

IMBA-880 Reliability Prediction Report (MTBF)

Report NO : 08I070003

4-2-2008

Issue Date

Wenyuan Yang

Manager

Jessica Chou

Test Engineer

Reliability Prediction (MTBF)

I . **Model Name:** IMBA-880 Ver. B

II . **Prediction Date:** Apr. 2nd,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 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-880 Ver. B
 - Failure Rate: 19.891949 ppm
 - MTBF: 50,272 Hours

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
IMBA-880	9697880016-DIP	Belcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	19.891949	50,272

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1231232720	Miscellaneous	Y3	Bellcore Issue 6	Level I		0.150000	1.00	.7541	0.150000	6666666.67
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001199	1.00	.0060	0.001199	834185311.58
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	.7541	0.150000	6666666.67
1653002100	Connection	CN1,JP1	Bellcore Issue 6	Level I		0.001199	2.00	.0121	0.002398	834185311.58
1653003100	Connection	JP5	Bellcore Issue 6	Level I		0.044954	1.00	.2260	0.044954	22244941.64
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.023975	2.00	.2411	0.047951	41709265.58
1653005200	Connection	CN7,CN8	Bellcore Issue 6	Level I		0.005994	2.00	.0603	0.011988	166837062.32
1653006101	Connection	IR1	Bellcore Issue 6	Level I		0.003596	1.00	.0181	0.003596	278061770.53
1653205203	Connection	COM2	Bellcore Issue 6	Level I		0.005994	1.00	.0301	0.005994	166837062.32
1653217205	Connection	FDD1	Bellcore Issue 6	Level I		0.020379	1.00	.1024	0.020379	49069724.21
1655003010	Connection	FAN2-FAN5	Bellcore Issue 6	Level I		0.001798	4.00	.0362	0.007193	556123541.06
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1119615294	Capacitor	C141,C142,C145-C148,C151,C158- C167,C181-C183,C188,C189,C196- C201,C87	Bellcore Issue 6	Level I		0.074923	17.00	6.4031	1.273698	13346964.99
1655404020	Connection	ATX2	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1119610299	Capacitor	C140,C143,C144,C289	Bellcore Issue 6	Level I		0.074923	4.00	1.5066	0.299694	13346964.99
1656304022	Connection	CN14	Bellcore Issue 6	Level I		0.002398	1.00	.0121	0.002398	417092655.79
1654425302	Connection	LPT1	Bellcore Issue 6	Level I		0.014985	1.00	.0753	0.014985	66734824.93
165440910B	Connection	COM1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1653005205	Connection	CN9	Bellcore Issue 6	Level I		0.005994	1.00	.0301	0.005994	166837062.32
1654515308	Connection	VGA1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1652508212	Connection	LAN1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1113647091	Capacitor	C27-C30	Bellcore Issue 6	Level I		0.044954	4.00	.9040	0.179816	22244941.64
1119647191	Capacitor	C119-C122,C160,C168,C180,C38-- C41,C71-C74,C79-C86	Bellcore Issue 6	Level I		0.074923	23.00	8.6630	1.723238	13346964.99
1189639190	Capacitor	EC13,EC14	Bellcore Issue 6	Level I		0.004625	2.00	.0465	0.009250	216222765.25
111961029D	Capacitor	C42	Bellcore Issue 6	Level I		0.074923	1.00	.3767	0.074923	13346964.99
1111647191	Capacitor	C36	Bellcore Issue 6	Level I		0.074923	1.00	.3767	0.074923	13346964.99
16515C0492	Connection	DIMM2,DIMM4	Bellcore Issue 6	Level I		0.143853	2.00	1.4463	0.287706	6951544.26
1169656190	Capacitor	C103,C118,C123,C60-C65,C78,C89	Bellcore Issue 6	Level I		0.005501	11.00	.3042	0.060515	181774505.62
1655004014	Connection	FAN1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

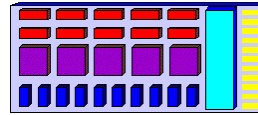


Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1211101161	Inductor	L7	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1111610292	Capacitor	C90	Bellcore Issue 6	Level I		0.074923	1.00	.3767	0.074923	13346964.99
1211101264	Inductor	L21	Bellcore Issue 6	Level I	14.10	0.003005	1.00	.0151	0.003005	332741985.25
1211101264	Inductor	L22	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1654907002	Connection	SATA2,SATA4	Bellcore Issue 6	Level I		0.004196	2.00	.0422	0.008391	238338660.45
1655424020	Connection	ATX1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1654816200	Connection	CN3	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
1654282202	Connection	GPCIE1	Bellcore Issue 6	Level I		0.098300	1.00	.4942	0.098300	10172991.60
1654907003	Connection	SATA1,SATA3	Bellcore Issue 6	Level I		0.004196	2.00	.0422	0.008391	238338660.45
1181633111	Capacitor	EC8-EC12	Bellcore Issue 6	Level I		0.004625	5.00	.1162	0.023124	216222765.25
1111610199	Capacitor	EC22,EC24	Bellcore Issue 6	Level I		0.044954	2.00	.4520	0.089908	22244941.64
1654260207	Connection	PCI1-PCI5	Bellcore Issue 6	Level I		0.071926	5.00	1.8079	0.359632	13903088.53
14S6200404	Integrated Circuit		Bellcore Issue 6	Level I		0.175797	1.00	.8838	0.175797	5688392.79
16515C0495	Connection	DIMM1,DIMM3	Bellcore Issue 6	Level I		0.143853	2.00	1.4463	0.287706	6951544.26
175011901H	Miscellaneous	BAT1_1	Bellcore Issue 6	Level I		0.900000	1.00	4.5244	0.900000	1111111.11
14S6200800	Integrated Circuit	U36	Bellcore Issue 6	Level I	8.00	0.420453	1.00	2.1137	0.420453	2378388.70
1211105674	Inductor	L23-L25	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
1211105674	Inductor	L26	Bellcore Issue 6	Level I	14.70	0.003037	1.00	.0153	0.003037	329223622.16
1654612307	Connection	KM1	Bellcore Issue 6	Level I		0.023975	1.00	.1205	0.023975	41709265.58
105A500233	Resistor	R892	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A501033	Resistor	R899	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A700003	Resistor	R144,R150,R153,R235,R258,R350- R354,R394,R433,R445,R453,R87,- R877,R895,R902,R911,R923,R944- R962-R964,R969,R977,R979	Bellcore Issue 6	Level I		0.002312	24.00	.2790	0.055498	432445530.49
105S700003	Resistor	R980-R982,R987,RS1,RS4	Bellcore Issue 6	Level I		0.002312	6.00	.0697	0.013875	432445530.49
105A700233	Resistor	R311,R314,R346	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A701003	Resistor	R148,R400,R935,R938,R941,R945	Bellcore Issue 6	Level I		0.002312	6.00	.0697	0.013875	432445530.49
105A701053	Resistor	R410	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A702203	Resistor	R106,R110,R119,R123,R126-R129- R215,R335	Bellcore Issue 6	Level I		0.002312	10.00	.1162	0.023124	432445530.49
105A702223	Resistor	R411,R866,R880,R912,R956,R959- R967	Bellcore Issue 6	Level I		0.002312	7.00	.0814	0.016187	432445530.49

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A703303	Resistor	R102,R337,R404-R407,R428-R431-R79,R82,R85,R87,R88,R90,R98	Bellcore Issue 6	Level I		0.002312	17.00	.1976	0.039311	432445530.49
105A703323	Resistor	R347	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A704723	Resistor	R10,R149,R151,R19,R20,R22-R25-,R253,R254,R274,R275,R277-R279-,R281,R282,R309,R318,R319,R323-R366,R367,R436,R450,R6,R871	Bellcore Issue 6	Level I		0.002312	28.00	.3255	0.064748	432445530.49
105A704723	Resistor	R878,R883,R886,R992,R995	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
105A708223	Resistor	R211-R214,R216-R222,R249-R252-,R255-R257,R269-R273,R324,R368-R377,R379-R393,R401,R419-R425-,R66,R78,R862,R869,R989-R991	Bellcore Issue 6	Level I		0.002312	64.00	.7440	0.147996	432445530.49
105A708223	Resistor	R994	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A710003	Resistor	R92-R96	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
105A700133	Resistor	R238,R260,R29,R315,R336,R341,-R349,R378,R432,R934	Bellcore Issue 6	Level I		0.002312	10.00	.1162	0.023124	432445530.49
105A733003	Resistor	R1,R2,R227,R28,R287,R298,R316-R345,R8	Bellcore Issue 6	Level I		0.002312	9.00	.1046	0.020812	432445530.49
105A701033	Resistor	R152,R154,R156,R157,R18,R261--R264,R267,R288,R296,R325,R339-,R344,R868,R889,R907,R909,R915-,R922,R952,R955,R957,R970	Bellcore Issue 6	Level I		0.002312	25.00	.2906	0.057811	432445530.49
105A701033	Resistor	R971,R974,R976,RRS2,RS3	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
105A722003	Resistor	R437,R438,R65	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A747003	Resistor	R113-R115,R322,R993,R996	Bellcore Issue 6	Level I		0.002312	6.00	.0697	0.013875	432445530.49
1059700101	Resistor	R865,R874,R906,R921	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
105A710053	Resistor	R241,R276	Bellcore Issue 6	Level I		0.013875	2.00	.1395	0.027749	72074255.08
105A500133	Resistor	R158,R160,R233,R247,R297,R317-,R397,R415,R417,R894,R916,R917-,R966	Bellcore Issue 6	Level I		0.002312	13.00	.1511	0.030062	432445530.49
105A501533	Resistor	R975	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A507503	Resistor	R3-R5	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A510003	Resistor	R130,R135,R449,R887,R896	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
105A549963	Resistor	R101,R105,R1109,R118,R122,R13-1-R134,R80,R83,R86,R89,R97	Bellcore Issue 6	Level I		0.002312	14.00	.1627	0.032374	432445530.49
105A561903	Resistor	R9	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A701203	Resistor	R64,R67-R73	Bellcore Issue 6	Level I		0.002312	8.00	.0930	0.018499	432445530.49

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A702033	Resistor	R234,R351	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
105A703903	Resistor	R355,R356	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
105A704733	Resistor	R293,R294	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
1059704761	Resistor	R340	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A704763	Resistor	R237,R240	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
105A705603	Resistor	R224	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A706823	Resistor	R881	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A710033	Resistor	R365	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A747033	Resistor	R229,R231,R26	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A756033	Resistor	R230,R232,R27	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A768003	Resistor	R184-R186,R204,R206,R207,R928-R930	Bellcore Issue 6	Level I		0.002312	8.00	.0930	0.018499	432445530.49
105A564903	Resistor	R7	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A502233	Resistor	R904,R972	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
1212306030	Inductor	PB1,PB11,PB12,PB5	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
1212306031	Inductor	FB12,FB13	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
1212308054	Inductor	L20,PB13-PB15,PB4,PB6,PB7	Bellcore Issue 6	Level I		0.002312	7.00	.0814	0.016187	432445530.49
1121501680	Capacitor	BC10,BC12,BC7,BC8,M100,M101,-M108,M109,M11,M110-M114,M117-M121,M125,M131,M144,M37-M42-M47-M51,M53,M58,M59,M62-M65	Bellcore Issue 6	Level I		0.004625	40.00	.9300	0.184994	216222765.25
1121501680	Capacitor	M71,M72,M76,M8,M80-M82,M84,M85,M87,M88,M94,M99	Bellcore Issue 6	Level I		0.004625	13.00	.3022	0.060123	216222765.25
1121722650	Capacitor	C125,C127,C128,C132,C133,C138	Bellcore Issue 6	Level I		0.004625	6.00	.1395	0.027749	216222765.25
1122701680	Capacitor	BC1,BC11,BC15-BC22,BC2-BC6,B-C9,C279,M1,M10,M102-M104,M106-M107,M115,M116,M12,M122,M124-M126-M128,M13,M133-M135	Bellcore Issue 6	Level I		0.004625	36.00	.8370	0.166495	216222765.25
1122701680	Capacitor	M138,M139,M14,M140,M141,M143-M145-M269,M17,M19,M2,M20-M27-M28,M3,M30-M36,M4,M43-M46,M5-M52,M54-M57,M60,M61,M66	Bellcore Issue 6	Level I		0.004625	165.00	3.8362	0.763102	216222765.25
1122701680	Capacitor	M67-M70,M7,M73-M75,M77-M79,M83,M86,M89,M9,M90-M93,M95-M98	Bellcore Issue 6	Level I		0.004625	23.00	.5347	0.106372	216222765.25
1124412080	Capacitor	C200	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

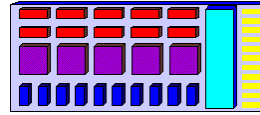


Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate,%	Failure Rate	MTBF, Unit
1124501780	Capacitor	N10,N13-N42,N2,N4-N6,N9	Bellcore Issue 6	Level I		0.004625	36.00	.8370	0.166495	216222765.25
1124510080	Capacitor	C45,C48-C50,C52-C59,C66-C69	Bellcore Issue 6	Level I		0.004625	16.00	.3720	0.073998	216222765.25
1124510280	Capacitor	C16,C176,C205,C206,C21,C239,C-247,C255,C260,C75-C77,C8	Bellcore Issue 6	Level I		0.004625	13.00	.3022	0.060123	216222765.25
1124415080	Capacitor	C177,C178	Bellcore Issue 6	Level I		0.004625	2.00	.0465	0.009250	216222765.25
1124522080	Capacitor	C1,C11-C14,C2,C23,C24,C3,C4,C4-6,C47,C6,C7,C9	Bellcore Issue 6	Level I		0.004625	15.00	.3487	0.069373	216222765.25
1124522180	Capacitor	C117,C264,C266,C271,C273	Bellcore Issue 6	Level I		0.004625	5.00	.1162	0.023124	216222765.25
1124533080	Capacitor	C137	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
1124547080	Capacitor	C45,C48-C50,C52-C59,C66-C69	Bellcore Issue 6	Level I		0.004625	16.00	.3720	0.073998	216222765.25
1124510280	Capacitor	C16,C176,C205,C206,C21,C239,C-247,C255,C260,C75-C77,C8	Bellcore Issue 6	Level I		0.004625	13.00	.3022	0.060123	216222765.25
1124415080	Capacitor	C177,C178	Bellcore Issue 6	Level I		0.004625	2.00	.0465	0.009250	216222765.25
1124522080	Capacitor	C1,C11-C14,C2,C23,C24,C3,C4,C4-6,C47,C6,C7,C9	Bellcore Issue 6	Level I		0.004625	15.00	.3487	0.069373	216222765.25
1124522180	Capacitor	C117,C264,C266,C271,C273	Bellcore Issue 6	Level I		0.004625	5.00	.1162	0.023124	216222765.25
1124533080	Capacitor	C137	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
1124547080	Capacitor	C10,C15,C19,C197,C199,C20	Bellcore Issue 6	Level I		0.004625	6.00	.1395	0.027749	216222765.25
1124547180	Capacitor	C195	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
1129747650	Capacitor	CA12-CA14,CA3,CA31,CA32,CA34-CA35,CA37,CA45-CA51,CA7	Bellcore Issue 6	Level I		0.004625	17.00	.3952	0.078623	216222765.25
1540701380	Resistor	RN2	Bellcore Issue 6	Level I		0.006537	1.00	.0329	0.006537	152970720.28
1300283540	Semiconductor	DD4	Bellcore Issue 6	Level I		0.024575	1.00	.1235	0.024575	40691910.29
1301005440	Semiconductor	DD1-DD3,DD5,DD6	Bellcore Issue 6	Level I		0.024575	5.00	.6177	0.122875	40691910.29
1540733180	Resistor	RN1	Bellcore Issue 6	Level I		0.006537	1.00	.0329	0.006537	152970720.28
1305099140	Semiconductor	Q38,Q40	Bellcore Issue 6	Level I		0.081916	2.00	.8236	0.163833	12207573.09
1310222210	Semiconductor	Q32-Q35	Bellcore Issue 6	Level I		0.024575	4.00	.4942	0.098300	40691910.29
1311390610	Semiconductor	Q39	Bellcore Issue 6	Level I		0.024575	1.00	.1235	0.024575	40691910.29
1124568080	Capacitor	C228,C233,C238,C241	Bellcore Issue 6	Level I		0.004625	4.00	.0930	0.018499	216222765.25
1314111713	Integrated Circuit	Q11	Bellcore Issue 6	Level I	13.60	0.164336	1.00	.8261	0.164336	6085108.42
1651203291	Connection	U36	Bellcore Issue 6	Level I		0.019180	1.00	.0964	0.019180	52136581.97
14S4048501	Integrated Circuit	U10	Bellcore Issue 6	Level I	11.90	0.146683	1.00	.7374	0.146683	6817422.03
14S4048501	Integrated Circuit	U30,U9	Bellcore Issue 6	Level I		0.063856	2.00	.6420	0.127712	15660198.22

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
14S4048501	Integrated Circuit	U34	Bellcore Issue 6	Level I	10.10	0.129877	1.00	.6529	0.129877	7699578.77
1540733082	Resistor	RN10-RN13,RN4-RN7	Bellcore Issue 6	Level I		0.006537	8.00	.2629	0.052298	152970720.28
14S4021310	Integrated Circuit	U3	Bellcore Issue 6	Level I	11.80	0.145700	1.00	.7325	0.145700	6863412.72
14S4021310	Integrated Circuit	U31	Bellcore Issue 6	Level I	10.50	0.133453	1.00	.6709	0.133453	7493247.70
1212312063	Inductor	PB3	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1315700211	Semiconductor	Q19,Q2	Bellcore Issue 6	Level I		0.081916	2.00	.8236	0.163833	12207573.09
14S5A01400	Integrated Circuit	U32,U42,U43,U6	Bellcore Issue 6	Level I		0.063856	4.00	1.2841	0.255425	15660198.22
105A575003	Resistor	R870,R876,R882,R885	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
105A505633	Resistor	R973	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A512033	Resistor	R897	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1211104760	Inductor	L10,L13	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
105A560463	Resistor	R143,R145,R163,R164,R168-R170-R198,R200	Bellcore Issue 6	Level I		0.002312	9.00	.1046	0.020812	432445530.49
105A530103	Resistor	R138	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A512403	Resistor	R146,R937,R940,R943,R947	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
1124701780	Capacitor	C261,C262,C265,C268,C270,C272-C275	Bellcore Issue 6	Level I		0.004625	7.00	.1627	0.032374	216222765.25
1310390411	Semiconductor	Q1,Q18,Q23,Q36,Q37,Q41,Q7	Bellcore Issue 6	Level I		0.024575	7.00	.8648	0.172024	40691910.29
1121610180	Capacitor	C234	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
1300414843	Semiconductor	D1-D5,D7,D8	Bellcore Issue 6	Level I		0.024575	7.00	.8648	0.172024	40691910.29
1174518180	Capacitor	CP1-CP4	Bellcore Issue 6	Level I		0.005501	4.00	.1106	0.022005	181774505.62
105A701623	Resistor	R321	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A513003	Resistor	R914,R918	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
1129701690	Capacitor	BC67	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
105A739033	Resistor	R409	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1121733380	Capacitor	C249	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
105A702263	Resistor	R236,R239,R353,R867,R884,R908-R920	Bellcore Issue 6	Level I		0.002312	7.00	.0814	0.016187	432445530.49
1059702261	Resistor	R864,R873,R879,R893,R905,R913-R919,R924	Bellcore Issue 6	Level I		0.002312	8.00	.0930	0.018499	432445530.49
1231314350	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	.7541	0.150000	6666666.67
1231325050	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	.7541	0.150000	6666666.67
105A547503	Resistor	R91	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A524963	Resistor	R223,R248,R360,R933	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
1121610060	Capacitor	TC1,TC3-TC7	Bellcore Issue 6	Level I		0.004625	6.00	.1395	0.027749	216222765.25
1189647080	Capacitor	C109	Bellcore Issue 6	Level I	10.50	0.005634	1.00	.0283	0.005634	177481491.27
121230603C	Inductor	FB8-FB11	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
1129710050	Capacitor	C159,CA1,CA15-CA30,CA38-CA44-,CA4,CA5,CA52-CA56,CA8,CA9,M-142,M270,TC15,TC2,TC8	Bellcore Issue 6	Level I		0.004625	39.00	.9067	0.180370	216222765.25
14S5A12503	Integrated Circuit	U11,U12,U28,U29,U33,U7	Bellcore Issue 6	Level I		0.041667	6.00	1.2568	0.250001	23999884.99
121230603D	Inductor	FB1-FB7	Bellcore Issue 6	Level I		0.002312	7.00	.0814	0.016187	432445530.49
105A706203	Resistor	R116,R117,R136,R141,R162,R165-,R167,R171-R173,R175-R178,R180-,R182,R190,R192,R193,R197,R199-,R201-R203,R416,R418	Bellcore Issue 6	Level I		0.002312	27.00	.3139	0.062436	432445530.49
121231206E	Inductor	PB8	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A522663	Resistor	R228	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1304101340	Semiconductor	LED1	Bellcore Issue 6	Level I		0.005342	1.00	.0269	0.005342	187200330.10
1124401880	Capacitor	C232	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
14S4256201	Integrated Circuit	U5	Bellcore Issue 6	Level I	15.80	0.100084	1.00	.5031	0.100084	9991570.54
14S6334605	Integrated Circuit	U23	Bellcore Issue 6	Level I		0.032912	1.00	.1655	0.032912	30383770.75
1121701080	Capacitor	C100,C101,C108,C113,C131,C134-,C152-C157,C161-C166,C169-C175-,C179,C194,C202,C204,C210,C212-,C220,C225-C227,C237,C240	Bellcore Issue 6	Level I		0.004625	44.00	1.0230	0.203494	216222765.25
1121701080	Capacitor	C243,C250,C251,C256-C258,C267-,C269,C274,C277,C280-C283,C5	Bellcore Issue 6	Level I		0.004625	15.00	.3487	0.069373	216222765.25
1129722060	Capacitor	C104,C105,C107,C110-C112,C114-,C116,C198,C91-C99	Bellcore Issue 6	Level I		0.004625	19.00	.4417	0.087872	216222765.25
106B701032	Resistor	RT3-RT5	Bellcore Issue 6	Level I		0.011988	3.00	.1808	0.035963	83418531.16
105A554963	Resistor	R11,R15,R17,R21	Bellcore Issue 6	Level I		0.002312	4.00	.0465	0.009250	432445530.49
105A525503	Resistor	R140	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
14S2200900	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.063856	1.00	.3210	0.063856	15660198.22
121110010F	Inductor	L11,L12,L9	Bellcore Issue 6	Level I		0.087872	3.00	1.3252	0.263617	11380145.54
14S9080900	Integrated Circuit	U44	Bellcore Issue 6	Level I		0.063856	1.00	.3210	0.063856	15660198.22
105A580663	Resistor	R362,R363	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
14S4410100	Integrated Circuit	U17	Bellcore Issue 6	Level I	28.00	0.410383	1.00	2.0631	0.410383	2436748.16

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00

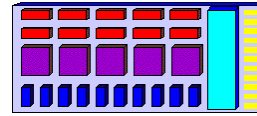


Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A527423	Resistor	R903	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
14S4650601	Integrated Circuit	U24	Bellcore Issue 6	Level I		0.063856	1.00	.3210	0.063856	15660198.22
121110010R	Inductor	L15	Bellcore Issue 6	Level I	9.40	0.002761	1.00	.0139	0.002761	362153266.87
14S4362703	Integrated Circuit	U37	Bellcore Issue 6	Level I	9.00	0.069400	1.00	.3489	0.069400	14409189.92
1540743080	Resistor	RN14,RN3,RN8,RN9	Bellcore Issue 6	Level I		0.006537	4.00	.1315	0.026149	152970720.28
105A704303	Resistor	R398,R399,R402,R403,R412,R413-R426,R427,R74-R77,R81,R84	Bellcore Issue 6	Level I		0.002312	14.00	.1627	0.032374	432445530.49
105A584563	Resistor	R137	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A505173	Resistor	R139,R225,R226	Bellcore Issue 6	Level I		0.002312	3.00	.0349	0.006937	432445530.49
105A516963	Resistor	R142	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
105A521003	Resistor	R147,R936,R939,R942,R946	Bellcore Issue 6	Level I		0.002312	5.00	.0581	0.011562	432445530.49
105A517413	Resistor	R348	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1315344310	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.063856	1.00	.3210	0.063856	15660198.22
14S4653701	Integrated Circuit	U38	Bellcore Issue 6	Level I	11.60	0.143752	1.00	.7227	0.143752	6956415.52
14S4294500	Integrated Circuit	U18	Bellcore Issue 6	Level I	19.00	0.118260	1.00	.5945	0.118260	8455912.86
14S428010C	Integrated Circuit	U22	Bellcore Issue 6	Level I	12.40	0.083509	1.00	.4198	0.083509	11974808.32
1315780310	Semiconductor	Q9	Bellcore Issue 6	Level I	15.80	0.125727	1.00	.6321	0.125727	7953719.08
1315780310	Semiconductor	Q4	Bellcore Issue 6	Level I	17.00	0.129658	1.00	.6518	0.129658	7712574.72
1315780310	Semiconductor	Q6	Bellcore Issue 6	Level I	14.80	0.122521	1.00	.6159	0.122521	8161890.13
1315780310	Semiconductor	Q14	Bellcore Issue 6	Level I	13.40	0.118135	1.00	.5939	0.118135	8464866.13
1315780310	Semiconductor	Q12-Q13,Q3,Q5,Q8	Bellcore Issue 6	Level I		0.081916	5.00	2.0590	0.409582	12207573.09
1315600210	Semiconductor	Q10	Bellcore Issue 6	Level I	12.10	0.114170	1.00	.5740	0.114170	8758836.18
1315600210	Semiconductor	Q20	Bellcore Issue 6	Level I	9.40	0.106258	1.00	.5342	0.106258	9411065.40
1315600210	Semiconductor	Q22	Bellcore Issue 6	Level I	10.20	0.108558	1.00	.5457	0.108558	9211700.49
1315600210	Semiconductor	Q16	Bellcore Issue 6	Level I	10.30	0.108848	1.00	.5472	0.108848	9187150.58
1315600210	Semiconductor	Q15	Bellcore Issue 6	Level I	14.00	0.120000	1.00	.6033	0.120000	8333333.33
1315600210	Semiconductor	Q17,Q21,Q24,Q26,Q28,Q31	Bellcore Issue 6	Level I		0.081916	6.00	2.4708	0.491498	12207573.09
1300581940	Semiconductor	D6	Bellcore Issue 6	Level I		0.024575	1.00	.1235	0.024575	40691910.29
14S3128421	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.063856	1.00	.3210	0.063856	15660198.22
1752310000	Miscellaneous	FS1,FS2,P1,P2	Bellcore Issue 6	Level I		0.030000	4.00	.6033	0.120000	33333333.33
1124515880	Capacitor	C248	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25

AAEON Reliability Prediction Report

Part Number 9697880016-DIP
Reference Des
Date 04. 2, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 26.00



Description Top-level assembly
File Name IMBA-880.RPJ
Time 3:34 下午
Failure Rate 19.891949
MTBF 50,272

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129610080	Capacitor	C288	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
11B2722650	Capacitor	C278	Bellcore Issue 6	Level I		0.004625	1.00	.0232	0.004625	216222765.25
1752320000	Miscellaneous	FS4	Bellcore Issue 6	Level I		0.030000	1.00	.1508	0.030000	33333333.33
14S4632600	Integrated Circuit	U15	Bellcore Issue 6	Level I	15.50	0.186320	1.00	.9367	0.186320	5367123.60
105A524333	Resistor	R898	Bellcore Issue 6	Level I		0.002312	1.00	.0116	0.002312	432445530.49
1651612992	Connection	CPU1	Bellcore Issue 6	Level I	9.00	0.731072	1.00	3.6752	0.731072	1367855.06
14S9661200	Integrated Circuit	U16	Bellcore Issue 6	Level I	25.00	0.341428	1.00	1.7164	0.341428	2928875.13
14S9661200	Integrated Circuit	U14	Bellcore Issue 6	Level I	27.00	0.386120	1.00	1.9411	0.386120	2589866.28
14S9661200	Integrated Circuit	U13	Bellcore Issue 6	Level I	25.80	0.358713	1.00	1.8033	0.358713	2787741.63
14S9661200	Integrated Circuit	U19	Bellcore Issue 6	Level I	19.40	0.239962	1.00	1.2063	0.239962	4167323.09
14S9661200	Integrated Circuit	U25	Bellcore Issue 6	Level I	20.00	0.249350	1.00	1.2535	0.249350	4010425.02
105A588703	Resistor	R396,R414	Bellcore Issue 6	Level I		0.002312	2.00	.0232	0.004625	432445530.49
1214309006	Inductor	L1,L16-L19,L2-L4	Bellcore Issue 6	Level I		0.002312	8.00	.0930	0.018499	432445530.49