

IMBA-910

Reliability Prediction Report (MTBF)

Report NO : 08I070008

6-09-2008

Issue Date

Wenyuan Yang

Manager

Jessica Chou

Test Engineer

Reliability Prediction (MTBF)

I . **Model Name:** IMBA-910

II . **Prediction Date:** Jun. 9th, 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: 23.2 degree C
- Standard: Telcordia (Bellcore) Standard

VII. Term and Definition:

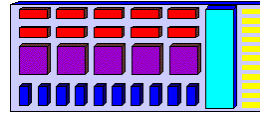
- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:

- IMBA-910
 - Failure Rate: 17.618693 ppm
 - MTBF: 56,758 Hours

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
IMBA-910	9697910011-DIP	Belcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	17.618693	56,758

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1119610291	Capacitor	EC25-EC27,EC30-EC36,EC38,EC39	Bellcore Issue 6	Level I		0.064700	12.00	4.4067	0.776398	15455999.10
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001035	1.00	.0059	0.001035	965999943.69
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	.8514	0.150000	6666666.67
1653002100	Connection	CMOS1,MFG_MODE	Bellcore Issue 6	Level I		0.001035	2.00	.0118	0.002070	965999943.69
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.020704	2.00	.2350	0.041408	48299997.18
1653005200	Connection	CN2,CN3	Bellcore Issue 6	Level I		0.005176	2.00	.0588	0.010352	193199988.74
1231232722	Miscellaneous	Y4	Bellcore Issue 6	Level I		0.150000	1.00	.8514	0.150000	6666666.67
1653006101	Connection	IR1	Bellcore Issue 6	Level I		0.003106	1.00	.0176	0.003106	321999981.23
1653205203	Connection	COM2,DIO1	Bellcore Issue 6	Level I		0.005176	2.00	.0588	0.010352	193199988.74
1653217205	Connection	FDD1	Bellcore Issue 6	Level I		0.017598	1.00	.0999	0.017598	56823526.10
1119610190	Capacitor	EC2,EC22-EC24	Bellcore Issue 6	Level I		0.038820	4.00	.8813	0.155280	25759998.50
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.020704	1.00	.1175	0.020704	48299997.18
1231125051	Miscellaneous	Y5,Y6	Bellcore Issue 6	Level I		0.150000	2.00	1.7027	0.300000	6666666.67
1655404020	Connection	ATX2	Bellcore Issue 6	Level I		0.002070	1.00	.0118	0.002070	482999971.85
1653302150	Connection	H1,H2	Bellcore Issue 6	Level I		0.001035	2.00	.0118	0.002070	965999943.69
1654808304	Connection	USB_LAN2	Bellcore Issue 6	Level I		0.004141	1.00	.0235	0.004141	241499985.92
1654425302	Connection	LPT1	Bellcore Issue 6	Level I		0.012940	1.00	.0734	0.012940	77279995.50
165440910B	Connection	COM1	Bellcore Issue 6	Level I		0.004658	1.00	.0264	0.004658	214666654.15
1653005205	Connection	CN1	Bellcore Issue 6	Level I		0.005176	1.00	.0294	0.005176	193199988.74
1654515308	Connection	VGA1	Bellcore Issue 6	Level I		0.007764	1.00	.0441	0.007764	128799992.49
1119647191	Capacitor	EC51-EC53	Bellcore Issue 6	Level I		0.064700	3.00	1.1017	0.194099	15455999.10
1119622195	Capacitor	EC11	Bellcore Issue 6	Level I		0.038820	1.00	.2203	0.038820	25759998.50
16515C0492	Connection	DIMM2,DIMM4	Bellcore Issue 6	Level I		0.124224	2.00	1.4101	0.248447	8049999.53
1655004014	Connection	FAN1-FAN3	Bellcore Issue 6	Level I		0.002070	3.00	.0353	0.006211	482999971.85
1119622196	Capacitor	EC1,EC10,EC3,EC9	Bellcore Issue 6	Level I		0.038820	4.00	.8813	0.155280	25759998.50
1211101264	Inductor	L25	Bellcore Issue 6	Level I	22.10	0.125057	1.00	.7098	0.125057	7996348.02
1654907002	Connection	SATA0,SATA1	Bellcore Issue 6	Level I		0.003623	2.00	.0411	0.007246	275999983.91
1655424020	Connection	ATX1	Bellcore Issue 6	Level I		0.012422	1.00	.0705	0.012422	80499995.31
1654282202	Connection	PCIE_1	Bellcore Issue 6	Level I		0.084886	1.00	.4818	0.084886	11780487.12
1654260207	Connection	PCI1-PCI3	Bellcore Issue 6	Level I		0.062112	3.00	1.0576	0.186335	16099999.06
111961029H	Capacitor	EC37,EC40-EC43	Bellcore Issue 6	Level I		0.064700	5.00	1.8361	0.323499	15455999.10

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1652522206	Connection	USB_LAN1	Bellcore Issue 6	Level I		0.011387	1.00	.0646	0.011387	87818176.70
16515C0495	Connection	DIMM1,DIMM3	Bellcore Issue 6	Level I		0.124224	2.00	1.4101	0.248447	8049999.53
175011901H	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	5.1082	0.900000	1111111.11
1654232200	Connection	PCIE_2	Bellcore Issue 6	Level I		0.033126	1.00	.1880	0.033126	30187498.24
1211105674	Inductor	L12,L13,L6,L7	Bellcore Issue 6	Level I		0.083169	4.00	1.8882	0.332674	12023773.24
1654612307	Connection	KM1	Bellcore Issue 6	Level I		0.003106	1.00	.0176	0.003106	321999981.23
1169682191	Capacitor	EC13-EC18,EC20,EC21	Bellcore Issue 6	Level I		0.005401	8.00	.2453	0.043211	185138735.20
105A500233	Resistor	R248,R416,R604	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A501033	Resistor	R107,R112,R385,R395,R436,R558-R607,R810	Bellcore Issue 6	Level I		0.002189	8.00	.0994	0.017509	456903383.18
105A700233	Resistor	R405,R653	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A701003	Resistor	R310,R311,R313,R329	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
105A701053	Resistor	R540,R844,R849	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A701503	Resistor	R351	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A702203	Resistor	R159,R161,R336,R437,R832,R835-R841,R846,R851,R853,R854,R857-R859-R861	Bellcore Issue 6	Level I		0.002189	20.00	.2484	0.043773	456903383.18
105A702223	Resistor	R393,R406,R637,R640,R672,R886-R901	Bellcore Issue 6	Level I		0.002189	7.00	.0870	0.015321	456903383.18
105A703303	Resistor	R114,R123,R124,R129,R139,R141-R149,R156,R160,R162-R166,R168-R169,R172,R173,R175,R177,R180-R182,R186,R189,R192,R243	Bellcore Issue 6	Level I		0.002189	26.00	.3230	0.056905	456903383.18
105A703303	Resistor	R244,R41,R470-R472,R522,R660	Bellcore Issue 6	Level I		0.002189	7.00	.0870	0.015321	456903383.18
105A703323	Resistor	R408,R625,R670	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A703333	Resistor	R136,R154	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A704703	Resistor	R185,R273,R274,R381	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
105A704723	Resistor	R113,R137,R14,R15,R422,R552,R553,R562,R563,R617,R659,R732,R777,R823,R899,R910,R911	Bellcore Issue 6	Level I		0.002189	17.00	.2112	0.037207	456903383.18
105A705623	Resistor	R776	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A708223	Resistor	R106,R109,R119,R122,R130,R144-R151,R302,R349,R397,R420,R421-R446,R457,R524,R652,R656,R668-R733,R735,R736,R821,R822	Bellcore Issue 6	Level I		0.002189	23.00	.2857	0.050339	456903383.18

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20

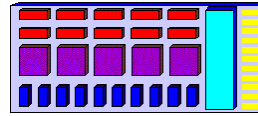


Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A708223	Resistor	R915,R99	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A710003	Resistor	R187,R188,R190,R410,R655,R9	Bellcore Issue 6	Level I		0.002189	6.00	.0745	0.013132	456903383.18
105A700133	Resistor	R110,R132,R133,R138,R147,R155-,R232,R272,R282,R340,R342,R345-,R346,R356,R362,R373,R378,R404-,R419,R424,R427,R447,R448	Bellcore Issue 6	Level I		0.002189	23.00	.2857	0.050339	456903383.18
105A700133	Resistor	R451,R468,R473,R476,R519,R56-,R57,R639,R675,R724,R885	Bellcore Issue 6	Level I		0.002189	11.00	.1366	0.024075	456903383.18
105A733003	Resistor	R411,R414,R425,R643,R829,R842-,R843	Bellcore Issue 6	Level I		0.002189	7.00	.0870	0.015321	456903383.18
105A701033	Resistor	R158,R16-R19,R198-R200,R20,R2-03,R21,R271,R287,R337,R383,R38-9,R390,R398,R415,R453,R455,R46-0,R477,R478,R480,R530,R535	Bellcore Issue 6	Level I		0.002189	27.00	.3354	0.059093	456903383.18
105A701033	Resistor	R536,R555-R557,R620,R644,R778-,R779,R784,R785,R793,R795,R845-,R847,R848,R850,R898,R907,R908-,R912	Bellcore Issue 6	Level I		0.002189	20.00	.2484	0.043773	456903383.18
105A701533	Resistor	R240,R407,R622,R674	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
105A722003	Resistor	R441	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A710053	Resistor	R463,R551	Bellcore Issue 6	Level I		0.013132	2.00	.1491	0.026264	76150563.86
105A500133	Resistor	R236,R238,R255,R258,R284,R289-,R316,R335,R396,R449,R464,R531-,R532,R601,R602,R623,R645,R863-,R865	Bellcore Issue 6	Level I		0.002189	19.00	.2360	0.041584	456903383.18
105A501323	Resistor	R222	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A501523	Resistor	R445	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A502223	Resistor	R432,R862,R864	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A502833	Resistor	R547	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A503033	Resistor	R603	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A510003	Resistor	R218,R434,R435	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A510033	Resistor	R145,R210,R212,R632	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
105A512413	Resistor	R278	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A515003	Resistor	R49-R51,R852,R856	Bellcore Issue 6	Level I		0.002189	5.00	.0621	0.010943	456903383.18
105A549963	Resistor	R217,R228,R229,R246,R288,R292-,R294,R295,R319,R361,R367	Bellcore Issue 6	Level I		0.002189	11.00	.1366	0.024075	456903383.18

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1122701680	Capacitor	M33,M337,M34,M35,M37-M40,M40-1-M404,M411-M413,M416-M419,M-42,M420-M447,M5,M57,M60,M62--M65,M69,M7,M71,M73,M78	Bellcore Issue 6	Level I		0.004377	60.00	1.4907	0.262638	228451691.59
1122701680	Capacitor	M79,M8,M80,M81,M84,M87,M9,M9-0,M92,M94,M95,M97,M99,R80	Bellcore Issue 6	Level I		0.004377	14.00	.3478	0.061282	228451691.59
1124501780	Capacitor	N1,N10-N43,N4,N53,N54,N9	Bellcore Issue 6	Level I		0.004377	39.00	.9689	0.170714	228451691.59
1124510080	Capacitor	C133,C161,C435,C436,C439,C440	Bellcore Issue 6	Level I		0.004377	6.00	.1491	0.026264	228451691.59
1124510280	Capacitor	C139,C163,C165,C166,C188,C262-C295,C309,C96	Bellcore Issue 6	Level I		0.004377	9.00	.2236	0.039396	228451691.59
1124415080	Capacitor	C220,C223	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1124522180	Capacitor	C162,C170	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1124522280	Capacitor	C260	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
1300001440	Semiconductor	D3,D6	Bellcore Issue 6	Level I		0.022670	2.00	.2573	0.045340	44111425.01
1124533080	Capacitor	C164	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
1124547180	Capacitor	C323,C324	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1129747650	Capacitor	C154,C18,C212,C217-C219,C22,C-229,C230,C240,C258,C266,C270,C-278,C279,C28,C280,C3,C30,C310,-C315,C316,C4,C430,C431	Bellcore Issue 6	Level I		0.004377	25.00	.6211	0.109432	228451691.59
1129747650	Capacitor	C64,C83,C94	Bellcore Issue 6	Level I		0.004377	3.00	.0745	0.013132	228451691.59
1540701380	Resistor	RN21	Bellcore Issue 6	Level I		0.005750	1.00	.0326	0.005750	173923615.11
1301005440	Semiconductor	D11	Bellcore Issue 6	Level I		0.022670	1.00	.1287	0.022670	44111425.01
1540727280	Resistor	RN3,RN5,RN6	Bellcore Issue 6	Level I		0.005750	3.00	.0979	0.017249	173923615.11
1540782280	Resistor	RN1,RN11,RN14-RN19,RN2,RN20	Bellcore Issue 6	Level I		0.005750	10.00	.3263	0.057497	173923615.11
1305099140	Semiconductor	D12,D13,D15,D16	Bellcore Issue 6	Level I		0.075566	4.00	1.7156	0.302265	13233427.50
1310222210	Semiconductor	Q10,Q12,Q18,Q19,Q37-Q51,Q53,Q-57,Q58,Q67,Q68,Q74,Q76-Q78,Q8-0,Q88,Q9	Bellcore Issue 6	Level I		0.022670	31.00	3.9888	0.702766	44111425.01
1311390610	Semiconductor	Q87	Bellcore Issue 6	Level I		0.022670	1.00	.1287	0.022670	44111425.01
1314111713	Integrated Circuit	U54-U57	Bellcore Issue 6	Level I		0.052000	4.00	1.1806	0.208000	19230812.90
14S4048501	Integrated Circuit	U31,U32	Bellcore Issue 6	Level I		0.052000	2.00	.5903	0.104000	19230812.90
1540733082	Resistor	RN25-RN34	Bellcore Issue 6	Level I		0.005750	10.00	.3263	0.057497	173923615.11
1540747282	Resistor	RN43,RN44	Bellcore Issue 6	Level I		0.005750	2.00	.0653	0.011499	173923615.11
1540747081	Resistor	RN13	Bellcore Issue 6	Level I		0.005750	1.00	.0326	0.005750	173923615.11

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1301005442	Semiconductor	D14	Bellcore Issue 6	Level I		0.022670	1.00	.1287	0.022670	44111425.01
14S4021310	Integrated Circuit	U35	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
105A566503	Resistor	R442	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1315700211	Semiconductor	Q55,Q56,Q59,Q70,Q72	Bellcore Issue 6	Level I		0.075566	5.00	2.1445	0.377831	13233427.50
14S5A01400	Integrated Circuit	U23,U34	Bellcore Issue 6	Level I		0.052000	2.00	.5903	0.104000	19230812.90
14S5A01430	Integrated Circuit	U41	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
105A530003	Resistor	R370,R384	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A505633	Resistor	R559,R560	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A512033	Resistor	R549	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A523233	Resistor	R548	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1121647780	Capacitor	C91	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
105A530103	Resistor	R219	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A512403	Resistor	R214,R317,R343	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A545303	Resistor	R683	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1189610180	Capacitor	TC14,TC15,TC5-TC7	Bellcore Issue 6	Level I		0.004377	5.00	.1242	0.021886	228451691.59
1124410180	Capacitor	C11,C12,C194,C198,C404,C405,C-54-C56,C58,C7,C8	Bellcore Issue 6	Level I		0.004377	12.00	.2981	0.052528	228451691.59
1122722080	Capacitor	C173,C29,C51,C52	Bellcore Issue 6	Level I		0.004377	4.00	.0994	0.017509	228451691.59
105A547003	Resistor	R108,R127,R403,R413,R780,R824	Bellcore Issue 6	Level I		0.002189	6.00	.0745	0.013132	456903383.18
1300414843	Semiconductor	D10,D4,D5,D9	Bellcore Issue 6	Level I		0.022670	4.00	.5147	0.090679	44111425.01
14S5A23200	Integrated Circuit	U5	Bellcore Issue 6	Level I		0.035327	1.00	.2005	0.035327	28306621.87
105A511313	Resistor	R237	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A700103	Resistor	R209,R251,R379,R391,R438,R94	Bellcore Issue 6	Level I		0.002189	6.00	.0745	0.013132	456903383.18
105A561913	Resistor	R412,R619,R676	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
1211101002	Inductor	L24,L8,L9	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
1174518180	Capacitor	CP1-CP5	Bellcore Issue 6	Level I		0.005401	5.00	.1533	0.027007	185138735.20
105A502003	Resistor	R285,R308,R309,R358	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
105A513003	Resistor	R387,R388	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A506823	Resistor	R429	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A703309	Resistor	R490-R507,R509,R512,R515,R571-R588,R590,R592,R594	Bellcore Issue 6	Level I		0.002189	42.00	.5217	0.091923	456903383.18
1129710090	Capacitor	C19-C21	Bellcore Issue 6	Level I		0.004377	3.00	.0745	0.013132	228451691.59

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20

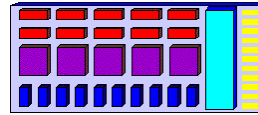


Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129722091	Capacitor	C15-C17	Bellcore Issue 6	Level I		0.004377	3.00	.0745	0.013132	228451691.59
1129710390	Capacitor	C206	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
1129701790	Capacitor	N2,N5-N8	Bellcore Issue 6	Level I		0.004377	5.00	.1242	0.021886	228451691.59
105A739033	Resistor	R376,R377	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
121230805B	Inductor	FB18	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1540747180	Resistor	RN4	Bellcore Issue 6	Level I		0.005750	1.00	.0326	0.005750	173923615.11
1121733380	Capacitor	C202	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
105A702263	Resistor	R102,R103,R105,R111,R118,R234- R245,R249,R259,R260,R275,R281- R303-R305,R314,R635,R642,R654- R98	Bellcore Issue 6	Level I		0.002189	20.00	.2484	0.043773	456903383.18
1315970110	Semiconductor	U1,U19,U21,U8	Bellcore Issue 6	Level I		0.075566	4.00	1.7156	0.302265	13233427.50
1231325050	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	.8514	0.150000	6666666.67
105A524963	Resistor	R247,R268,R431,R444,R685	Bellcore Issue 6	Level I		0.002189	5.00	.0621	0.010943	456903383.18
121230603C	Inductor	FB11-FB14	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
14S5A12503	Integrated Circuit	U29,U30,U33	Bellcore Issue 6	Level I		0.035327	3.00	.6015	0.105982	28306621.87
121230603D	Inductor	FB1,FB10,FB2,FB6-FB9	Bellcore Issue 6	Level I		0.002189	7.00	.0870	0.015321	456903383.18
1311119710	Semiconductor	Q11	Bellcore Issue 6	Level I		0.022670	1.00	.1287	0.022670	44111425.01
105A706203	Resistor	R296,R320-R322,R360,R380,R456- R458	Bellcore Issue 6	Level I		0.002189	8.00	.0994	0.017509	456903383.18
1540756180	Resistor	RN10,RN8	Bellcore Issue 6	Level I		0.005750	2.00	.0653	0.011499	173923615.11
1211100109	Inductor	L18	Bellcore Issue 6	Level I		0.083169	1.00	.4720	0.083169	12023773.24
1189633181	Capacitor	TC11,TC12	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
105A522663	Resistor	R363	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1304101340	Semiconductor	LED1-LED3	Bellcore Issue 6	Level I		0.004132	3.00	.0704	0.012397	241995391.14
1124433090	Capacitor	C25,C26	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.025880	1.00	.1469	0.025880	38639997.75
1314043113	Integrated Circuit	Q54	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
105A561613	Resistor	R239	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1121701080	Capacitor	C102,C103,C147,C157,C168,C172- C176,C177,C181,C182,C186,C187- C191,C196,C222,C239,C252,C254- C257,C263,C283,C291,C300	Bellcore Issue 6	Level I		0.004377	23.00	.5714	0.100678	228451691.59

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1121701080	Capacitor	C301,C303,C34,C416,C446,C66,C-74,C77,C80,C82,C86,C87	Bellcore Issue 6	Level I		0.004377	12.00	.2981	0.052528	228451691.59
1124410190	Capacitor	C208	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
105A515009	Resistor	R252-R254	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
105A703909	Resistor	R486-R489,R508,R510,R511,R513-R514,R516-R518,R567-R570,R589-R591,R593,R595-R599	Bellcore Issue 6	Level I		0.002189	24.00	.2981	0.052528	456903383.18
105A700109	Resistor	R467	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
14S1035801	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
1129722060	Capacitor	C110,C117,C119-C122,C124-C130-C132,C136-C138,C151,C169,C216-C37,C5	Bellcore Issue 6	Level I		0.004377	22.00	.5466	0.096300	228451691.59
106B701032	Resistor	RT2,RT3	Bellcore Issue 6	Level I		0.010352	2.00	.1175	0.020704	96599994.37
105A532413	Resistor	R682	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A548703	Resistor	R277	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A524903	Resistor	R855,R858	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
14S2200900	Integrated Circuit	U7	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
14S9080900	Integrated Circuit	U39,U53	Bellcore Issue 6	Level I		0.052000	2.00	.5903	0.104000	19230812.90
14S4652100	Integrated Circuit	U16	Bellcore Issue 6	Level I	13.20	0.132551	1.00	.7523	0.132551	7544255.57
105A501233	Resistor	R833,R834	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
11C2510190	Capacitor	C109,C41,C42,C49,C95	Bellcore Issue 6	Level I		0.004377	5.00	.1242	0.021886	228451691.59
105A527423	Resistor	R428	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A501623	Resistor	R608	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
14S4650601	Integrated Circuit	U42	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
1121501690	Capacitor	M103-M105,M107,M108,M110,M11-2,M113,M116,M118,M119,M121,M-123,M124,M127,M128,M130,M131-M133,M135,M137,M138,M192	Bellcore Issue 6	Level I		0.004377	23.00	.5714	0.100678	228451691.59
1121501690	Capacitor	M193-M202,M204-M206,M220-M22-4,M227-M235,M82,M83,M85,M86,-M88,M89,M91,M93,M96,M98	Bellcore Issue 6	Level I		0.004377	37.00	.9193	0.161960	228451691.59
14S4362704	Integrated Circuit	U37	Bellcore Issue 6			0.064816	1.00	.3679	0.064816	15428230.14
123131435B	Miscellaneous	Y3	Bellcore Issue 6	Level I		0.150000	1.00	.8514	0.150000	6666666.67
105A521003	Resistor	R224,R333,R357	Bellcore Issue 6	Level I		0.002189	3.00	.0373	0.006566	456903383.18
1315344310	Integrated Circuit	U17,U40	Bellcore Issue 6	Level I		0.052000	2.00	.5903	0.104000	19230812.90

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129601080	Capacitor	C224,C225,C228,C238,C241-C243-,C245,C246,C255,C256,C264,C269-,C271-C273,C307,C308,C432	Bellcore Issue 6	Level I		0.004377	19.00	.4720	0.083169	228451691.59
14S3917900	Integrated Circuit	U11,U13,U14	Bellcore Issue 6	Level I		0.052000	3.00	.8854	0.156000	19230812.90
1189647180	Capacitor	TC10,TC8	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
121110010Z	Inductor	L19,L22,L23	Bellcore Issue 6	Level I		0.083169	3.00	1.4161	0.249506	12023773.24
11A4427080	Capacitor	C97,C98	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1300581940	Semiconductor	D2	Bellcore Issue 6	Level I		0.022670	1.00	.1287	0.022670	44111425.01
14S3128421	Integrated Circuit	U4	Bellcore Issue 6	Level I		0.052000	1.00	.2951	0.052000	19230812.90
1752310000	Miscellaneous	P1,P2	Bellcore Issue 6	Level I		0.030000	2.00	.3405	0.060000	33333333.33
1124515880	Capacitor	C204	Bellcore Issue 6	Level I		0.004377	1.00	.0248	0.004377	228451691.59
1211105673	Inductor	L14	Bellcore Issue 6	Level I	39.60	0.004376	1.00	.0248	0.004376	228529000.67
1211105673	Inductor	L5	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1315888010	Semiconductor	Q25,Q30,Q6,Q66,Q7	Bellcore Issue 6	Level I		0.075566	5.00	2.1445	0.377831	13233427.50
1315888010	Semiconductor	Q32	Bellcore Issue 6	Level I	29.60	0.165314	1.00	.9383	0.165314	6049100.59
14S3950100	Integrated Circuit	U12	Bellcore Issue 6	Level I	22.40	0.121974	1.00	.6923	0.121974	8198490.07
14S4632600	Integrated Circuit	U24	Bellcore Issue 6	Level I	10.10	0.107175	1.00	.6083	0.107175	9330552.67
14S4661400	Integrated Circuit	U9	Bellcore Issue 6	Level I	30.30	0.398085	1.00	2.2594	0.398085	2512023.68
14S4661400	Integrated Circuit	U22	Bellcore Issue 6	Level I	27.50	0.335142	1.00	1.9022	0.335142	2983810.94
14S4653200	Integrated Circuit	U36	Bellcore Issue 6	Level I	11.80	0.120485	1.00	.6838	0.120485	8299772.79
14S4296500	Integrated Circuit	U18	Bellcore Issue 6	Level I	11.80	0.069400	1.00	.3939	0.069400	14409189.92
105A518233	Resistor	R208	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A816563	Resistor	R233	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A517813	Resistor	R256,R624	Bellcore Issue 6	Level I		0.002189	2.00	.0248	0.004377	456903383.18
105A530113	Resistor	R328	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
105A524333	Resistor	R401	Bellcore Issue 6	Level I		0.002189	1.00	.0124	0.002189	456903383.18
1540751080	Resistor	RN12,RN7,RN9	Bellcore Issue 6	Level I		0.005750	3.00	.0979	0.017249	173923615.11
1189647184	Capacitor	TC13,TC16-TC18	Bellcore Issue 6	Level I		0.004377	4.00	.0994	0.017509	228451691.59
1651612992	Connection	U15	Bellcore Issue 6	Level I		0.401139	1.00	2.2768	0.401139	2492903.08
1214309006	Inductor	L1,L15,L17,L2,L20,L21,L3,L4	Bellcore Issue 6	Level I		0.002189	8.00	.0994	0.017509	456903383.18
106B706820	Resistor	RT1	Bellcore Issue 6	Level I		0.010352	1.00	.0588	0.010352	96599994.37

AAEON Reliability Prediction Report

Part Number 9697910011-DIP
Reference Des
Date 06. 9, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 23.20



Description Top-level assembly
File Name IMBA-910.RPJ
Time 5:32 下午
Failure Rate 17.618693
MTBF 56,758

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate,%	Failure Rate	MTBF, Unit
1315889612	Semiconductor	Q14-Q16,Q22,Q24,Q31,Q34,Q63--Q64,Q69,Q79	Bellcore Issue 6	Level I		0.075566	11.00	4.7179	0.831228	13233427.50
1315889612	Semiconductor	Q20	Bellcore Issue 6	Level I	15.10	0.114774	1.00	.6514	0.114774	8712791.60
1315889612	Semiconductor	Q62	Bellcore Issue 6	Level I	19.20	0.127681	1.00	.7247	0.127681	7831989.15
1315889612	Semiconductor	Q61	Bellcore Issue 6	Level I	21.10	0.134021	1.00	.7607	0.134021	7461538.54
1315889612	Semiconductor	Q52	Bellcore Issue 6	Level I	23.70	0.143075	1.00	.8121	0.143075	6989351.40
1315889612	Semiconductor	Q35	Bellcore Issue 6	Level I	30.30	0.168114	1.00	.9542	0.168114	5948354.96
1315889612	Semiconductor	Q33	Bellcore Issue 6	Level I	44.10	0.230819	1.00	1.3101	0.230819	4332400.86
1315889612	Semiconductor	Q13	Bellcore Issue 6	Level I	29.40	0.164520	1.00	.9338	0.164520	6078278.62
14S4033000	Integrated Circuit	U51,U52	Bellcore Issue 6	Level I		0.035327	2.00	.4010	0.070655	28306621.87
14S4256203	Integrated Circuit	U3	Bellcore Issue 6	Level I	11.10	0.066772	1.00	.3790	0.066772	14976392.87
14S4280113	Integrated Circuit	U25	Bellcore Issue 6	Level I	16.60	0.090016	1.00	.5109	0.090016	11109191.32
105A554963	Resistor	R72-R75	Bellcore Issue 6	Level I		0.002189	4.00	.0497	0.008755	456903383.18
14S6201601	Integrated Circuit	U20	Bellcore Issue 6	Level I		0.026801	1.00	.1521	0.026801	37311444.10
105A700003	Resistor	R121,R146,R178,R184,R193,R194-,R197,R2,R215,R22,R23,R230,R24-2,R283,R32,R326,R327,R33,R330,-R338,R339,R344,R35,R359	Bellcore Issue 6	Level I		0.002189	24.00	.2981	0.052528	456903383.18
105A700003	Resistor	R36,R364,R368,R369,R38,R399,R-40,R418,R42,R433,R44,R450,454,-R46,R479,R48,R566,R647-R649,R-669,R673,R677,R678,R680	Bellcore Issue 6	Level I		0.002189	25.00	.3106	0.054716	456903383.18
105A700003	Resistor	R684,R702,R704,R706,R708-R710-,R738,R739,R781,R786-R789,R792-,R8,R815,R817,R819,R827,R828,R-830,R867,R870-R874,R876	Bellcore Issue 6	Level I		0.002189	29.00	.3602	0.063471	456903383.18
105A700003	Resistor	R879-R883,R887,R889,R903,R905-,R906,R909,R95,R96	Bellcore Issue 6	Level I		0.002189	13.00	.1615	0.028452	456903383.18
1121722650	Capacitor	C299,C39	Bellcore Issue 6	Level I		0.004377	2.00	.0497	0.008755	228451691.59
1129710050	Capacitor	C104,C105,C107,C135,C141,C143-,C144,C148-C150,C152,C153,C155-,C156,C158-C160,C178,C179,C183-,C185,C201,C207,C209-C211	Bellcore Issue 6	Level I		0.004377	27.00	.6708	0.118187	228451691.59
1129710050	Capacitor	C213,C215,C221,C247,C261,C27,-C305,C306,C401,C402,C433,C434-,C437,C438,C441-C445,C6,C75,C7-9,C89	Bellcore Issue 6	Level I		0.004377	23.00	.5714	0.100678	228451691.59

