

# TF-FWS-816W8-H25 Reliability Prediction Report (MTBF)

Report NO : 07I070001

**5-29-2007**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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I . **Model Name:** TF-FWS-816W8-H25-A10

II . **Prediction Date:** May 29, 2007

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: 25.5 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:

TF-FWS-816W8-H25-A10 :

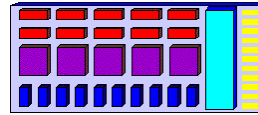
Failure Rate: 17.178738 ppm

MTBF: 58,211 Hours

- FAN (1759281600) MTTF : 30 ° C / 606,120 Hrs
- LCM (9789810000) : LCD Lift 25 ° C / 45%RH : 50,000 Hrs
- Power supply (1757925008) H1U-6250P MTBF : 114,248 Hours

### AAEON Reliability Prediction Report

**Part Number** TF-FWS-816W8-H25-A10  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50

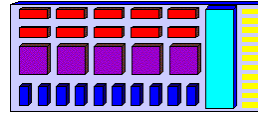


**Description** Top-level assembly  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 17.178738  
**MTBF** 58,211

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-FWS-816W8-H25-A10	TF-FWS-816W8--H25-A10	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	17.178738	58,211
ASS'Y PER-T078-A10	9697T07802	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.342843	2,916,784
FWB-816-A10	9697B81604	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	16.795598	59,539
ASS'Y PER-R09P	9697R09P00	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.032120	31,132,915

### AAEON Reliability Prediction Report

**Part Number** TF-FWS-816W8-H25-A10  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description** Top-level assembly  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 17.178738  
**MTBF** 58,211

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653007200	Connection	HEADER	Bellcore Issue 6	Level I		0.008176	1.00	100.0000	0.008176	122307879.14



### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50

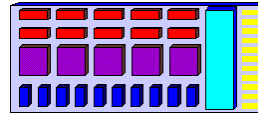


**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1750220320	Connection	BT1	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	.8931	0.150000	6666666.67
1653002100	Connection	JP1	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
1653003200	Connection	CN7	Bellcore Issue 6	Level I		0.003504	1.00	.0209	0.003504	285385051.33
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.004672	2.00	.0556	0.009344	214038788.50
1653005200	Connection	CN4,CN5	Bellcore Issue 6	Level I		0.005840	2.00	.0695	0.011680	171231030.80
1653208200	Connection	CN1	Bellcore Issue 6	Level I		0.009344	1.00	.0556	0.009344	107019394.25
1653300100	Connection	FP2	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
1655004011	Connection	PWR1	Bellcore Issue 6	Level I		0.023360	1.00	.1391	0.023360	42807757.70
1231232722	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	.8931	0.150000	6666666.67
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	5.3585	0.900000	1111111.11
1653205203	Connection	COM2	Bellcore Issue 6	Level I		0.005840	1.00	.0348	0.005840	171231030.80
1655003010	Connection	FAN1-FAN3	Bellcore Issue 6	Level I		0.001752	3.00	.0313	0.005256	570770102.67
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.023360	1.00	.1391	0.023360	42807757.70
1812850290	Semiconductor	VR1	Bellcore Issue 6	Level I		0.080753	1.00	.4808	0.080753	12383368.55
1231125051	Miscellaneous	Y10,Y3-Y9	Bellcore Issue 6	Level I		0.150000	8.00	7.1447	1.200000	6666666.67
1655404020	Connection	ATX1	Bellcore Issue 6	Level I		0.002336	1.00	.0139	0.002336	428077577.00
1119610299	Capacitor	EC12,EC42,EC43	Bellcore Issue 6	Level I		0.073001	3.00	1.3039	0.219002	13698482.46
1654808304	Connection	USB1	Bellcore Issue 6	Level I		0.004672	1.00	.0278	0.004672	214038788.50
1653900034	Connection	CFD1	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
1111610210	Capacitor	EC1,EC3,EC4,EC9	Bellcore Issue 6	Level I		0.073001	4.00	1.7386	0.292003	13698482.46
165440910B	Connection	COM1	Bellcore Issue 6	Level I		0.023360	1.00	.1391	0.023360	42807757.70
1119612291	Capacitor	EC23-EC25,EC28-EC30,EC33,EC35-EC41,EC44	Bellcore Issue 6	Level I		0.073001	15.00	6.5196	1.095012	13698482.46
1119647191	Capacitor	EC14,EC26,EC27,EC31,EC32,EC6-EC7	Bellcore Issue 6	Level I		0.073001	7.00	3.0425	0.511006	13698482.46
16515C0492	Connection	DIMM1,DIMM2	Bellcore Issue 6	Level I		0.001168	2.00	.0139	0.002336	856155154.00
1169656190	Capacitor	EC11,EC15,EC16,EC19-EC22,EC34	Bellcore Issue 6	Level I		0.005483	8.00	.2612	0.043868	182366143.54
1655004014	Connection	CPUFAN1	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
1211101161	Inductor	L3	Bellcore Issue 6	Level I		0.087020	1.00	.5181	0.087020	11491627.57
1211101264	Inductor	L11-L13	Bellcore Issue 6	Level I		0.087020	3.00	1.5543	0.261060	11491627.57
1655424020	Connection	ATX2	Bellcore Issue 6	Level I		0.014016	1.00	.0835	0.014016	71346262.83

### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1654907003	Connection	SATA1,SATA3	Bellcore Issue 6	Level I		0.023360	2.00	.2782	0.046721	42807757.70
1111610199	Capacitor	EC45-EC48,EC50,EC51	Bellcore Issue 6	Level I		0.043800	6.00	1.5647	0.262803	22830804.11
1304414610	Semiconductor	PSALED1	Bellcore Issue 6	Level I		0.005104	1.00	.0304	0.005104	195913336.05
1601110201	Connection	RSW1	Bellcore Issue 6	Level I		0.023360	1.00	.1391	0.023360	42807757.70
1653212203	Connection	LCMA1	Bellcore Issue 6	Level I		0.014016	1.00	.0835	0.014016	71346262.83
1751300002	Connection	RELAY1-RELAY8	Bellcore Issue 6	Level I		0.001168	8.00	.0556	0.009344	856155154.00
1181647111	Capacitor	EC13,EC8	Bellcore Issue 6	Level I		0.004580	2.00	.0545	0.009160	218340923.84
165251220B	Connection	LAN1-LAN8	Bellcore Issue 6	Level I		0.007008	8.00	.3338	0.056065	142692525.67
105A500233	Resistor	R237,R240,R246,R25,R32	Bellcore Issue 6	Level I		0.002290	5.00	.0682	0.011450	436681847.68
105A701003	Resistor	R165,R184,R30,R45,R473,R51,R65-R9	Bellcore Issue 6	Level I		0.002290	8.00	.1091	0.018320	436681847.68
105A701053	Resistor	R199	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A702203	Resistor	R211,R213,R216,R222,R225,R230-R688	Bellcore Issue 6	Level I		0.002290	7.00	.0954	0.016030	436681847.68
105A702223	Resistor	R336,R50,R682	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
105A703303	Resistor	R100-R110,R112-R116,R132-R134-R139-R141,R143,R182,R185,R259-R484,R487	Bellcore Issue 6	Level I		0.002290	28.00	.3818	0.064120	436681847.68
105A703303	Resistor	R773,R82-R89,R91-R96	Bellcore Issue 6	Level I		0.002290	15.00	.2045	0.034350	436681847.68
105A703323	Resistor	R129,R15,R20,R21,R24,R248,R286-R308,R314-R316,R318,R374,R384-R395,R531	Bellcore Issue 6	Level I		0.002290	16.00	.2182	0.036640	436681847.68
105A703323	Resistor	R532-R534,R555-R558,R564,R565-R568,R569,R572,R573,R582,R587-R622,R626	Bellcore Issue 6	Level I		0.002290	17.00	.2318	0.038930	436681847.68
105A703323	Resistor	R629,R637,R661,R99,RS10-RS27,-RS4-RS9	Bellcore Issue 6	Level I		0.002290	28.00	.3818	0.064120	436681847.68
105A704703	Resistor	R280,R281,R284,R559,R566,R567-R571,R578	Bellcore Issue 6	Level I		0.002290	8.00	.1091	0.018320	436681847.68
105A704723	Resistor	R11-R13,R135,R137,R138,R14,R16-R17,R174,R2,R255,R256,R278,R406,R407,R417	Bellcore Issue 6	Level I		0.002290	17.00	.2318	0.038930	436681847.68
105A704723	Resistor	R427,R530,R683,R684,R696,R697-R702,R733,R769,RS42-RS44	Bellcore Issue 6	Level I		0.002290	12.00	.1636	0.027480	436681847.68
105A705623	Resistor	R508,R509	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A707503	Resistor	R142,R145,R153,R449	Bellcore Issue 6	Level I		0.002290	4.00	.0545	0.009160	436681847.68

### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A708223	Resistor	R111,R131,R146-R148,R154-R159-,R163,R194,R203,R217-R220,R408-R410,R476	Bellcore Issue 6	Level I		0.002290	22.00	.3000	0.050380	436681847.68
105A708223	Resistor	R477,R478,R481,R482,R485,R491-,R493,R510-R515,R518-R520,R535-R6,R714	Bellcore Issue 6	Level I		0.002290	19.00	.2591	0.043510	436681847.68
105A708223	Resistor	R715,R98	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A700133	Resistor	R183,R235,R247,R274,R337,R338-,R400,R49,R492,R494,R5,R554,R6-42,R662,R669	Bellcore Issue 6	Level I		0.002290	15.00	.2045	0.034350	436681847.68
105A700133	Resistor	R689,R690,R692,R693,R695,R719-R725,R729	Bellcore Issue 6	Level I		0.002290	13.00	.1772	0.029770	436681847.68
105A733003	Resistor	R399,R418,R428-R431,R685	Bellcore Issue 6	Level I		0.002290	7.00	.0954	0.016030	436681847.68
105A701033	Resistor	R172,R176-R178,R180,R221,R226-,R228,R231,R233,R236,R243,R245-R333,R402	Bellcore Issue 6	Level I		0.002290	15.00	.2045	0.034350	436681847.68
105A701033	Resistor	R403,R411,R414-R416,R486,R488-,R489,R498,R500,R504,R616,R630-R634,R703	Bellcore Issue 6	Level I		0.002290	15.00	.2045	0.034350	436681847.68
105A701033	Resistor	R704,R734,R777	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
105A715033	Resistor	R1	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A722003	Resistor	R475	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A747003	Resistor	R179,R529,R56,R58,R60	Bellcore Issue 6	Level I		0.002290	5.00	.0682	0.011450	436681847.68
1059700001	Resistor	RS1	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1059700101	Resistor	R238,R241,R272,R273,R276,R277-,R536,R537,R539,R540,R579,R580-R583,R584	Bellcore Issue 6	Level I		0.002290	14.00	.1909	0.032060	436681847.68
1059700101	Resistor	R586,R595,R599,R606	Bellcore Issue 6	Level I		0.002290	4.00	.0545	0.009160	436681847.68
105A710053	Resistor	R200,R405	Bellcore Issue 6	Level I		0.013740	2.00	.1636	0.027480	72780307.95
105A500133	Resistor	R206,R207,R548-R550,R553	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
105A501533	Resistor	R718	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A504763	Resistor	R208,R23,R26,R42,R57	Bellcore Issue 6	Level I		0.002290	5.00	.0682	0.011450	436681847.68
105A510003	Resistor	R144,R152,R279,R317,R35,R36,R-404,R61,R620,R768,R770,R97,RS-41,RS45	Bellcore Issue 6	Level I		0.002290	14.00	.1909	0.032060	436681847.68
105A515003	Resistor	R250,R452	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A549913	Resistor	R306,R581,R647,R650,R651,R652	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68



### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A549963	Resistor	R118-R127,R210,R214,R215,R223- R224,R229,R289-R304,R357-R372- R375-R382	Bellcore Issue 6	Level I		0.002290	56.00	.7635	0.128240	436681847.68
105A549963	Resistor	R385-R392,R706-R709,R71,R711-- R713,R716,R72-R80	Bellcore Issue 6	Level I		0.002290	26.00	.3545	0.059540	436681847.68
105A561903	Resistor	R355,R397	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A701523	Resistor	R130	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A702033	Resistor	R258,R275	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A703903	Resistor	R195,R196,R456	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
105A704733	Resistor	R732,R735	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A706233	Resistor	R589,R590	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A710033	Resistor	R136	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A747033	Resistor	R265,R282,R305,R332,R726,R731	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
105A756033	Resistor	R263,R283,R312,R324,R727,R730	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
105A768003	Resistor	R432,R433,R435-R438	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
105A564903	Resistor	R356,R396	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A502233	Resistor	R413	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1212306031	Inductor	FB10,FB9	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
1212308054	Inductor	FB13,FB20-FB23,FB25-FB40,FB49- FB52,L9	Bellcore Issue 6	Level I		0.002290	26.00	.3545	0.059540	436681847.68
1121722650	Capacitor	C109,C119,C126,C135,C205,C206- C94	Bellcore Issue 6	Level I		0.004580	7.00	.1909	0.032060	218340923.84
1124412080	Capacitor	C132	Bellcore Issue 6	Level I		0.004580	1.00	.0273	0.004580	218340923.84
1124410080	Capacitor	C362,C57-C60,C65-C72	Bellcore Issue 6	Level I		0.004580	13.00	.3545	0.059540	218340923.84
1124522080	Capacitor	C242,C243,C250,C253,C282,C285- C288,C289,C292,C294,C296,C297- C77,C78,C80	Bellcore Issue 6	Level I		0.004580	15.00	.4090	0.068700	218340923.84
1124522080	Capacitor	C81,C84,C85,C87,C89-C92	Bellcore Issue 6	Level I		0.004580	8.00	.2182	0.036640	218340923.84
1124522180	Capacitor	C177,C44,C88	Bellcore Issue 6	Level I		0.004580	3.00	.0818	0.013740	218340923.84
1124433080	Capacitor	C173	Bellcore Issue 6	Level I		0.004580	1.00	.0273	0.004580	218340923.84
1124547080	Capacitor	C167,C169,C203,C215,C342,C359	Bellcore Issue 6	Level I		0.004580	6.00	.1636	0.027480	218340923.84
1124547180	Capacitor	C168,C343-C358	Bellcore Issue 6	Level I		0.004580	17.00	.4636	0.077860	218340923.84
1540700080	Resistor	RN20	Bellcore Issue 6	Level I		0.006390	1.00	.0380	0.006390	156490149.87

### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50

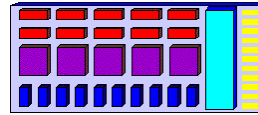


**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129747650	Capacitor	C1,C122,C144,C181,C185,C189,C-199,C200,C202,C207,C208,C211,C-214,C216	Bellcore Issue 6	Level I		0.004580	14.00	.3818	0.064120	218340923.84
1129747650	Capacitor	C218-C220,C222-C225,C227-C234-,C241,C246-C249,C251,C252,C254-C259,C268	Bellcore Issue 6	Level I		0.004580	29.00	.7908	0.132820	218340923.84
1129747650	Capacitor	C269-C272,C274-C281,C322,C323-C6,C73,C74,C83,C95	Bellcore Issue 6	Level I		0.004580	19.00	.5181	0.087020	218340923.84
1540701380	Resistor	RN26	Bellcore Issue 6	Level I		0.006390	1.00	.0380	0.006390	156490149.87
1300283540	Semiconductor	DD6	Bellcore Issue 6	Level I		0.024226	1.00	.1442	0.024226	41277895.16
1301005440	Semiconductor	DD2-DD5,DD7	Bellcore Issue 6	Level I		0.024226	5.00	.7212	0.121130	41277895.16
1540782280	Resistor	RN23,RN5-RN7,RN9	Bellcore Issue 6	Level I		0.006390	5.00	.1902	0.031951	156490149.87
1310222210	Semiconductor	Q31,Q32	Bellcore Issue 6	Level I		0.024226	2.00	.2885	0.048452	41277895.16
1124556280	Capacitor	C10	Bellcore Issue 6	Level I		0.004580	1.00	.0273	0.004580	218340923.84
1314111713	Integrated Circuit	Q20	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
1651203291	Connection	U34	Bellcore Issue 6	Level I		0.018688	1.00	.1113	0.018688	53509697.12
1540733082	Resistor	RN12-RN15,RN21,RN22,RN4,RN8	Bellcore Issue 6	Level I		0.006390	8.00	.3044	0.051121	156490149.87
1540747282	Resistor	RN1,RN16-RN19	Bellcore Issue 6	Level I		0.006390	5.00	.1902	0.031951	156490149.87
1129610260	Capacitor	C290,C291,C334-C339	Bellcore Issue 6	Level I		0.004580	8.00	.2182	0.036640	218340923.84
1315700211	Semiconductor	Q54	Bellcore Issue 6	Level I		0.080753	1.00	.4808	0.080753	12383368.55
105A505633	Resistor	R412	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1211104760	Inductor	L6,L7	Bellcore Issue 6	Level I		0.087020	2.00	1.0362	0.174040	11491627.57
105A560463	Resistor	R181,R448,R457,R460,R465,R467-R468,R472,R64	Bellcore Issue 6	Level I		0.002290	9.00	.1227	0.020610	436681847.68
105A549903	Resistor	R444	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A530103	Resistor	R169	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A512403	Resistor	R166,R446,R469	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
1124418080	Capacitor	C286,C287,C293,C295	Bellcore Issue 6	Level I		0.004580	4.00	.1091	0.018320	218340923.84
105A527463	Resistor	R447	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1050504760	Resistor	R204,R547	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
1121615080	Capacitor	C118,C120	Bellcore Issue 6	Level I		0.004580	2.00	.0545	0.009160	218340923.84
1124701780	Capacitor	C121,C128-C131,C133,C134,C142-C145,C146,C148,C150,C153,C163-C164,C170	Bellcore Issue 6	Level I		0.004580	16.00	.4363	0.073280	218340923.84

### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1124701780	Capacitor	C172,C174,C176,C186,C188,C190-C192,C194-C197,C201,C221,C226-C283,C284	Bellcore Issue 6	Level I		0.004580	17.00	.4636	0.077860	218340923.84
1124701780	Capacitor	C324-C329,C340,C341,C50,C53,C54,C7,C96-C98	Bellcore Issue 6	Level I		0.004580	15.00	.4090	0.068700	218340923.84
1124701680	Capacitor	BC1,BC10,BC100-BC205,BC207-B-C218,BC272,BC274,BC11-BC28,B-C2,BC280-BC306	Bellcore Issue 6	Level I		0.004580	222.00	6.0537	1.016759	218340923.84
1124701680	Capacitor	BC29,BC3,BC30,BC308,BC309,BC-31,BC310,BC313-BC317,BC32-BC-59,BC4-BC6,BC61	Bellcore Issue 6	Level I		0.004580	42.00	1.1453	0.192360	218340923.84
1124701680	Capacitor	BC62-BC64,BC66-BC69,BC7,BC70-BC99,BC8,BC9	Bellcore Issue 6	Level I		0.004580	40.00	1.0908	0.183200	218340923.84
1310390411	Semiconductor	Q42-Q53,Q55	Bellcore Issue 6	Level I		0.024226	13.00	1.8751	0.314939	41277895.16
14S5A23200	Integrated Circuit	U48,U49	Bellcore Issue 6	Level I		0.040466	2.00	.4819	0.080932	24712139.08
1174518180	Capacitor	CP1-CP8	Bellcore Issue 6	Level I		0.005483	8.00	.2612	0.043868	182366143.54
105A703033	Resistor	R22	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A513003	Resistor	R439	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A739033	Resistor	R198	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A702263	Resistor	R18,R205,R209,R257,R27-R29,R40-R41,R54,R59	Bellcore Issue 6	Level I		0.002290	11.00	.1500	0.025190	436681847.68
105A547503	Resistor	R212,R90	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
105A524963	Resistor	R483,R517,R521	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
1121610060	Capacitor	TC1,TC2	Bellcore Issue 6	Level I		0.004580	2.00	.0545	0.009160	218340923.84
1189647080	Capacitor	C62	Bellcore Issue 6	Level I		0.004580	1.00	.0273	0.004580	218340923.84
14S5A73200	Integrated Circuit	U51,U52	Bellcore Issue 6	Level I		0.040466	2.00	.4819	0.080932	24712139.08
121230603D	Inductor	FB1-FB5,FB7,FB8	Bellcore Issue 6	Level I		0.002290	7.00	.0954	0.016030	436681847.68
105A568103	Resistor	R234	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A706203	Resistor	R171,R440-R443,R450,R451,R455-R459,R462-R464,R471,R474,R516-R522,R55	Bellcore Issue 6	Level I		0.002290	17.00	.2318	0.038930	436681847.68
105A706203	Resistor	R62,R63,R66-R68,R70	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
121231206E	Inductor	FB11	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1654262300	Connection	MPCI1	Bellcore Issue 6	Level I		0.001168	1.00	.0070	0.001168	856155154.00
105A522663	Resistor	R175	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68

**AAEON Reliability Prediction Report**

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50

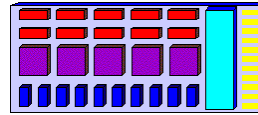


**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1124401880	Capacitor	C125,C147,C149,C16,C2,C260-C2-67,C29,C306-C321,C43,C47,C5,C55	Bellcore Issue 6	Level I		0.004580	34.00	.9271	0.155720	218340923.84
121230603H	Inductor	FB24,FB41,FB42,FB53,FB54,FB6	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.029200	1.00	.1739	0.029200	34246206.16
14S6334605	Integrated Circuit	U26,U27	Bellcore Issue 6	Level I		0.031736	2.00	.3779	0.063472	31509940.45
1121701080	Capacitor	C102,C104,C106,C11,C113,C117,-C12,C123,C14,C141,C151,C152,C-171,C175,C178	Bellcore Issue 6	Level I		0.004580	15.00	.4090	0.068700	218340923.84
1121701080	Capacitor	C179,C180,C182-C184,C187,C193-C198,C204,C217,C25,C3,C30,C33-0,C332,C333	Bellcore Issue 6	Level I		0.004580	16.00	.4363	0.073280	218340923.84
1121701080	Capacitor	C361,C4,C61,C64,C75,C76,C79,C8-C82,C93	Bellcore Issue 6	Level I		0.004580	10.00	.2727	0.045800	218340923.84
1189922180	Capacitor	C13,C143,C18,C19,C23,C26,C28	Bellcore Issue 6	Level I		0.004580	7.00	.1909	0.032060	218340923.84
1129722060	Capacitor	C127,C209,C210,C212,C213,C235-C240,C244,C245,C31-C42,C45,C4-6,C48,C49	Bellcore Issue 6	Level I		0.004580	29.00	.7908	0.132820	218340923.84
1129722060	Capacitor	C52,C56,C63	Bellcore Issue 6	Level I		0.004580	3.00	.0818	0.013740	218340923.84
106B701032	Resistor	RT1,RT2	Bellcore Issue 6	Level I		0.011680	2.00	.1391	0.023360	85615515.40
14S4255101	Integrated Circuit	U28	Bellcore Issue 6	Level I	14.30	0.166534	1.00	.9915	0.166534	6004784.89
14S4255101	Integrated Circuit	U29	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
105A554963	Resistor	R343-R346,R351-R354	Bellcore Issue 6	Level I		0.002290	8.00	.1091	0.018320	436681847.68
1129610051	Capacitor	TC10-TC19,TC21,TC23-TC70,TC3--TC6,TC72,TC73,TC75-TC80,TC8,-TC82,TC83	Bellcore Issue 6	Level I		0.004580	74.00	2.0179	0.338920	218340923.84
121230603L	Inductor	FB12,FB18,FB19,FB45,FB46,FB55--FB60,FB62,FB64	Bellcore Issue 6	Level I		0.002290	13.00	.1772	0.029770	436681847.68
105A525503	Resistor	R189	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A538323	Resistor	R33	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A524903	Resistor	R422,R425,R737,R741,R743,R745-,R747,R749,R751,R753,R755,R757-,R759,R761	Bellcore Issue 6	Level I		0.002290	14.00	.1909	0.032060	436681847.68
105A524903	Resistor	R763,R765	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
1315041210	Semiconductor	Q10-Q12,Q16,Q2,Q21,Q23,Q24-Q-26,Q6	Bellcore Issue 6	Level I		0.000000	11.00	.0000	0.000000	.00
1315041410	Semiconductor	Q13-Q15,Q19,Q22,Q4,Q5,Q7,Q8	Bellcore Issue 6	Level I		0.000000	9.00	.0000	0.000000	.00
14S4655600	Integrated Circuit	U2	Bellcore Issue 6	Level I	22.00	0.274286	1.00	1.6331	0.274286	3645829.71

### AAEON Reliability Prediction Report

**Part Number** 9697B81604  
**Reference Des**  
**Date** 05. 29, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.50



**Description**  
**File Name** TF-FWS-816W8-H25-A10.-  
**Time** 2:02 下午  
**Failure Rate** 16.795598  
**MTBF** 59,539

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
14S2200900	Integrated Circuit	U10	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
121110010F	Inductor	L10,L52,L8	Bellcore Issue 6	Level I		0.087020	3.00	1.5543	0.261060	11491627.57
1300414844	Semiconductor	D1-D5,D7	Bellcore Issue 6	Level I		0.024226	6.00	.8654	0.145356	41277895.16
1214309002	Inductor	L14-L51	Bellcore Issue 6	Level I		0.002290	38.00	.5181	0.087020	436681847.68
105A580663	Resistor	R524,R525	Bellcore Issue 6	Level I		0.002290	2.00	.0273	0.004580	436681847.68
14S4410100	Integrated Circuit	U9	Bellcore Issue 6	Level I	34.60	0.248906	1.00	1.4820	0.248906	4017588.39
121230805Z	Inductor	FB14-FB17,FB61,FB63	Bellcore Issue 6	Level I		0.002290	6.00	.0818	0.013740	436681847.68
105A501623	Resistor	R242	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
14S4650601	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
14S4362703	Integrated Circuit	U37	Bellcore Issue 6	Level I		0.040466	1.00	.2409	0.040466	24712139.08
1121501690	Capacitor	C100,C101,C103,C105,C107,C108- C110-C112,C114-C116,C137-C140- C154-C161	Bellcore Issue 6	Level I		0.004580	24.00	.6545	0.109920	218340923.84
123131435B	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	.8931	0.150000	6666666.67
14S3500700	Integrated Circuit	T1,T2,T5-T8	Bellcore Issue 6	Level I		0.061574	6.00	2.1996	0.369444	16240641.01
1540743080	Resistor	RN10,RN11,RN2,RN3	Bellcore Issue 6	Level I		0.006390	4.00	.1522	0.025561	156490149.87
105A704303	Resistor	R186,R188,R190,R192,R490,R495- -R497	Bellcore Issue 6	Level I		0.002290	8.00	.1091	0.018320	436681847.68
105A584563	Resistor	R170	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A505173	Resistor	R191,R526,R527	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
105A516963	Resistor	R167	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A521003	Resistor	R162,R445,R470	Bellcore Issue 6	Level I		0.002290	3.00	.0409	0.006870	436681847.68
105A541203	Resistor	R239	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
105A517413	Resistor	R244	Bellcore Issue 6	Level I		0.002290	1.00	.0136	0.002290	436681847.68
1315344310	Integrated Circuit	U4	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
14S4910400	Integrated Circuit	U14	Bellcore Issue 6	Level I		0.040466	1.00	.2409	0.040466	24712139.08
14S4653701	Integrated Circuit	U17	Bellcore Issue 6	Level I		0.061574	1.00	.3666	0.061574	16240641.01
14S4294500	Integrated Circuit	U11	Bellcore Issue 6	Level I	31.00	0.209735	1.00	1.2487	0.209735	4767923.55
14S428010A	Integrated Circuit	U12	Bellcore Issue 6	Level I	13.80	0.087642	1.00	.5218	0.087642	11410032.60
1300581940	Semiconductor	D6	Bellcore Issue 6	Level I		0.024226	1.00	.1442	0.024226	41277895.16
1752310000	Miscellaneous	FS1-FS8	Bellcore Issue 6	Level I		0.030000	8.00	1.4289	0.240000	33333333.33
1211106802	Inductor	L1,L2	Bellcore Issue 6	Level I		0.087020	2.00	1.0362	0.174040	11491627.57



