

ONYX-154/174 Reliability Prediction Report (MTBF)

Report NO : 08P070019

10-07-2008

Issue Date

Wenyuan Yang

Manager

Jessica Chou

Test Engineer

Reliability Prediction (MTBF)

I . **Model Name:** TF-ONYX-154/174HTT-A1-1110

II . **Prediction Date:** Oct. 7th, 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 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:

ONYX-154/174 (not include Inverter, Cooler, FAN, power supply, LCD and Touch screen) :

Failure Rate: 21.655726 ppm

MTBF: 46,177 Hours

Below key parts were provided by the suppliers.

ONYX-154 component:

- Power supply (SPS.190/264VAC.to 24VDC.4.16/6.66A.150W.Astrodyne.ASM150-24)

MTBF: Convection Cooled: 150,000Hrs and Air Flow (200 CFM): 300,000 Hrs

- LCD (LCD.15".1024X76.450nits.4LAMP.CPT.CLAA150XP07FQ)
Lamp life Time: Min. 40,000 hours (IL at 8.0 mA)
- Touch (TOUCH SCREEN.15".5 Wire.Resistive.ABON.AT-150F-5RB-A08N-25R-150FH)
Durability: 35,000,000 times (Knock Test Pass)
- Inverter (INVERTER.DC TO AC.FOR HYUNDAI 17" TFT LCD.(4LAMPS).QF132V1.16(S))
MTBF: 92,9375.8033 hours
- CPU Cooler (C6012A6105LA)
MTBF: When operation at 25°C, this fan shall have a life expectancy of 30,000 hours and 50,000 hours respectively for Sleeve Bearing and Ball Bearing systems.
- FAN (System Fan.60*60*15mm.12VDC.for Coypu.SUNON.KDE1206PHV1.MS.AF.GN)
MTTF: 606,120 hours/ 30°C

ONYX-174 component:

- LCD (LCD.17".CPT.CLAA170EA07.4LAMP)
Lamp life Time: Min. 40,000 hours (IL at 7.0 mA)
- Touch (TOUCH SCREEN.17".5 Wire.Resistive.ABON.AT-171F-5RB-005N-25R-150FH)
Durability: 35,000,000 times (Knock Test Pass)
- Inverter, Cooler, FAN, power supply's components are same as ONYX-154

AAEON Reliability Prediction Report

Part Number
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 21.655726
MTBF 46,177

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-ONYX-154/174HTT-A1--1110		Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	21.655726	46,177
EMB-852T	9697852T1J-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	15.744017	63,516
ASS'Y CD-ROM Transfer Board T023	9697T02302	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.078353	12,762,746
ASS'Y Power Board PER-P12D	9697P12D02-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	3.804764	262,828
ASS'Y Y011 OSD Board	9697Y01102	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.015584	64,168,101
A'SSY YC03 USB Board	9697YC0300	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.007108	140,695,902
ASS'Y 8 in 1 Card Reader T066	9697T06600	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.499286	2,002,859
ASS'Y AMP&USB Hub board T109	9697T10900-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	1.197826	834,846
A'SSY Battery transfer board PER-T112	9697T11200-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.008391	119,169,330
Riser Board PER-R17P	9697R17P00-DIP	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.300396	3,328,940

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1750220323	Connection	BAT1	Bellcore Issue 6	Level I		0.001199	1.00	.0076	0.001199	834185311.58
1655417020	Connection	CN1	Bellcore Issue 6	Level I		0.011988	1.00	.0761	0.011988	83418531.16
1655305020	Connection	CN3	Bellcore Issue 6	Level I		0.002997	1.00	.0190	0.002997	333674124.63
1654530300	Connection	CN8	Bellcore Issue 6	Level I		0.017982	1.00	.1142	0.017982	55612354.11
1653213220	Connection	CN11	Bellcore Issue 6	Level I		0.015584	1.00	.0990	0.015584	64168100.89
1654543500	Connection	CN14	Bellcore Issue 6	Level I		0.025774	1.00	.1637	0.025774	38799316.82
1654612307	Connection	CN15	Bellcore Issue 6	Level I		0.003596	1.00	.0228	0.003596	278061770.53
1655004022	Connection	CN19	Bellcore Issue 6	Level I		0.002398	1.00	.0152	0.002398	417092655.79
1653005200	Connection	CN23	Bellcore Issue 6	Level I		0.005994	1.00	.0381	0.005994	166837062.32
1653009100	Connection	CN28	Bellcore Issue 6	Level I		0.005394	1.00	.0343	0.005394	185374513.69
1655004020	Connection	CN29	Bellcore Issue 6	Level I		0.002398	1.00	.0152	0.002398	417092655.79
14S6200400	Integrated Circuit	PWH1	Bellcore Issue 6	Level I		0.175797	1.00	1.1166	0.175797	5688392.79
1653004302	Connection	JP3	Bellcore Issue 6	Level I		0.007193	1.00	.0457	0.007193	139030885.26
1653003201	Connection	JP4,JP5	Bellcore Issue 6	Level I		0.003596	2.00	.0457	0.007193	278061770.53
1654260206	Connection	PC11	Bellcore Issue 6	Level I		0.071926	1.00	.4568	0.071926	13903088.53
1750119011	Miscellaneous	BAT1	Bellcore Issue 6	Level I		0.900000	1.00	5.7165	0.900000	1111111.11
1652522203	Connection	CN2	Bellcore Issue 6	Level I		0.013187	1.00	.0838	0.013187	75835028.33
1653006101	Connection	CN9	Bellcore Issue 6	Level I		0.003596	1.00	.0228	0.003596	278061770.53
1655003010	Connection	CN12,CN13	Bellcore Issue 6	Level I		0.001798	2.00	.0228	0.003596	556123541.06
1653220208	Connection	CN21	Bellcore Issue 6	Level I		0.023975	1.00	.1523	0.023975	41709265.58
1651592490	Connection	DIMM1	Bellcore Issue 6	Level I		0.110287	1.00	.7005	0.110287	9067231.65
1653003101	Connection	JP1,JP2,JP6	Bellcore Issue 6	Level I		0.001798	3.00	.0343	0.005394	556123541.06
1653002202	Connection	JP7	Bellcore Issue 6	Level I		0.002398	1.00	.0152	0.002398	417092655.79
1653205203	Connection	CN16,CN17	Bellcore Issue 6	Level I		0.005994	2.00	.0761	0.011988	166837062.32
1212306030	Inductor	FB7,FB8	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
1211103360	Inductor	L3,L4	Bellcore Issue 6	Level I		0.087872	2.00	1.1163	0.175745	11380145.54
1211100160	Inductor	L8,L9	Bellcore Issue 6	Level I		0.087872	2.00	1.1163	0.175745	11380145.54
1211106870	Inductor	L10	Bellcore Issue 6	Level I		0.087872	1.00	.5581	0.087872	11380145.54
1211100102	Inductor	L11	Bellcore Issue 6	Level I		0.087872	1.00	.5581	0.087872	11380145.54
1211101009	Inductor	L12	Bellcore Issue 6	Level I		0.087872	1.00	.5581	0.087872	11380145.54
1654262300	Connection	MPC11	Bellcore Issue 6	Level I		0.074324	1.00	.4721	0.074324	13454601.80

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Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
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Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1315450010	Semiconductor	M1-M3	Bellcore Issue 6	Level I		0.000000	3.00	.0000	0.000000	.00
1213103018	Inductor	NL1	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
1315700212	Semiconductor	Q11,Q12,Q19,Q36,Q38,Q41,Q42,Q-49,Q5,Q50-Q53,Q6,Q54-Q56,Q58--Q60	Bellcore Issue 6	Level I		0.081916	20.00	10.4060	1.638327	12207573.09
1315668012	Semiconductor	Q10,Q15,Q16,Q9	Bellcore Issue 6	Level I		0.024575	4.00	.6244	0.098300	40691910.29
1315889611	Semiconductor	Q13,Q14,Q17,Q18,U17,U18	Bellcore Issue 6	Level I		0.081916	6.00	3.1218	0.491498	12207573.09
1315030110	Semiconductor	Q21-Q24,Q30-Q33	Bellcore Issue 6	Level I		0.000000	8.00	.0000	0.000000	.00
1315030210	Semiconductor	Q34	Bellcore Issue 6	Level I		0.000000	1.00	.0000	0.000000	.00
1315667910	Semiconductor	U64	Bellcore Issue 6	Level I		0.081916	1.00	.5203	0.081916	12207573.09
1311390610	Semiconductor	Q35,Q37	Bellcore Issue 6	Level I		0.024575	2.00	.3122	0.049150	40691910.29
1310390411	Semiconductor	Q43-Q45	Bellcore Issue 6	Level I		0.024575	3.00	.4683	0.073725	40691910.29
1540710084	Resistor	RP1,RP11,RP12,RP15,RP16,RP19-,RP20,RP23,RP24,RP26,RP28,RP-30,RP32	Bellcore Issue 6	Level I		0.006537	13.00	.5398	0.084984	152970720.28
1540710084	Resistor	RP33,RP35,RP4,RP7,RP70,RP71,-RP9	Bellcore Issue 6	Level I		0.006537	7.00	.2907	0.045760	152970720.28
105A720009	Resistor	R663	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
1124701680	Capacitor	C642	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1122722080	Capacitor	C613	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1653205201	Connection	CN27	Bellcore Issue 6	Level I		0.005994	1.00	.0381	0.005994	166837062.32
1231373740	Miscellaneous	Y7	Bellcore Issue 6	Level I		0.150000	1.00	.9527	0.150000	6666666.67
14S3033800	Integrated Circuit	U20	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S3260100	Integrated Circuit	U22	Bellcore Issue 6	Level I	43.00	0.374248	1.00	2.3771	0.374248	2672026.93
14S4285201	Integrated Circuit	U24	Bellcore Issue 6	Level I	37.40	0.290271	1.00	1.8437	0.290271	3445059.16
14S4280106	Integrated Circuit	U25	Bellcore Issue 6	Level I	35.80	0.269522	1.00	1.7119	0.269522	3710266.06
14S4810001	Integrated Circuit	U27	Bellcore Issue 6	Level I		0.041667	1.00	.2647	0.041667	23999884.99
14S47009B0	Integrated Circuit	U31	Bellcore Issue 6	Level I		0.073694	1.00	.4681	0.073694	13569563.14
14S3020100	Integrated Circuit	U33	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S4021310	Integrated Circuit	U35,U36,U58	Bellcore Issue 6	Level I		0.063856	3.00	1.2168	0.191568	15660198.22
14S4021310	Integrated Circuit	U44	Bellcore Issue 6	Level I	27.40	0.395666	1.00	2.5131	0.395666	2527383.60
14S4021310	Integrated Circuit	U45	Bellcore Issue 6	Level I	26.90	0.383767	1.00	2.4375	0.383767	2605750.95
14S4021310	Integrated Circuit	U57	Bellcore Issue 6	Level I	32.40	0.534251	1.00	3.3934	0.534251	1871779.55

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129701690	Capacitor	C33,C337-C340,C342-C349,C35,C-351,C352,C354,C355,C358,C359,C-36	Bellcore Issue 6	Level I		0.000804	21.00	.1072	0.016877	1244276103.50
1129701690	Capacitor	C361,C369-C398,C400,C402,C405-C413,C41,C418,C419,C421,C422,-C424	Bellcore Issue 6	Level I		0.000804	48.00	.2450	0.038577	1244276103.50
1129701690	Capacitor	C428,C429,C432-C437,C439,C44,-C440,C441,C443,C446,C447,C449-C45	Bellcore Issue 6	Level I		0.000804	17.00	.0868	0.013663	1244276103.50
1129701690	Capacitor	C450,C452,C453,C459,C469,C47,-C470,C477,C48,C482,C483,C488--C494	Bellcore Issue 6	Level I		0.000804	18.00	.0919	0.014466	1244276103.50
1129701690	Capacitor	C497-C503,C50,C508-C511,C520,-C523,C524,C549,C55,C569,C57,C-585	Bellcore Issue 6	Level I		0.000804	20.00	.1021	0.016074	1244276103.50
1129701690	Capacitor	C586,C587,C59,C590,C592-C596,-C61,C626-C632,C63,C635,C643,C7-C414,C415	Bellcore Issue 6	Level I		0.000804	23.00	.1174	0.018485	1244276103.50
1129701690	Capacitor	C89,C9,C90-C93,C95-C98	Bellcore Issue 6	Level I		0.000804	10.00	.0510	0.008037	1244276103.50
105A530103	Resistor	R191,R192	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A501523	Resistor	R199	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A702229	Resistor	R213-R215,R218,R221,R222,R229-R230,R340,R341,R354,R402,R430-R432,R731,R732	Bellcore Issue 6	Level I		0.002312	16.00	.2350	0.036999	432445530.49
105A702229	Resistor	R450,R451,R544	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A701009	Resistor	R240-R251,R254,R257-R261,R268-R269,R276,R277,R284,R286,R302-R303,R726,R727	Bellcore Issue 6	Level I		0.002312	28.00	.4113	0.064748	432445530.49
105A701009	Resistor	R305,R307-R309,R312,R313	Bellcore Issue 6	Level I		0.002312	6.00	.0881	0.013875	432445530.49
105A701533	Resistor	R375	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A706203	Resistor	R327	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A513003	Resistor	R334	Bellcore Issue 6	Level 0		0.004625	1.00	.0294	0.004625	216222765.25
105A708223	Resistor	R351	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A700003	Resistor	FB29,FB30,R365,R479,R490,R608-R654,FB6,R674	Bellcore Issue 6	Level I		0.002312	9.00	.1322	0.020812	432445530.49
105A506823	Resistor	R476,R478	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A747033	Resistor	R579,R580	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49

AAEON Reliability Prediction Report

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Reference Des
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Environment GF, GU - Ground Fixed, Uncontrolled
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Description
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Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A702053	Resistor	R612	Bellcore Issue 6	Level I		0.013875	1.00	.0881	0.013875	72074255.08
1054600289	Resistor	SR1,SR2	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
1189615187	Capacitor	TC26,TC34,TC6	Bellcore Issue 6	Level I		0.000804	3.00	.0153	0.002411	1244276103.50
1189615187	Capacitor	TC33	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1189615187	Capacitor	FU7	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1189615187	Capacitor	TC27	Bellcore Issue 6	Level I	38.20	0.001554	1.00	.0099	0.001554	643550727.35
1189615190	Capacitor	C589,C591,TC29-TC31	Bellcore Issue 6	Level I		0.000804	5.00	.0255	0.004018	1244276103.50
1189615190	Capacitor	TC28	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
11E1647650	Capacitor	C6	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
121110010R	Inductor	L5,L6	Bellcore Issue 6	Level I		0.087872	2.00	1.1163	0.175745	11380145.54
14S5A00700	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.040175	1.00	.2552	0.040175	24890958.85
14S3156500	Integrated Circuit	U6,U8	Bellcore Issue 6	Level I		0.063856	2.00	.8112	0.127712	15660198.22
1315441012	Semiconductor	U10	Bellcore Issue 6	Level I	31.50	0.184795	1.00	1.1737	0.184795	5411402.23
1315441012	Semiconductor	U12	Bellcore Issue 6	Level I		0.081916	1.00	.5203	0.081916	12207573.09
1315992601	Semiconductor	U16	Bellcore Issue 6	Level I		0.081916	1.00	.5203	0.081916	12207573.09
1315992601	Semiconductor	U53	Bellcore Issue 6	Level I		0.081916	1.00	.5203	0.081916	12207573.09
1315992601	Semiconductor	U14	Bellcore Issue 6	Level I		0.081916	1.00	.5203	0.081916	12207573.09
1231324555	Miscellaneous	Y6	Bellcore Issue 6	Level I		0.150000	1.00	.9527	0.150000	6666666.67
14S4147600	Integrated Circuit	U21	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S6334610	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.032912	1.00	.2090	0.032912	30383770.75
1315970110	Semiconductor	U32,U41,U63,U66	Bellcore Issue 6	Level I		0.163833	4.00	4.1624	0.655331	6103786.54
14S5974740	Integrated Circuit	U65,U69	Bellcore Issue 6	Level I		0.041667	2.00	.5293	0.083334	23999884.99
14S4871203	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.041667	1.00	.2647	0.041667	23999884.99
14S4048500	Integrated Circuit	U37,U39	Bellcore Issue 6	Level I		0.063856	2.00	.8112	0.127712	15660198.22
14S3065500	Integrated Circuit	U49	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
1540733082	Resistor	RP57-RP60,RP62-RP65,RP73-RP76	Bellcore Issue 6	Level I		0.006537	12.00	.4983	0.078446	152970720.28
106B501031	Resistor	RT1-RT3	Bellcore Issue 6	Level I		0.011988	3.00	.2284	0.035963	83418531.16
105A501039	Resistor	R207,R324,R328,R331,R370,R442-,R443,R468,R471,R473-R475,R484-,R486,R714,R728	Bellcore Issue 6	Level I		0.002312	17.00	.2497	0.039311	432445530.49

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Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A501039	Resistor	R5,R51,R537,R540-R542,R545,R5-46,R567,R568,R634,R638,R641,R6-42,R74	Bellcore Issue 6	Level I		0.002312	15.00	.2203	0.034686	432445530.49
105A501039	Resistor	R76,R78,R79,R86,R87,R89,R99	Bellcore Issue 6	Level I		0.002312	7.00	.1028	0.016187	432445530.49
105A700009	Resistor	R211,R364,R366-R368,R378,R39,-R393,R399,R403,R404,R420	Bellcore Issue 6	Level I		0.002312	12.00	.1763	0.027749	432445530.49
105A700009	Resistor	R421,R433,R465,R470,R505,R507-R508,R510,R55	Bellcore Issue 6	Level I		0.002312	9.00	.1322	0.020812	432445530.49
105A700009	Resistor	R59,R616,R623,R625,R627,R629,-R631,R635-R637,R639,R640,R652	Bellcore Issue 6	Level I		0.002312	13.00	.1909	0.030062	432445530.49
105A700009	Resistor	R655,R7,R84,R374,R665,R669,R7-10,R712,R720,R734	Bellcore Issue 6	Level I		0.002312	10.00	.1469	0.023124	432445530.49
105A501003	Resistor	R17,R35,R44,R46,R83	Bellcore Issue 6	Level I		0.002312	5.00	.0734	0.011562	432445530.49
1059702261	Resistor	R105,R108,R19,R22,R36,R37,R49-R52,R58,R62,R82,R88	Bellcore Issue 6	Level I		0.002312	12.00	.1763	0.027749	432445530.49
105A517423	Resistor	R23	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A551113	Resistor	R38	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
1059700001	Resistor	R109,R110,R173,R175-R177,R390-R391,R45,R64,R67	Bellcore Issue 6	Level I		0.002312	11.00	.1616	0.025437	432445530.49
105A571533	Resistor	R53,R57	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A502833	Resistor	R63	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A500233	Resistor	R154,R70,R71	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A533203	Resistor	R77,R90,R93,R98	Bellcore Issue 6	Level I		0.002312	4.00	.0588	0.009250	432445530.49
105A578703	Resistor	R172,R92,R97	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A561903	Resistor	R407,R96	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A521033	Resistor	R107	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A503309	Resistor	R117-R120,R122-R125,R127,R129-R131,R133,R135,R137,R139,R140-R142	Bellcore Issue 6	Level I		0.002312	18.00	.2644	0.041624	432445530.49
105A503309	Resistor	R144-R148,R347,R348,R460-R463-R466,R487,R497,R551,R552,R559-R560	Bellcore Issue 6	Level I		0.002312	18.00	.2644	0.041624	432445530.49
105A503309	Resistor	R562,R646	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A547503	Resistor	R149	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A733009	Resistor	R156,R440,R441,R467,R469,R565-R566,R576,R577,R578	Bellcore Issue 6	Level I		0.002312	10.00	.1469	0.023124	432445530.49
105A554963	Resistor	R163-R165,R168,R171	Bellcore Issue 6	Level I		0.002312	5.00	.0734	0.011562	432445530.49

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1124568280	Capacitor	C13	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
14S4081110	Integrated Circuit	U59	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
123131435B	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	.9527	0.150000	6666666.67
1231325058	Miscellaneous	Y4	Bellcore Issue 6	Level I		0.150000	1.00	.9527	0.150000	6666666.67
1759100006	Miscellaneous	BU1	Bellcore Issue 6	Level I		0.150000	1.00	.9527	0.150000	6666666.67
1653010203	Connection	CN5	Bellcore Issue 6	Level I		0.011988	1.00	.0761	0.011988	83418531.16
1654030003	Connection	CN6	Bellcore Issue 6	Level I		0.017982	1.00	.1142	0.017982	55612354.11
1653004202	Connection	CN7	Bellcore Issue 6	Level I		0.004795	1.00	.0305	0.004795	208546327.90
1653005202	Connection	CN10,CN24	Bellcore Issue 6	Level I		0.005994	2.00	.0761	0.011988	166837062.32
1653022202	Connection	CN22	Bellcore Issue 6	Level I		0.026373	1.00	.1675	0.026373	37917514.16
1174522180	Capacitor	CP1	Bellcore Issue 6	Level I		0.000708	1.00	.0045	0.000708	1412006383.28
1129722060	Capacitor	C190,C286,C287,C314,C315,C401-C5,TC32	Bellcore Issue 6	Level I		0.000804	8.00	.0408	0.006429	1244276103.50
1124522880	Capacitor	C12	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
105A549963	Resistor	R182	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A512703	Resistor	R197	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A540263	Resistor	R209,R318,R319	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A560403	Resistor	R217,R227	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A560463	Resistor	R220,R228	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A705609	Resistor	R160,R167,R169,R170,R252,R253-R255,R256,R262-R267,R270-R275-R278	Bellcore Issue 6	Level I		0.002312	21.00	.3084	0.048561	432445530.49
105A705609	Resistor	R279-R283,R285,R287-R293,R296-R298,R300,R304,R306,R310,R311-R314	Bellcore Issue 6	Level I		0.002312	22.00	.3231	0.050873	432445530.49
105A705609	Resistor	R315	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A506803	Resistor	R329	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A548703	Resistor	R332	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A522663	Resistor	R350	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A733003	Resistor	R352,R379,R389	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A510033	Resistor	R355	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A554903	Resistor	R406	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A507509	Resistor	R431,R454,R455-R459,R715-R717	Bellcore Issue 6	Level I		0.002312	10.00	.1469	0.023124	432445530.49

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A514003	Resistor	R434	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A702233	Resistor	R547,R548	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A756033	Resistor	R581,R582	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A504723	Resistor	R607,R609,R611	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A523233	Resistor	R613	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
1189633181	Capacitor	TC5	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1189633181	Capacitor	TC7	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
11E9610190	Capacitor	TC10	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1189922180	Capacitor	TC21	Bellcore Issue 6	Level I		0.004625	3.00	.0881	0.013875	216222765.25
1189922180	Capacitor	TC20	Bellcore Issue 6	Level I		0.004625	2.00	.0588	0.009250	216222765.25
1189922180	Capacitor	TC23	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
1189922180	Capacitor	TC22	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
1189922180	Capacitor	TC24	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
1189922180	Capacitor	TC25	Bellcore Issue 6	Level I	36.30	0.008684	1.00	.0552	0.008684	115150901.19
1189922180	Capacitor	TC11	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
14S4070610	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S5900600	Integrated Circuit	U3	Bellcore Issue 6	Level I		0.073694	1.00	.4681	0.073694	13569563.14
14S5A01400	Integrated Circuit	U38,U4,U5	Bellcore Issue 6	Level I		0.063856	3.00	1.2168	0.191568	15660198.22
14S2303700	Integrated Circuit	U7	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S2705700	Integrated Circuit	U11	Bellcore Issue 6	Level I	32.40	0.534251	1.00	3.3934	0.534251	1871779.55
1314331010	Integrated Circuit	U13	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S4148500	Integrated Circuit	U15	Bellcore Issue 6	Level I		0.063856	1.00	.4056	0.063856	15660198.22
14S5A00820	Integrated Circuit	U19,U70	Bellcore Issue 6	Level I		0.041667	2.00	.5293	0.083334	23999884.99
1651611992	Connection	U23	Bellcore Issue 6	Level I		0.001199	1.00	.0076	0.001199	834185311.58
1540756081	Resistor	RP10,RP13,RP14,RP17,RP18,RP2- ,RP21,RP22,RP25,RP27,RP29,RP3- ,RP31	Bellcore Issue 6	Level I		0.006537	13.00	.5398	0.084984	152970720.28
1540756081	Resistor	RP34,RP36,RP5,RP6,RP8	Bellcore Issue 6	Level I		0.006537	5.00	.2076	0.032686	152970720.28
1540782280	Resistor	RP37-RP44,RP46-RP48,RP54-RP5- 6,RP61	Bellcore Issue 6	Level I		0.006537	15.00	.6228	0.098058	152970720.28
1540700080	Resistor	RP49,RP72	Bellcore Issue 6	Level I		0.006537	2.00	.0830	0.013074	152970720.28
105A705623	Resistor	R371	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1540715180	Resistor	RP69	Bellcore Issue 6	Level I		0.006537	1.00	.0415	0.006537	152970720.28
105A704729	Resistor	R1,R316,R345,R358-R361,R452,R-453,R646,R481,R483,R492,R494	Bellcore Issue 6	Level I		0.002312	14.00	.2056	0.032374	432445530.49
105A704729	Resistor	R501,R509,R511-R513,R515-R518-R520,R554,R555,R557,R558,R569-R570	Bellcore Issue 6	Level I		0.002312	16.00	.2350	0.036999	432445530.49
105A704729	Resistor	R603-R605,R624,R626,R628,R630-R645,R651	Bellcore Issue 6	Level I		0.002312	9.00	.1322	0.020812	432445530.49
105A500139	Resistor	R10-R12,R121,R13,R132,R134,R1-41,R143,R151,R155,R2,R203-R205-R212	Bellcore Issue 6	Level I		0.002312	16.00	.2350	0.036999	432445530.49
105A500139	Resistor	R3,R346,R349,R363,R395,R4,R416-R447,R472,R482,R489,R493,R500-R514	Bellcore Issue 6	Level I		0.002312	14.00	.2056	0.032374	432445530.49
105A500139	Resistor	R564,R575,R66,R660,R662,R8,R3-73	Bellcore Issue 6	Level I		0.002312	7.00	.1028	0.016187	432445530.49
105A710039	Resistor	R14,R200-R202,R223,R400,R419,-R42,R43,R535,R536,R538,R539,R-553,R722,R723,R724	Bellcore Issue 6	Level I		0.002312	17.00	.2497	0.039311	432445530.49
105A710039	Resistor	R556,R6	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A503033	Resistor	R477,R9,R94	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A516513	Resistor	R15	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A512033	Resistor	R18	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A700133	Resistor	R20,R353,R606	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A568123	Resistor	R21,R24	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A708229	Resistor	R206,R320-R323,R325,R326,R33,-R330,R336,R338,R34,R343,R344,-R572	Bellcore Issue 6	Level I		0.002312	15.00	.2203	0.034686	432445530.49
105A708229	Resistor	R600,R658,R659	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A502423	Resistor	R40,R436	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A518223	Resistor	R100,R48	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
105A547523	Resistor	R50	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A507523	Resistor	R60	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A502033	Resistor	R65,R72	Bellcore Issue 6	Level I		0.002312	2.00	.0294	0.004625	432445530.49
1059701133	Resistor	R69	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A501033	Resistor	R16,R495,R496,R498,R73,R75,R6-73,R676	Bellcore Issue 6	Level I		0.002312	8.00	.1175	0.018499	432445530.49

AAEON Reliability Prediction Report

Part Number 9697852T1J-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 15.744017
MTBF 63,516

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A705133	Resistor	R488,R499,R80	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
1059700101	Resistor	R104,R231-R239,R85	Bellcore Issue 6	Level I		0.002312	11.00	.1616	0.025437	432445530.49
105A519103	Resistor	R95	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A519623	Resistor	R102	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A528723	Resistor	R103	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A549969	Resistor	R111-R116,R185,R187,R188,R381-R384	Bellcore Issue 6	Level I		0.002312	13.00	.1909	0.030062	432445530.49
105A510053	Resistor	R126,R356,R357	Bellcore Issue 6	Level I		0.013875	3.00	.2644	0.041624	72074255.08
105A515003	Resistor	R152,R161,R193,R194,R219,R226-R333,R335	Bellcore Issue 6	Level I		0.002312	8.00	.1175	0.018499	432445530.49
105A500133	Resistor	R153,R216,R225	Bellcore Issue 6	Level I		0.002312	3.00	.0441	0.006937	432445530.49
105A527463	Resistor	R162,R166,R184,R195,R196	Bellcore Issue 6	Level I		0.002312	5.00	.0734	0.011562	432445530.49
105A524303	Resistor	R180	Bellcore Issue 6	Level I		0.002312	1.00	.0147	0.002312	432445530.49
105A510009	Resistor	R181,R183,R186,R189,R190,R198-R571,R573,R574,R649,R650,R661-R733	Bellcore Issue 6	Level I		0.002312	13.00	.1909	0.030062	432445530.49
1121722780	Capacitor	C8	Bellcore Issue 6	Level I		0.004625	1.00	.0294	0.004625	216222765.25
1121701080	Capacitor	C17,C173,C175,C18-C20,C301,C303,C305,C307,C309,C311	Bellcore Issue 6	Level I		0.000804	12.00	.0613	0.009644	1244276103.50
1121701080	Capacitor	C34,C353,C356,C38,C40,C416,C417,C42,C512-C519,C52	Bellcore Issue 6	Level I		0.000804	17.00	.0868	0.013663	1244276103.50
1121701080	Capacitor	C521,C522,C525-C532,C54,C552-C556,C559,C561-C563,C567,C573-C574	Bellcore Issue 6	Level I		0.000804	23.00	.1174	0.018485	1244276103.50
1121701080	Capacitor	C577,C580,C581,C584,C607,C608-C614,C616,C617-C623,C69-C72,C76,C78	Bellcore Issue 6	Level I		0.000804	21.00	.1072	0.016877	1244276103.50
1121701080	Capacitor	C83,C87	Bellcore Issue 6	Level I		0.000804	2.00	.0102	0.001607	1244276103.50
1129701790	Capacitor	C122,C124,C126,C128,C167,C169-C224,C228,C325,C327,C360,C504-C506	Bellcore Issue 6	Level I		0.000804	13.00	.0664	0.010448	1244276103.50
1129701790	Capacitor	C636-C639,C64,C640,C641,C65	Bellcore Issue 6	Level I		0.000804	8.00	.0408	0.006429	1244276103.50
1124433190	Capacitor	C29,C462,C467,C468,C66,C67,C77-C82	Bellcore Issue 6	Level I		0.000804	8.00	.0408	0.006429	1244276103.50
1124547280	Capacitor	C75	Bellcore Issue 6	Level I		0.000804	1.00	.0051	0.000804	1244276103.50
1129722680	Capacitor	C149-C158	Bellcore Issue 6	Level I		0.000804	10.00	.0510	0.008037	1244276103.50

AAEON Reliability Prediction Report

Part Number 9697P12D02-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 3.804764
MTBF 262,828

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653003101	Connection	JP1	Bellcore Issue 6	Level I		0.001798	1.00	.0473	0.001798	556123541.06
1655302020	Connection	J4	Bellcore Issue 6	Level I		0.001199	1.00	.0315	0.001199	834185311.58
1655004011	Connection	J2,J3	Bellcore Issue 6	Level I		0.002398	2.00	.1260	0.004795	417092655.79
1655306020	Connection	J1	Bellcore Issue 6	Level I		0.003596	1.00	.0945	0.003596	278061770.53
1655003010	Connection	J9	Bellcore Issue 6	Level I		0.001798	1.00	.0473	0.001798	556123541.06
1189647193	Capacitor	EC6,EC7	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
1181647110	Capacitor	EC1-EC5	Bellcore Issue 6	Level I		0.004625	5.00	.6078	0.023124	216222765.25
1189618090	Capacitor	C13,C16,C48-C50,C55,C57	Bellcore Issue 6	Level I		0.004625	7.00	.8509	0.032374	216222765.25
105A512103	Resistor	R26	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A700003	Resistor	R13,R17,R22,R30,R32,R36,R38,R-40,R41,R64	Bellcore Issue 6	Level I		0.002312	10.00	.6078	0.023124	432445530.49
105A700233	Resistor	R23	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A701003	Resistor	R2	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A701053	Resistor	R29,45R,R69	Bellcore Issue 6	Level I		0.002312	3.00	.1823	0.006937	432445530.49
105A700133	Resistor	R5,R53,R6,R7	Bellcore Issue 6	Level I		0.002312	4.00	.2431	0.009250	432445530.49
105A701033	Resistor	R24,R31,R42,R8	Bellcore Issue 6	Level I		0.002312	4.00	.2431	0.009250	432445530.49
1059501001	Resistor	R35	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1059700001	Resistor	R48	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A502033	Resistor	R47,R70	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
105A510003	Resistor	R3,R4	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
105A510033	Resistor	R54,R58-R60,R62,R65	Bellcore Issue 6	Level I		0.002312	6.00	.3647	0.013875	432445530.49
105A512413	Resistor	R14,R18	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
105A524913	Resistor	R20	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1124522180	Capacitor	C37	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
1124533080	Capacitor	C32,C34	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
1300003240	Semiconductor	D3	Bellcore Issue 6	Level I		0.024575	1.00	.6459	0.024575	40691910.29
1124547280	Capacitor	C59	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
1124701650	Capacitor	C53	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
1125501760	Capacitor	C56	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
1143610080	Capacitor	C29,C33,C39	Bellcore Issue 6	Level I		0.004625	3.00	.3647	0.013875	216222765.25
1301005442	Semiconductor	D1	Bellcore Issue 6	Level I		0.024575	1.00	.6459	0.024575	40691910.29

AAEON Reliability Prediction Report

Part Number 9697P12D02-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 3.804764
MTBF 262,828

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1315700211	Semiconductor	Q1-Q3,Q10,Q11	Bellcore Issue 6	Level I		0.081916	5.00	10.7650	0.409582	12207573.09
105A556223	Resistor	R39	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1121547661	Capacitor	C1,C35,C8	Bellcore Issue 6	Level I		0.004625	3.00	.3647	0.013875	216222765.25
1121747780	Capacitor	C61	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
1123710090	Capacitor	C15,C20	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
1124701680	Capacitor	C47,C51,C52,C58,C60	Bellcore Issue 6	Level I		0.004625	5.00	.6078	0.023124	216222765.25
105A536503	Resistor	R25	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A530933	Resistor	R61	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A704729	Resistor	R11,R27,R9	Bellcore Issue 6	Level I		0.002312	3.00	.1823	0.006937	432445530.49
105A700009	Resistor	R10,R12	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
1129701690	Capacitor	C12,C2,C22-C24,C26-C28,C38,C40-C43	Bellcore Issue 6	Level I		0.004625	13.00	1.5802	0.060123	216222765.25
1129701790	Capacitor	C10,C6	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
1301053040	Semiconductor	D6	Bellcore Issue 6	Level I		0.024575	1.00	.6459	0.024575	40691910.29
1144647680	Capacitor	C25,C54	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
105A702433	Resistor	R66	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A515033	Resistor	R43	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1314193110	Integrated Circuit	U5	Bellcore Issue 6	Level I		0.063856	1.00	1.6783	0.063856	15660198.22
105A515433	Resistor	R46	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
14S5A00820	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.041667	1.00	1.0951	0.041667	23999884.99
1121701080	Capacitor	C30,C31	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
1124522290	Capacitor	C11	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
105A502039	Resistor	R15	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1054600289	Resistor	R28,R49	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
105A518223	Resistor	R34	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A547523	Resistor	R44	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1129610051	Capacitor	C17-C19,C44-C46	Bellcore Issue 6	Level I		0.004625	6.00	.7293	0.027749	216222765.25
1121722090	Capacitor	C36	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
105A534823	Resistor	R19	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1301003640	Semiconductor	D4,D5,D7-D9	Bellcore Issue 6	Level I		0.024575	5.00	3.2295	0.122875	40691910.29
1301003640	Semiconductor	D11	Bellcore Issue 6	Level I	19.40	0.041339	1.00	1.0865	0.041339	24190161.07

AAEON Reliability Prediction Report

Part Number 9697P12D02-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

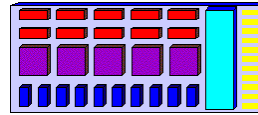


Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 3.804764
MTBF 262,828

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1301003440	Semiconductor	D2	Bellcore Issue 6	Level I		0.024575	1.00	.6459	0.024575	40691910.29
1315567011	Semiconductor	Q12,Q13,Q4-Q9	Bellcore Issue 6	Level I		0.081916	8.00	17.2240	0.655331	12207573.09
121230603S	Inductor	L1	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1050597623	Resistor	R33	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1122522890	Capacitor	C7	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
121110336H	Inductor	L2	Bellcore Issue 6	Level I	37.70	0.168600	1.00	4.4313	0.168600	5931192.26
105A502733	Resistor	R68	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1752001900	Miscellaneous	F1,F2	Bellcore Issue 6	Level I		0.030000	2.00	1.5770	0.060000	33333333.33
11C4501060	Capacitor	C4	Bellcore Issue 6	Level I		0.004625	1.00	.1216	0.004625	216222765.25
11C1522480	Capacitor	C3,C5	Bellcore Issue 6	Level I		0.004625	2.00	.2431	0.009250	216222765.25
121110100K	Inductor	L4,L5	Bellcore Issue 6	Level I		0.087872	2.00	4.6191	0.175745	11380145.54
1053500279	Resistor	CR1,CR2	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
14S3378000	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.063856	1.00	1.6783	0.063856	15660198.22
1301330T40	Semiconductor	D10	Bellcore Issue 6	Level I	20.40	0.042390	1.00	1.1141	0.042390	23590635.06
1315741610	Semiconductor	T3	Bellcore Issue 6	Level I	26.30	0.163335	1.00	4.2929	0.163335	6122376.57
1315741610	Semiconductor	T2	Bellcore Issue 6	Level I	20.10	0.140241	1.00	3.6859	0.140241	7130557.49
1052506879	Resistor	R52	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1211102266	Inductor	L3	Bellcore Issue 6	Level I	34.50	0.004222	1.00	.1110	0.004222	236843959.14
1211102266	Inductor	L6	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1314108517	Integrated Circuit	U3	Bellcore Issue 6	Level I		0.063856	1.00	1.6783	0.063856	15660198.22
105A530113	Resistor	R56,R57	Bellcore Issue 6	Level I		0.002312	2.00	.1216	0.004625	432445530.49
14S3372801	Integrated Circuit	U4	Bellcore Issue 6	Level I	28.00	0.410383	1.00	10.7860	0.410383	2436748.16
1315889611	Semiconductor	T1	Bellcore Issue 6	Level I		0.081916	1.00	2.1530	0.081916	12207573.09
1211103308	Inductor	L7	Bellcore Issue 6	Level I	19.30	0.125057	1.00	3.2869	0.125057	7996348.55
105A706223	Resistor	R67	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1315668510	Semiconductor	Q14	Bellcore Issue 6	Level I		0.081916	1.00	2.1530	0.081916	12207573.09
14S2400700	Integrated Circuit	U6	Bellcore Issue 6	Level I	17.30	0.209561	1.00	5.5079	0.209561	4771874.72
105A526100	Resistor	R50	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
105A523233	Resistor	R71	Bellcore Issue 6	Level I		0.002312	1.00	.0608	0.002312	432445530.49
1119622112	Capacitor	C62,C63	Bellcore Issue 6	Level I		0.044954	2.00	2.3630	0.089908	22244941.64
1655106003	Connection	J7	Bellcore Issue 6	Level I		0.003596	1.00	.0945	0.003596	278061770.53

AAEON Reliability Prediction Report

Part Number 9697P12D02-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

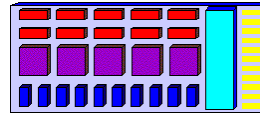


Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 3.804764
MTBF 262,828

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate,%	Failure Rate	MTBF, Unit
1655307022	Connection	J6	Bellcore Issue 6	Level I		0.004196	1.00	.1103	0.004196	238338660.45
1655420020	Connection	CN1	Bellcore Issue 6	Level I		0.011988	1.00	.3151	0.011988	83418531.16

AAEON Reliability Prediction Report

Part Number 9697T06600
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 0.499286
MTBF 2,002,859

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1655005121	Connection	USB1	Bellcore Issue 6	Level I		0.002997	1.00	.6002	0.002997	333674124.63
12311120A1	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	30.0429	0.150000	6666666.67
1304451400	Semiconductor	D1	Bellcore Issue 6	Level I		0.005342	1.00	1.0699	0.005342	187200330.10
105A700003	Resistor	R9-R11	Bellcore Issue 6	Level I		0.002312	3.00	1.3894	0.006937	432445530.49
105A701053	Resistor	R13,R7	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
105A702223	Resistor	R16	Bellcore Issue 6	Level I		0.002312	1.00	.4631	0.002312	432445530.49
105A700133	Resistor	R2	Bellcore Issue 6	Level I		0.002312	1.00	.4631	0.002312	432445530.49
105A701033	Resistor	R15,R17	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
105A747003	Resistor	R1,R3	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
105A704733	Resistor	R14,R5	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
105A710033	Resistor	R12,R18	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
105A768003	Resistor	R4	Bellcore Issue 6	Level I		0.002312	1.00	.4631	0.002312	432445530.49
1121501680	Capacitor	C1,C11,C12,C16,C18,C2,C20,C21,- C23,C3,C4,C6-C9	Bellcore Issue 6	Level I		0.004625	15.00	13.8944	0.069373	216222765.25
1124420080	Capacitor	C14,C15	Bellcore Issue 6	Level I		0.004625	2.00	1.8526	0.009250	216222765.25
1124601660	Capacitor	C24-C26	Bellcore Issue 6	Level I		0.004625	3.00	2.7789	0.013875	216222765.25
1129747650	Capacitor	C10,C5	Bellcore Issue 6	Level I		0.004625	2.00	1.8526	0.009250	216222765.25
1122501780	Capacitor	C13	Bellcore Issue 6	Level I		0.004625	1.00	.9263	0.004625	216222765.25
105A524033	Resistor	R6	Bellcore Issue 6	Level I		0.002312	1.00	.4631	0.002312	432445530.49
1315035610	Semiconductor	U3	Bellcore Issue 6	Level I		0.000000	1.00	.0000	0.000000	.00
121231206B	Inductor	L1,L2	Bellcore Issue 6	Level I		0.002312	2.00	.9263	0.004625	432445530.49
1129710060	Capacitor	C19,C22	Bellcore Issue 6	Level I		0.004625	2.00	1.8526	0.009250	216222765.25
1214309000	Inductor	CM1	Bellcore Issue 6	Level I		0.002312	1.00	.4631	0.002312	432445530.49
11C1501080	Capacitor	C17	Bellcore Issue 6	Level I		0.004625	1.00	.9263	0.004625	216222765.25
14S4819000	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.041667	1.00	8.3453	0.041667	23999884.99
1314880511	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.063856	1.00	12.7895	0.063856	15660198.22
1653946110	Connection	CON4	Bellcore Issue 6	Level I		0.027572	1.00	5.5222	0.027572	36268926.59
1653910110	Connection	CON2	Bellcore Issue 6	Level I		0.005994	1.00	1.2005	0.005994	166837062.32
1653909110	Connection	CON3	Bellcore Issue 6	Level I		0.005394	1.00	1.0804	0.005394	185374513.69
165392521C	Connection	CON1	Bellcore Issue 6	Level I		0.029969	1.00	6.0024	0.029969	33367412.46

AAEON Reliability Prediction Report

Part Number 9697T10900-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

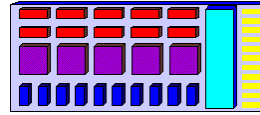


Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 1.197826
MTBF 834,846

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1112610190	Capacitor	C3	Bellcore Issue 6	Level I		0.044954	1.00	3.7530	0.044954	22244941.64
1655302020	Connection	CN2,CN4,CN7,CN8	Bellcore Issue 6	Level I		0.001199	4.00	.4003	0.004795	834185311.58
1655004011	Connection	CN1	Bellcore Issue 6	Level I		0.002398	1.00	.2002	0.002398	417092655.79
1655304020	Connection	CN11-CN13,CN3,CN9	Bellcore Issue 6	Level I		0.002398	5.00	1.0008	0.011988	417092655.79
1655305020	Connection	CN6	Bellcore Issue 6	Level I		0.002997	1.00	.2502	0.002997	333674124.63
1655308021	Connection	CN10,CN5	Bellcore Issue 6	Level I		0.004795	2.00	.8006	0.009590	208546327.90
1111610194	Capacitor	C14,C4	Bellcore Issue 6	Level I		0.044954	2.00	7.5059	0.089908	22244941.64
1111622102	Capacitor	C30,C32,C34	Bellcore Issue 6	Level I		0.044954	3.00	11.2589	0.134862	22244941.64
105A701053	Resistor	R21	Bellcore Issue 6	Level I		0.002312	1.00	.1931	0.002312	432445530.49
105A704723	Resistor	R19	Bellcore Issue 6	Level I		0.002312	1.00	.1931	0.002312	432445530.49
105A701033	Resistor	R15,R8	Bellcore Issue 6	Level I		0.002312	2.00	.3861	0.004625	432445530.49
105A701533	Resistor	R13,R14,R17,R18,R22-R25	Bellcore Issue 6	Level I		0.002312	8.00	1.5444	0.018499	432445530.49
105A704733	Resistor	R16	Bellcore Issue 6	Level I		0.002312	1.00	.1931	0.002312	432445530.49
105A710033	Resistor	R1,R11,R2,R3	Bellcore Issue 6	Level I		0.002312	4.00	.7722	0.009250	432445530.49
105A721033	Resistor	R12	Bellcore Issue 6	Level I		0.002312	1.00	.1931	0.002312	432445530.49
1122701680	Capacitor	C1,C2	Bellcore Issue 6	Level I		0.004625	2.00	.7722	0.009250	216222765.25
1124420080	Capacitor	C27,C28	Bellcore Issue 6	Level I		0.004625	2.00	.7722	0.009250	216222765.25
1314111715	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.063856	1.00	5.3310	0.063856	15660198.22
1129701690	Capacitor	C10-C12,C15-C17,C19,C21-C25,C-29,C31,C33,C5-C9	Bellcore Issue 6	Level I		0.004625	20.00	7.7221	0.092497	216222765.25
105A568003	Resistor	R20	Bellcore Issue 6	Level I		0.002312	1.00	.1931	0.002312	432445530.49
1315970110	Semiconductor	U7-U9	Bellcore Issue 6	Level I		0.081916	3.00	20.5163	0.245749	12207573.09
1129610050	Capacitor	C13	Bellcore Issue 6	Level I		0.004625	1.00	.3861	0.004625	216222765.25
1121701080	Capacitor	C18,C20,C26	Bellcore Issue 6	Level I		0.004625	3.00	1.1583	0.013875	216222765.25
14S3522800	Integrated Circuit	U3,U4	Bellcore Issue 6	Level I		0.063856	2.00	10.6620	0.127712	15660198.22
14S1013200	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.063856	1.00	5.3310	0.063856	15660198.22
14S4850000	Integrated Circuit	U5	Bellcore Issue 6	Level I		0.041667	1.00	3.4785	0.041667	23999884.99
1214309000	Inductor	CH1-CH4	Bellcore Issue 6	Level I		0.002312	4.00	.7722	0.009250	432445530.49
105A700003	Resistor	FB1-FB5,FB8,FB9	Bellcore Issue 6	Level I		0.002312	7.00	1.3514	0.016187	432445530.49
105A747003	Resistor	R4,R5	Bellcore Issue 6	Level I		0.002312	2.00	.3861	0.004625	432445530.49
12311120A1	Miscellaneous	X1	Bellcore Issue 6	Level I		0.150000	1.00	12.5227	0.150000	6666666.67

AAEON Reliability Prediction Report

Part Number 9697T11200-DIP
Reference Des
Date 10. 7, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description
File Name ONYX-154_174.RPJ
Time 2:16 下午
Failure Rate 0.008391
MTBF 119,169,330

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1655307022	Connection	J1, J2	Bellcore Issue 6	Level I		0.004196	2.00	100.0000	0.008391	238338660.45

