03
105A747003	Resistor	R223	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A705033	Resistor	R297,R301,R337	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A702223	Resistor	R307,R344	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

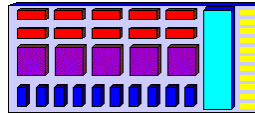


**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1059511001	Resistor	R349-350	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1149633190	Capacitor	TC11-13	Bellcore Issue 6	Level I		0.004933	3.00	.1144	0.014799	202722669.92
14S4237120	Integrated Circuit	U1	Bellcore Issue 6	Level I	12.00	0.077420	1.00	.5987	0.077420	12916624.12
14S5801400	Integrated Circuit	U2	Bellcore Issue 6	Level I	3.00	0.045117	1.00	.3489	0.045117	22164547.86
14S5900700	Integrated Circuit	U3	Bellcore Issue 6	Level I	13.00	0.115258	1.00	.8912	0.115258	8676209.89
14S5500800	Integrated Circuit	U4	Bellcore Issue 6	Level I	7.00	0.088777	1.00	.6865	0.088777	11264182.63
14S4070600	Integrated Circuit	U5	Bellcore Issue 6	Level I	7.00	0.097911	1.00	.7571	0.097911	10213356.27
14S5207402	Integrated Circuit	U6	Bellcore Issue 6	Level I	3.00	0.075610	1.00	.5847	0.075610	13225687.84
14S5501400	Integrated Circuit	U9	Bellcore Issue 6	Level I	15.00	0.125285	1.00	.9688	0.125285	7981782.34
14S4244300	Integrated Circuit	U10	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9145	0.118260	8455912.86
14S4900000	Integrated Circuit	U12	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9145	0.118260	8455912.86
14S5512500	Integrated Circuit	U13	Bellcore Issue 6	Level I	9.00	0.096820	1.00	.7487	0.096820	10328441.13
14S3155300	Integrated Circuit	U15	Bellcore Issue 6	Level I	15.00	0.168759	1.00	1.3049	0.168759	5925622.25
14S9055500	Integrated Circuit	u16	Bellcore Issue 6	Level I	7.00	0.069574	1.00	.5380	0.069574	14373251.85
14S4021303	Integrated Circuit	U17-18,U34-35	Bellcore Issue 6	Level I	8.00	0.104969	4.00	3.2467	0.419877	9526603.44
14S4397703	Integrated Circuit	U19	Bellcore Issue 6	Level I	11.00	0.073313	1.00	.5669	0.073313	13640096.66
14S4378100	Integrated Circuit	U22	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.4888	0.192530	5193998.23
14S3924800	Integrated Circuit	U25	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.4888	0.192530	5193998.23
14S4813902	Integrated Circuit	U26	Bellcore Issue 6	Level I	14.00	0.086245	1.00	.6669	0.086245	11594908.63
14S6334600	Integrated Circuit	U27	Bellcore Issue 6	Level I	10.00	0.120485	1.00	.9317	0.120485	8299772.79
14S3200400	Integrated Circuit	U28	Bellcore Issue 6	Level I	13.00	0.147672	1.00	1.1419	0.147672	6771770.53
14S4866100	Integrated Circuit	U29	Bellcore Issue 6	Level I	9.00	0.065672	1.00	.5078	0.065672	15227088.64
14S4048500	Integrated Circuit	U20-21,U30-33	Bellcore Issue 6	Level I	9.00	0.112485	6.00	5.2188	0.674911	8890058.82
14S4911216	Integrated Circuit	U36	Bellcore Issue 6	Level I	16.00	0.180291	1.00	1.3941	0.180291	5546598.71
14S4881000	Integrated Circuit	U37	Bellcore Issue 6	Level I	18.00	0.205515	1.00	1.5892	0.205515	4865835.10
1315995610	Semiconductor	U40	Bellcore Issue 6	Level I	7.00	0.193788	1.00	1.4985	0.193788	5160285.71
14S3181900	Integrated Circuit	U41	Bellcore Issue 6	Level I	3.00	0.147672	1.00	1.1419	0.147672	6771770.53
1315995310	Semiconductor	U43	Bellcore Issue 6	Level I	11.00	0.215958	1.00	1.6699	0.215958	4630523.11
1233350050	Miscellaneous	Y5	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1233349160	Miscellaneous	Y7	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1653007204	Connection	CN28	Bellcore Issue 6	Level I		0.007966	1.00	.0616	0.007966	125540038.67

**AAEON Reliability Prediction Report**

**Part Number** 9697668080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



**Description** CPU Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1651204493	Connection	U14_SKT	Bellcore Issue 6	Level I		0.025035	1.00	.1936	0.025035	39944557.76
1651203291	Connection	U8_SKT	Bellcore Issue 6	Level I		0.018207	1.00	.1408	0.018207	54923766.92
1059503001	Resistor	R179,R185	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
14S5A24540	Integrated Circuit	U7	Bellcore Issue 6	Level I	6.00	0.091286	1.00	.7059	0.091286	10954631.16
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001138	1.00	.0088	0.001138	878780270.71
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	6.9593	0.900000	1111111.11
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1655420020	Connection	CN2	Bellcore Issue 6	Level I		0.011379	1.00	.0880	0.011379	87878027.07
1653205200	Connection	CN5	Bellcore Issue 6	Level I		0.005690	1.00	.0440	0.005690	175756054.14
1654808300	Connection	CN6	Bellcore Issue 6	Level I		0.005690	1.00	.0440	0.005690	175756054.14
1653217202	Connection	CN7	Bellcore Issue 6	Level I		0.019345	1.00	.1496	0.019345	51692957.10
1653006100	Connection	CN8,JP16	Bellcore Issue 6	Level I		0.003414	2.00	.0528	0.006828	292926756.90
1654922600	Connection	CN9	Bellcore Issue 6	Level I		0.014793	1.00	.1144	0.014793	67598482.36
1654449501	Connection	CN10	Bellcore Issue 6	Level I		0.015931	1.00	.1232	0.015931	62770019.34
1654612300	Connection	CN11	Bellcore Issue 6	Level I		0.006828	1.00	.0528	0.006828	146463378.45
1653225200	Connection	CN12	Bellcore Issue 6	Level I		0.028449	1.00	.2200	0.028449	35151210.83
1653003100	Connection	JP1,JP6-7	Bellcore Issue 6	Level I		0.001707	3.00	.0396	0.005121	585853513.81
1655003000	Connection	CN13,CN24	Bellcore Issue 6	Level I		0.001707	2.00	.0264	0.003414	585853513.81
1652508202	Connection	CN14	Bellcore Issue 6	Level I		0.004552	1.00	.0352	0.004552	219695067.68
1653222200	Connection	CN15-16	Bellcore Issue 6	Level I		0.025035	2.00	.3872	0.050069	39944557.76
1653220203	Connection	CN17	Bellcore Issue 6	Level I		0.022759	1.00	.1760	0.022759	43939013.54
1654418500	Connection	CN20	Bellcore Issue 6	Level I		0.005121	1.00	.0396	0.005121	195284504.60
1654409001	Connection	CN19	Bellcore Issue 6	Level I		0.005121	1.00	.0396	0.005121	195284504.60
1653013200	Connection	CN21	Bellcore Issue 6	Level I		0.014793	1.00	.1144	0.014793	67598482.36
1654630200	Connection	CN23	Bellcore Issue 6	Level I		0.017069	1.00	.1320	0.017069	58585351.38
1655305020	Connection	CN25	Bellcore Issue 6	Level I		0.002845	1.00	.0220	0.002845	351512108.28
1655306020	Connection	CN26-27	Bellcore Issue 6	Level I		0.003414	2.00	.0528	0.006828	292926756.90
1651607920	Connection	CPU1	Bellcore Issue 6	Level I		0.210519	1.00	1.6279	0.210519	4750163.63
1189622110	Capacitor	C236	Bellcore Issue 6	Level I		0.042673	1.00	.3300	0.042673	23434140.55
1119610293	Capacitor	C53-54	Bellcore Issue 6	Level I		0.071121	2.00	1.0999	0.142243	14060484.33
1119610291	Capacitor	C371-373,C56-57,C59-60,C65-66	Bellcore Issue 6	Level I		0.075338	9.00	5.2430	0.678044	13273483.15



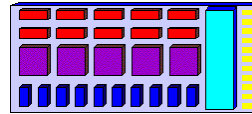






**AAEON Reliability Prediction Report**

**Part Number** 96910P3K04  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

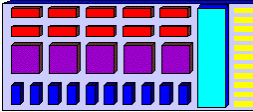


**Description** Power Board  
**File Name** TBOX-3303.RPJ  
**Time** 6:40 PM  
**Failure Rate** 0.010241  
**MTBF** 97,642,252

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1652905200	Connection	CN2,CN3	Bellcore Issue 6	Level I		0.002845	2.00	55.5556	0.005690	351512108.28
1655108000	Connection	CN1	Bellcore Issue 6	Level I		0.004552	1.00	44.4444	0.004552	219695067.68

AAEON Reliability Prediction Report

Part Number 96910P3K05
Reference Des
Date 10. 17, 2001
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00



Description FDD&CD-ROM(Input)Board
File Name TBOX-3303.RPJ
Time 6:40 PM
Failure Rate 0.114227
MTBF 8,754,491

Table with 11 columns: Part Number, Category, Location, Calculation Model, Quality, Tem. Rise, Failure Rate, Unit, Quantity, Failure Rate, %, Failure Rate, MTBF, Unit. Rows include parts like 1059704723 (Resistor), 1121701680 (Capacitor), 1124410080 (Capacitor), 1111622080 (Capacitor), 1653426110 (Connection), 1653425210 (Connection), and 1652980200 (Connection).



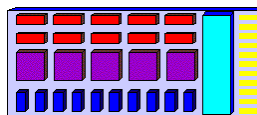






### AAEON Reliability Prediction Report

**Part Number** TBOX-3306  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



**Description** Top-level assembly  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 51.151980  
**MTBF** 19,550

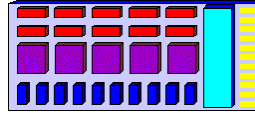
Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TBOX-3306	TBOX-3306	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	51.151980	19,550
MB-668_CPU_128MEM	9697688080	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	12.932295	77,326
MB-668 Riser Card	9691666624	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.179795	5,561,900
Power Board	96910P3K04	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.010241	97,642,252
FDD&CD-ROM(Input)Board	96910P3K05	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.114227	8,754,491
FDD&CD-ROM(Output)Board	9691666612	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.089328	11,194,653
96P PC to LCD Board	9691666605	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.112071	8,922,929
Retractable HDD Board Module	96910P3K00	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.053483	18,697,453
Power Board	96910P3K01	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.017069	58,585,351





**AAEON Reliability Prediction Report**

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

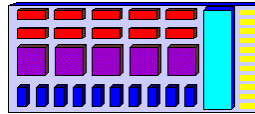


**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129701080	Capacitor	CO1-12,C10,C103,C17,C356,C48--50,C52,C72,C88	Bellcore Issue 6	Level I		0.005466	22.00	.9298	0.120244	182961702.19
1141601090	Capacitor	C69	Bellcore Issue 6	Level I		0.002357	1.00	.0182	0.002357	424256814.77
1129747650	Capacitor	C5,C7,CP1-12,CP25	Bellcore Issue 6	Level I		0.005466	15.00	.6340	0.081984	182961702.19
1174533080	Capacitor	CP16-24	Bellcore Issue 6	Level I		0.001060	36.00	.2951	0.038168	943198589.05
1124427080	Capacitor	C388-391	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1141610050	Capacitor	C224,C361,C392,C436,C51,C76-77-CT1-5,TC4-8	Bellcore Issue 6	Level I		0.002357	18.00	.3281	0.042427	424256814.77
1124410080	Capacitor	C1-2,C181-185,C187-194,C241-26-4,C438	Bellcore Issue 6	Level I		0.001060	40.00	.3279	0.042409	943198589.05
1142610060	Capacitor	C3,C6	Bellcore Issue 6	Level I		0.001587	2.00	.0245	0.003174	630075050.70
1124501780	Capacitor	C351-354,C365-366,C378,C38,C4,-C58,C67-68	Bellcore Issue 6	Level I		0.001060	12.00	.0984	0.012723	943198589.05
1122701680	Capacitor	C102,C108-111,C114-117,C11-13,-C144,C158-165,C167-C168,C170--178,C16,C186,C21,C217-222,C226--227,C229-232,C234-235,C239,C2-82-289,C298-341,C31-37,C363,C3-67-370,C374-376,C379-387,C39-47-,C393-394,C437,C446-451,C475-4-84,C487-496,C506-513,C61-62,C71-C79-80,C87,C9	Bellcore Issue 6	Level I		0.001598	179.00	2.2112	0.285964	625953979.55
1124420080	Capacitor	C134-135,C29	Bellcore Issue 6	Level I		0.001060	3.00	.0246	0.003181	943198589.05
1124601860	Capacitor	C19-20,C75,C78	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1124447080	Capacitor	C100,C145-148,C205-213,C97-99	Bellcore Issue 6	Level I		0.001060	17.00	.1394	0.018024	943198589.05
1124547180	Capacitor	C25-C28	Bellcore Issue 6	Level I		0.001060	4.00	.0328	0.004241	943198589.05
1125501760	Capacitor	C105,C74,C92	Bellcore Issue 6	Level I		0.000864	3.00	.0200	0.002591	1157799909.29
1124510180	Capacitor	C106,C107,C112,C113,C118-C133-C197-C204,C266-C281	Bellcore Issue 6	Level I		0.001060	44.00	.3607	0.046650	943198589.05
1124522180	Capacitor	C63	Bellcore Issue 6	Level I		0.001060	1.00	.0082	0.001060	943198589.05
1124547280	Capacitor	C64	Bellcore Issue 6	Level I		0.001060	1.00	.0082	0.001060	943198589.05
1141647080	Capacitor	C101,C104,C70,C73,C86,C89	Bellcore Issue 6	Level I		0.002357	6.00	.1094	0.014142	424256814.77
1149622180	Capacitor	C395-396,C81-84	Bellcore Issue 6	Level I		0.004535	6.00	.2104	0.027212	220487045.01
1124518180	Capacitor	C290-297,C342-350	Bellcore Issue 6	Level I		0.001060	17.00	.1394	0.018024	943198589.05
1124415080	Capacitor	C179-180,C214-215,C416	Bellcore Issue 6	Level I		0.001060	5.00	.0410	0.005301	943198589.05
1124433080	Capacitor	C195-196,C237-238,C29	Bellcore Issue 6	Level I		0.001060	5.00	.0410	0.005301	943198589.05

### AAEON Reliability Prediction Report

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

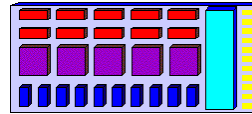


**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1141622060	Capacitor	C228	Bellcore Issue 6	Level I		0.002357	1.00	.0182	0.002357	424256814.77
1124527180	Capacitor	C410-411	Bellcore Issue 6	Level I		0.001060	2.00	.0164	0.002120	943198589.05
1122747880	Capacitor	C413	Bellcore Issue 6	Level I		0.001598	1.00	.0124	0.001598	625953979.55
1302000340	Semiconductor	D1	Bellcore Issue 6	Level I		0.027212	1.00	.2104	0.027212	36747840.84
1300581740	Semiconductor	D12-13,D3	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1301005440	Semiconductor	D4-5	Bellcore Issue 6	Level I		0.023881	2.00	.3693	0.047762	41874327.58
1300414840	Semiconductor	D8-11,D14,D18,D18-20,D6	Bellcore Issue 6	Level I		0.023881	9.00	1.6620	0.214929	41874327.58
1305099140	Semiconductor	D15-17	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1752000700	Miscellaneous	FS1	Bellcore Issue 6	Level I		0.030000	1.00	.2320	0.030000	33333333.33
1752311000	Miscellaneous	FS2-4	Bellcore Issue 6	Level I		0.030000	3.00	.6959	0.090000	33333333.33
1213130008	Inductor	LN1-9	Bellcore Issue 6	Level I		0.002268	36.00	.6313	0.081637	440974090.03
121308050	Inductor	FB1-7,L1-5,L7-9,L16-25,L27-33,L36-41,L46	Bellcore Issue 6	Level I		0.002268	39.00	.6839	0.088441	440974090.03
1212308057	Inductor	L38	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306035	Inductor	L48	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212312063	Inductor	L34	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306034	Inductor	L26,R189	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1212306031	Inductor	L10-12	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
1211102200	Inductor	L13	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1212306030	Inductor	L42-45	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
1211102767	Inductor	L47	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1315500311	Semiconductor	Q2,Q3	Bellcore Issue 6	Level I	15.00	0.120000	2.00	1.8558	0.240000	8333333.33
1314838410	Integrated Circuit	Q4-6	Bellcore Issue 6	Level I	15.00	0.168759	3.00	3.9148	0.506276	5925622.25
1315700210	Semiconductor	Q7-8	Bellcore Issue 6	Level I		0.159207	2.00	2.4622	0.318413	6281149.14
1310390410	Semiconductor	Q1,Q9-10,Q13-14,Q16	Bellcore Issue 6	Level I		0.023881	6.00	1.1080	0.143286	41874327.58
1310222210	Semiconductor	Q11-12,Q15	Bellcore Issue 6	Level I		0.023881	3.00	.5540	0.071643	41874327.58
1540727280	Resistor	RN1-2,RN25,RN27,RN70-71	Bellcore Issue 6	Level I		0.006246	6.00	.2898	0.037476	160102772.00
1540782280	Resistor	RN12-24,RN26,RN3-9,RN61-62	Bellcore Issue 6	Level I		0.006246	23.00	1.1108	0.143658	160102772.00
1540756280	Resistor	RN10-11	Bellcore Issue 6	Level I		0.006246	2.00	.0966	0.012492	160102772.00
1540747282	Resistor	RN29-30,RN63-64,RN67-68,RN89--90,RN93-94	Bellcore Issue 6	Level I		0.006246	10.00	.4830	0.062460	160102772.00
1540756080	Resistor	RN31-58	Bellcore Issue 6	Level I		0.006246	28.00	1.3523	0.174888	160102772.00

**AAEON Reliability Prediction Report**

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

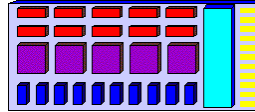


**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1540715380	Resistor	RN60	Bellcore Issue 6	Level I		0.006246	1.00	.0483	0.006246	160102772.00
1540733082	Resistor	RN65-66,RN69,RN72-77,RN80-86,-RN88,RN91-92,RN95	Bellcore Issue 6	Level I		0.006246	20.00	.9660	0.124920	160102772.00
1540701380	Resistor	RN78,RN87	Bellcore Issue 6	Level I		0.006246	2.00	.0966	0.012492	160102772.00
105A501033	Resistor	R142-143,R145-146,R149,R153,R-53	Bellcore Issue 6	Level I		0.002268	7.00	.1227	0.015874	440974090.03
105A705603	Resistor	R1,R87-88	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A700133	Resistor	R11,R122-128,R159-160,R17,R190-,R2,R202,R27,R284-285,R295-296-,R305,R31,R32,R353,R359,R38,R-52,R72-R74,R79	Bellcore Issue 6	Level I		0.002268	33.00	.5787	0.074834	440974090.03
105A700003	Resistor	R131,R133,R144,R191-192,R203,-R207,R22,R225-233,R235,R237,R-239,R241,R243,R282,R287,R299,-R3,R339-340,R360,R361,R363,R3-64,R83	Bellcore Issue 6	Level I		0.002268	33.00	.5787	0.074834	440974090.03
105A702723	Resistor	R18,R25-26,R29,R35,R4,R49,R57,-R61,R8-9	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A704723	Resistor	R13,R132,R134,R136-137,R156,R-158,R187-188,R193,R20,R234,R2-70-274,R33,R368-R370,R5,R50,R5-1,R63	Bellcore Issue 6	Level I		0.002268	25.00	.4384	0.056693	440974090.03
105A733003	Resistor	R275-279,R288,R30,R300,R302,R-34,R36-37,R6-7,R77,R80,R85,R89-94,R97	Bellcore Issue 6	Level I		0.002268	24.00	.4208	0.054425	440974090.03
105A702203	Resistor	R106,R14,R351,R60	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A710033	Resistor	R16,R309-310,R45	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A702053	Resistor	R19	Bellcore Issue 6	Level I		0.013606	1.00	.1052	0.013606	73495681.67
105A701533	Resistor	R21,R292,R294,R58-59	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A547033	Resistor	R114-115,R24	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A710003	Resistor	R157,R28,R47,R75-76,R81	Bellcore Issue 6	Level I		0.002268	6.00	.1052	0.013606	440974090.03
105A507503	Resistor	R40-41,R95	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A515003	Resistor	R43-44,R96	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A701033	Resistor	R101,R138-141,R152,R161,R217,-R221,R336,R46	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A707503	Resistor	R212-215,R54-56	Bellcore Issue 6	Level I		0.002268	7.00	.1227	0.015874	440974090.03

**AAEON Reliability Prediction Report**

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

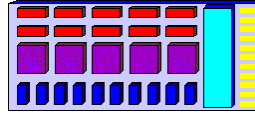


**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A703303	Resistor	R1,R216,R220,R267,R289-290,R3-73,R62,R66	Bellcore Issue 6	Level I		0.002268	9.00	.1578	0.020409	440974090.03
105A722003	Resistor	R268-269	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A556003	Resistor	R65	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A768003	Resistor	R68	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A715003	Resistor	R346-347,R70-71,R78	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A701003	Resistor	R105,R130,R135,R148,R163-164,-R291,R293,R343,R98-99	Bellcore Issue 6	Level I		0.002268	11.00	.1929	0.024945	440974090.03
105A504763	Resistor	R102-103	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A549913	Resistor	R104	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A705623	Resistor	R107,R110,R219,R224,R304	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A571533	Resistor	R108	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A528713	Resistor	R109	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A707523	Resistor	R111	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1059518701	Resistor	R112	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
1059511501	Resistor	R113	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A756033	Resistor	R116-117	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1059512401	Resistor	R119-119,R121	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
1059524961	Resistor	R120	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A710053	Resistor	R129	Bellcore Issue 6	Level I		0.013606	1.00	.1052	0.013606	73495681.67
1059502831	Resistor	R147	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A521033	Resistor	R150	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A590923	Resistor	R151	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A560423	Resistor	R154-155	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
105A704703	Resistor	R176-177,R183-184,R186	Bellcore Issue 6	Level I		0.002268	5.00	.0877	0.011339	440974090.03
105A501723	Resistor	R198	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A751033	Resistor	R200-201,R204,R23	Bellcore Issue 6	Level I		0.002268	4.00	.0701	0.009071	440974090.03
105A505103	Resistor	R100,R208-211,R253-254,R256,-R259,R67	Bellcore Issue 6	Level I		0.002268	10.00	.1754	0.022677	440974090.03
105A747003	Resistor	R223	Bellcore Issue 6	Level I		0.002268	1.00	.0175	0.002268	440974090.03
105A705033	Resistor	R297,R301,R337	Bellcore Issue 6	Level I		0.002268	3.00	.0526	0.006803	440974090.03
105A702223	Resistor	R307,R344	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00

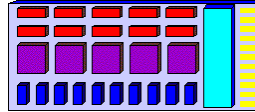


**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1059511001	Resistor	R349-350	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
1149633190	Capacitor	TC11-13	Bellcore Issue 6	Level I		0.004933	3.00	.1144	0.014799	202722669.92
14S4237120	Integrated Circuit	U1	Bellcore Issue 6	Level I	12.00	0.077420	1.00	.5987	0.077420	12916624.12
14S5801400	Integrated Circuit	U2	Bellcore Issue 6	Level I	3.00	0.045117	1.00	.3489	0.045117	22164547.86
14S5900700	Integrated Circuit	U3	Bellcore Issue 6	Level I	13.00	0.115258	1.00	.8912	0.115258	8676209.89
14S5500800	Integrated Circuit	U4	Bellcore Issue 6	Level I	7.00	0.088777	1.00	.6865	0.088777	11264182.63
14S4070600	Integrated Circuit	U5	Bellcore Issue 6	Level I	7.00	0.097911	1.00	.7571	0.097911	10213356.27
14S5207402	Integrated Circuit	U6	Bellcore Issue 6	Level I	3.00	0.075610	1.00	.5847	0.075610	13225687.84
14S5501400	Integrated Circuit	U9	Bellcore Issue 6	Level I	15.00	0.125285	1.00	.9688	0.125285	7981782.34
14S4244300	Integrated Circuit	U10	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9145	0.118260	8455912.86
14S4900000	Integrated Circuit	U12	Bellcore Issue 6	Level I	20.00	0.118260	1.00	.9145	0.118260	8455912.86
14S5512500	Integrated Circuit	U13	Bellcore Issue 6	Level I	9.00	0.096820	1.00	.7487	0.096820	10328441.13
14S3155300	Integrated Circuit	U15	Bellcore Issue 6	Level I	15.00	0.168759	1.00	1.3049	0.168759	5925622.25
14S9055500	Integrated Circuit	u16	Bellcore Issue 6	Level I	7.00	0.069574	1.00	.5380	0.069574	14373251.85
14S4021303	Integrated Circuit	U17-18,U34-35	Bellcore Issue 6	Level I	8.00	0.104969	4.00	3.2467	0.419877	9526603.44
14S4397703	Integrated Circuit	U19	Bellcore Issue 6	Level I	11.00	0.073313	1.00	.5669	0.073313	13640096.66
14S4378100	Integrated Circuit	U22	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.4888	0.192530	5193998.23
14S3924800	Integrated Circuit	U25	Bellcore Issue 6	Level I	17.00	0.192530	1.00	1.4888	0.192530	5193998.23
14S4813902	Integrated Circuit	U26	Bellcore Issue 6	Level I	14.00	0.086245	1.00	.6669	0.086245	11594908.63
14S6334600	Integrated Circuit	U27	Bellcore Issue 6	Level I	10.00	0.120485	1.00	.9317	0.120485	8299772.79
14S3200400	Integrated Circuit	U28	Bellcore Issue 6	Level I	13.00	0.147672	1.00	1.1419	0.147672	6771770.53
14S4866100	Integrated Circuit	U29	Bellcore Issue 6	Level I	9.00	0.065672	1.00	.5078	0.065672	15227088.64
14S4048500	Integrated Circuit	U20-21,U30-33	Bellcore Issue 6	Level I	9.00	0.112485	6.00	5.2188	0.674911	8890058.82
14S4911216	Integrated Circuit	U36	Bellcore Issue 6	Level I	16.00	0.180291	1.00	1.3941	0.180291	5546598.71
14S4881000	Integrated Circuit	U37	Bellcore Issue 6	Level I	18.00	0.205515	1.00	1.5892	0.205515	4865835.10
1315995610	Semiconductor	U40	Bellcore Issue 6	Level I	7.00	0.193788	1.00	1.4985	0.193788	5160285.71
14S3181900	Integrated Circuit	U41	Bellcore Issue 6	Level I	3.00	0.147672	1.00	1.1419	0.147672	6771770.53
1315995310	Semiconductor	U43	Bellcore Issue 6	Level I	11.00	0.215958	1.00	1.6699	0.215958	4630523.11
1233350050	Miscellaneous	Y5	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1233349160	Miscellaneous	Y7	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1653007204	Connection	CN28	Bellcore Issue 6	Level I		0.007966	1.00	.0616	0.007966	125540038.67

### AAEON Reliability Prediction Report

**Part Number** 9697688080  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temperature** 25.00



**Description** CPU Board  
**File Name** TBOX-3306.RPJ  
**Time** 6:39 PM  
**Failure Rate** 12.932295  
**MTBF** 77,326

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1651204493	Connection	U14_SKT	Bellcore Issue 6	Level I		0.025035	1.00	.1936	0.025035	39944557.76
1651203291	Connection	U8_SKT	Bellcore Issue 6	Level I		0.018207	1.00	.1408	0.018207	54923766.92
1059503001	Resistor	R179,R185	Bellcore Issue 6	Level I		0.002268	2.00	.0351	0.004535	440974090.03
14S5A24540	Integrated Circuit	U7	Bellcore Issue 6	Level I	6.00	0.091286	1.00	.7059	0.091286	10954631.16
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001138	1.00	.0088	0.001138	878780270.71
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	6.9593	0.900000	1111111.11
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.1599	0.150000	6666666.67
1655420020	Connection	CN2	Bellcore Issue 6	Level I		0.011379	1.00	.0880	0.011379	87878027.07
1653205200	Connection	CN5	Bellcore Issue 6	Level I		0.005690	1.00	.0440	0.005690	175756054.14
1654808300	Connection	CN6	Bellcore Issue 6	Level I		0.005690	1.00	.0440	0.005690	175756054.14
1653217202	Connection	CN7	Bellcore Issue 6	Level I		0.019345	1.00	.1496	0.019345	51692957.10
1653006100	Connection	CN8,JP16	Bellcore Issue 6	Level I		0.003414	2.00	.0528	0.006828	292926756.90
1654922600	Connection	CN9	Bellcore Issue 6	Level I		0.014793	1.00	.1144	0.014793	67598482.36
1654449501	Connection	CN10	Bellcore Issue 6	Level I		0.015931	1.00	.1232	0.015931	62770019.34
1654612300	Connection	CN11	Bellcore Issue 6	Level I		0.006828	1.00	.0528	0.006828	146463378.45
1653225200	Connection	CN12	Bellcore Issue 6	Level I		0.028449	1.00	.2200	0.028449	35151210.83
1653003100	Connection	JP1,JP6-7	Bellcore Issue 6	Level I		0.001707	3.00	.0396	0.005121	585853513.81
1655003000	Connection	CN13,CN24	Bellcore Issue 6	Level I		0.001707	2.00	.0264	0.003414	585853513.81
1652508202	Connection	CN14	Bellcore Issue 6	Level I		0.004552	1.00	.0352	0.004552	219695067.68
1653222200	Connection	CN15-16	Bellcore Issue 6	Level I		0.025035	2.00	.3872	0.050069	39944557.76
1653220203	Connection	CN17	Bellcore Issue 6	Level I		0.022759	1.00	.1760	0.022759	43939013.54
1654418500	Connection	CN20	Bellcore Issue 6	Level I		0.005121	1.00	.0396	0.005121	195284504.60
1654409001	Connection	CN19	Bellcore Issue 6	Level I		0.005121	1.00	.0396	0.005121	195284504.60
1653013200	Connection	CN21	Bellcore Issue 6	Level I		0.014793	1.00	.1144	0.014793	67598482.36
1654630200	Connection	CN23	Bellcore Issue 6	Level I		0.017069	1.00	.1320	0.017069	58585351.38
1655305020	Connection	CN25	Bellcore Issue 6	Level I		0.002845	1.00	.0220	0.002845	351512108.28
1655306020	Connection	CN26-27	Bellcore Issue 6	Level I		0.003414	2.00	.0528	0.006828	292926756.90
1651607920	Connection	CPU1	Bellcore Issue 6	Level I		0.210519	1.00	1.6279	0.210519	4750163.63
1189622110	Capacitor	C236	Bellcore Issue 6	Level I		0.042673	1.00	.3300	0.042673	23434140.55
1119610293	Capacitor	C53-54	Bellcore Issue 6	Level I		0.071121	2.00	1.0999	0.142243	14060484.33
1119610291	Capacitor	C371-373,C56-57,C59-60,C65-66	Bellcore Issue 6	Level I		0.075338	9.00	5.2430	0.678044	13273483.15















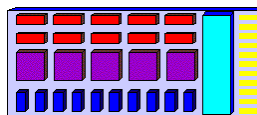






### AAEON Reliability Prediction Report

**Part Number** TD-3212(T/M/MT)  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GB, GC - Ground Benign, Controlled  
**Temperature** 30.00



**Description** Top-level assembly  
**File Name** Td-3212.rpj  
**Time** 6:37 PM  
**Failure Rate** 86.616271  
**MTBF** 11,545

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TD-3212(T/M/MT)	TD-3212(T/M/MT)	MIL-HDBK-	Method I Case 3	GB, GC - Ground Benign,	100.00	1.00	86.616271	11,545
90P PC to LCD Board	9691666605	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.115485	8,659,159
KB/Mouse_CTR	969B400300	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.933215	1,071,565
Copy of	969B400301	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.900783	1,110,145
IrDA Board	969B320002	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.182951	5,465,937
	969B320003	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.151734	6,590,476









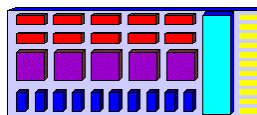






### AAEON Reliability Prediction Report

**Part Number** TD-3215(T/M/MT)  
**Reference Des**  
**Date** 10. 17, 2001  
**Environment** GB, GC - Ground Benign, Controlled  
**Temperature** 30.00



**Description** Top-level assembly  
**File Name** Td-3215.rpj  
**Time** 6:36 PM  
**Failure Rate** 86.616271  
**MTBF** 11,545

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TD-3215(T/M/MT)	TD-3215(T/M/MT)	MIL-HDBK-	Method I Case 3	GB, GC - Ground Benign,	100.00	1.00	86.616271	11,545
90P PC to LCD Board	9691666605	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.115485	8,659,159
KB/Mouse_CTR	969B400300	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.933215	1,071,565
Copy of	969B400301	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.900783	1,110,145
IrDA Board	969B320002	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.182951	5,465,937
	969B320003	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	0.151734	6,590,476













