

FES-5130

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 14.292904 ppm MTBF: 69,965 Hours
---------	---

Issue date	Approval	Test Engineer
2010/09/10	Jansin Lee	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TF-FES-5130F-A10-01

II . Prediction Date: Sep. 10, 2010

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: 25.1 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-FES-5130F-A10-01 (Not include power Adapter):

- Failure Rate: 14.292904 ppm
- MTBF: 69,965 Hours

Below components value were provided by the suppliers:

- (TF)Power Adapter.100/240V.12V.5A.60W.DC.With Lock.FSP.FSP060-DBAB1
MTBF: 60,000 hours

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description Top-level assembly
File Name TF-FES-5130F-A10-01.RPJ
Time 14:19
Failure Rate 14.292904
MTBF 69,965

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-FES-5130F-A10-01	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	14.29	69964.79
ASS'Y AEB-POS-A12	9697APOS00-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	1.77	565664.33
ASS'Y IMBE-945G-A12	9697945G13-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	12.53	79839.87

AAEON Reliability Prediction Report

Part Number 9697APOS00-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 1.767833
MTBF 565,664

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050700002	Resistor	R101,R102,R104, R105	Telcordia Issue 1	Level I		4.00	0.002272	.5141	440111121.05
1121501680	Capacitor	BC17,BC19,BC26, BC27,BC28,BC29, BC30,BC31,BC32, BC33,BC34,BC35, BC36,BC37,BC38, BC39,BC40,BC41, BC42,BC43,BC46, BC51,BC68,BC69, BC70,BC71,BC75	Telcordia Issue 1	Level I		27.00	0.004544	6.9405	220055560.52
1121501690	Capacitor	BC1,BC11,BC13,BC15, BC18,BC3,BC44,BC45, BC48,BC49,BC5,BC50, BC52,BC53,BC7,BC74, BC9	Telcordia Issue 1	Level I		17.00	0.004544	4.3699	220055560.52
1654926900	Connection	CN4A	Telcordia Issue 1	Level I		1.00	0.029741	1.6824	33623145.27
1654226300	Connection	CN4B	Telcordia Issue 1	Level I		1.00	0.029741	1.6824	33623145.27
1174510180	Capacitor	CP3,CP4,CP5,CP6, CP7,CP8	Telcordia Issue 1	Level I		6.00	0.005469	1.8562	182842274.63
1129601080	Capacitor	C3,C4	Telcordia Issue 1	Level I		2.00	0.004544	.5141	220055560.52
1124410080	Capacitor	C7,C8	Telcordia Issue 1	Level I		2.00	0.004544	.5141	220055560.52
121230603H	Inductor	FB2,FB3,FB4,FB5	Telcordia Issue 1	Level I		4.00	0.002272	.5141	440111121.05
1233348051	Miscellaneous	OSC1	Telcordia Issue 1	Level I		1.00	0.360000	20.3639	2777777.78
1314570810	Semiconductor	Q5	Telcordia Issue 1	Level I		1.00	0.047899	2.7095	20877097.20
1540710080	Resistor	RN3,RN4,RN5,RN6, RN7,RN8	Telcordia Issue 1	Level I		6.00	0.006275	2.1296	159372657.61
105A704729	Resistor	R1,R16,R17,R2,R3, R5,R8	Telcordia Issue 1	Level I		7.00	0.002272	.8997	440111121.05
105A701033	Resistor	R19,R41	Telcordia Issue 1	Level I		2.00	0.002272	.2571	440111121.05
105A700003	Resistor	FB11,FB12,FB13, FB14,R15,R39,R4, R40,R48,R52,R53, R54,R60,R62,R68, R75,R78	Telcordia Issue 1	Level I		17.00	0.002272	2.1850	440111121.05
105A708229	Resistor	R20,R22	Telcordia Issue 1	Level I		2.00	0.002272	.2571	440111121.05
105A701039	Resistor	R23,R25,R26,R27	Telcordia Issue 1	Level I		4.00	0.002272	.5141	440111121.05
105A501223	Resistor	R24	Telcordia Issue 1	Level I		1.00	0.002272	.1285	440111121.05
105A700133	Resistor	R37,R38,R55,R61, R67,R73	Telcordia Issue 1	Level I		6.00	0.002272	.7712	440111121.05
105A710033	Resistor	R56	Telcordia Issue 1	Level I		1.00	0.002272	.1285	440111121.05
105A502200	Resistor	R63	Telcordia Issue 1	Level I		1.00	0.002272	.1285	440111121.05
105A511503	Resistor	R64	Telcordia Issue 1	Level I		1.00	0.002272	.1285	440111121.05
11C2510190	Capacitor	TC1	Telcordia Issue 1	Level I		1.00	0.004544	.2571	220055560.52
1129610051	Capacitor	TC14,TC15,TC16, TC17,TC19,TC2,TC3, TC4,TC6,TC7	Telcordia Issue 1	Level I		10.00	0.004544	2.5706	220055560.52

AAEON Reliability Prediction Report

Part Number 9697APOS00-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10

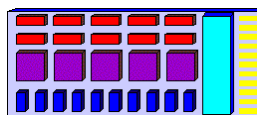


Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 1.767833
MTBF 565,664

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S4121601	Integrated Circuit	U1	Telcordia Issue 1	Level I	17.30	1.00	0.068823	3.8931	14530034.10
14S4021301	Integrated Circuit	U3,U4,U5	Telcordia Issue 1	Level I		3.00	0.059802	10.1483	16721916.86
14S3115001	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.059802	3.3828	16721916.86
14S5A00700	Integrated Circuit	U11	Telcordia Issue 1	Level I		1.00	0.025394	1.4365	39379309.36
11E2647650	Capacitor	C9	Telcordia Issue 1	Level I		1.00	0.004544	.2571	220055560.52
105A700009	Resistor	R14,R71,R81	Telcordia Issue 1	Level I		3.00	0.002272	.3856	440111121.05
14S4730701	Integrated Circuit	U7	Telcordia Issue 1	Level I	22.10	1.00	0.269126	15.2235	3715729.90
1653210201	Connection	DVI1	Telcordia Issue 1	Level I		1.00	0.011439	.6471	87420177.69
1310390411	Semiconductor	Q1,Q2	Telcordia Issue 1	Level I		2.00	0.023950	2.7095	41754194.40
1653004201	Connection	COMV1,COMV4	Telcordia Issue 1	Level I		2.00	0.004576	.5177	218550444.24
1653003101	Connection	COMV2,COMV3	Telcordia Issue 1	Level I		2.00	0.001716	.1941	582801184.63
1653300107	Connection	COMV1(1-2), COMV2(1-2), COMV4(5-6) COMV1(5-6), COMV3(1-2),	Telcordia Issue 1	Level I		5.00	0.001144	.3235	874201776.95
1653205203	Connection	COM3,COM4	Telcordia Issue 1	Level I		2.00	0.005720	.6471	174840355.39
1119647191	Capacitor	EC1,EC2	Telcordia Issue 1	Level I		2.00	0.071494	8.0883	13987228.43
165424920A	Connection	PCIE1	Telcordia Issue 1	Level I		1.00	0.001144	.0647	874201776.95
165440910K	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.001144	.0647	874201776.95

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11E9501090	Capacitor	C100,C147,C148, C151,C155,C158, C159,C167,C173, C174,C175,C176, C177,C178,C179, C180,C182,C183, C185,C186,C187, C188,C191,C193, C196,C198,C201, C203,C207,C208, C209,C210,C212, C229,C36,C39,C42, C43,C49,C50,C59	Telcordia Issue 1	Level I		52.00	0.004544	1.8866	220055560.52
11B9747490	Capacitor	C166,C168,C46,C48	Telcordia Issue 1	Level I		4.00	0.004544	.1451	220055560.52
1129710090	Capacitor	C108,C109,C110, C220,C222,C51,C53	Telcordia Issue 1	Level I		7.00	0.004544	.2540	220055560.52
1124433090	Capacitor	C57,C58,C84,C85	Telcordia Issue 1	Level I		4.00	0.004544	.1451	220055560.52
1129701790	Capacitor	C143,C213,C216, C218,C62,C66,C70, C78,C81	Telcordia Issue 1	Level I		9.00	0.004544	.3265	220055560.52
1124410191	Capacitor	C72	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
1124433190	Capacitor	C102,C189,C190, C225,C233,C235, C236,C237,C238, C239,C244,C79,C93, C94	Telcordia Issue 1	Level I		14.00	0.004544	.5079	220055560.52
118961018A	Capacitor	C202,C80,C88,C89	Telcordia Issue 1	Level I		4.00	0.004544	.1451	220055560.52
1124427091	Capacitor	C105,C112,C113, C114,C115,C116, C117,C227,C232,C63	Telcordia Issue 1	Level I		10.00	0.004544	.3628	220055560.52
1124515880	Capacitor	C91	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
1121722780	Capacitor	C106,C126,C129	Telcordia Issue 1	Level I		3.00	0.004544	.1088	220055560.52
11C9512780	Capacitor	C107	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
11C4501060	Capacitor	C119,C128	Telcordia Issue 1	Level I		2.00	0.004544	.0726	220055560.52
1124518280	Capacitor	C123,C134	Telcordia Issue 1	Level I		2.00	0.004544	.0726	220055560.52
1122522890	Capacitor	C149	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
1129622050	Capacitor	C171,C172,C205, C214	Telcordia Issue 1	Level I		4.00	0.004544	.1451	220055560.52
1124418190	Capacitor	C226	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
1124556180	Capacitor	C228	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
16515A0997	Connection	DIMM1	Telcordia Issue 1	Level I		1.00	0.114390	.9133	8742017.77
1300283540	Semiconductor	D1	Telcordia Issue 1	Level I		1.00	0.023950	.1912	41754194.40
1300414844	Semiconductor	D2	Telcordia Issue 1	Level I		1.00	0.023950	.1912	41754194.40

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1300581940	Semiconductor	D3	Telcordia Issue 1	Level I		1.00	0.079832	.6374	12526258.32
1300001440	Semiconductor	D4,D5	Telcordia Issue 1	Level I		2.00	0.023950	.3824	41754194.40
1301003440	Semiconductor	D6,D8,D9	Telcordia Issue 1	Level I		3.00	0.023950	.5736	41754194.40
1301005442	Semiconductor	D11,D7	Telcordia Issue 1	Level I		2.00	0.023950	.3824	41754194.40
1301005440	Semiconductor	D12,D13,D15	Telcordia Issue 1	Level I		3.00	0.023950	.5736	41754194.40
1301053040	Semiconductor	D14	Telcordia Issue 1	Level I		1.00	0.023950	.1912	41754194.40
12123A0003	Inductor	FB1	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1212308054	Inductor	FB12,FB19,FB2,FB26, FB29,FB31,FB33, FB35,FB7	Telcordia Issue 1	Level I		9.00	0.002272	.1633	440111121.05
1212306033	Inductor	FB10,FB20,FB21, FB22,FB23,FB24, FB25,FB3,FB36,FB37, FB38,FB39,FB5,FB6, FB8,FB9	Telcordia Issue 1	Level I		16.00	0.002272	.2903	440111121.05
121230603H	Inductor	FB18,FB34,FB4	Telcordia Issue 1	Level I		3.00	0.002272	.0544	440111121.05
1059700001	Resistor	FB11,FB13,FB14, FB15,FB16,FB17, FB27,FB28,FB30, FB32,FB50,FB51, R315,R354,R36,R386, R393,R534,R732, R733	Telcordia Issue 1	Level I		20.00	0.002272	.3628	440111121.05
1752310000	Miscellaneous	FS1,FS4,FS5	Telcordia Issue 1	Level I		3.00	0.003000	.0719	333333333.33
1752001601	Miscellaneous	FS2,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0479	333333333.33
121110336L	Inductor	L3	Telcordia Issue 1	Level I	33.50	1.00	0.155717	1.2432	6421889.33
121110336L	Inductor	L5	Telcordia Issue 1	Level I	30.00	1.00	0.147240	1.1756	6791638.04
121110010P	Inductor	L16,L6	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
1211101002	Inductor	L7	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1211101002	Inductor	L15	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1214309006	Inductor	L10,L11,L12,L13,L8, L9	Telcordia Issue 1	Level I		6.00	0.002272	.1088	440111121.05
1315889611	Semiconductor	Q1,Q22,Q26,Q27, Q30,Q4	Telcordia Issue 1	Level I		6.00	0.079832	3.8243	12526258.32
1315889611	Semiconductor	Q28	Telcordia Issue 1	Level I	31.80	1.00	0.182218	1.4548	5487939.84
1310390411	Semiconductor	Q2,Q31,Q36,Q43	Telcordia Issue 1	Level I		4.00	0.023950	.7649	41754194.40
1315668012	Semiconductor	Q23,Q24,Q3	Telcordia Issue 1	Level I		3.00	0.023950	.5736	41754194.40
1315668012	Semiconductor	Q25	Telcordia Issue 1	Level I	31.60	1.00	0.054409	.4344	18379183.30
1315700211	Semiconductor	Q10,Q11,Q12,Q13, Q14,Q15,Q18,Q19, Q20,Q40,Q42,Q44, Q45,Q46,Q47,Q5,Q6, Q7,Q8,Q9	Telcordia Issue 1	Level I		20.00	0.079832	12.7476	12526258.32
1315313800	Semiconductor	Q21	Telcordia Issue 1	Level I		1.00	0.079832	.6374	12526258.32
14S3524700	Integrated Circuit	Q29	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315230111	Semiconductor	Q34	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
1305099140	Semiconductor	Q37, Q38	Telcordia Issue 1	Level I		2.00	0.079832	1.2748	12526258.32
1311390610	Semiconductor	Q39, Q41	Telcordia Issue 1	Level I		2.00	0.023950	.3824	41754194.40
1540701380	Resistor	RN1	Telcordia Issue 1	Level I		1.00	0.006275	.0501	159372657.61
106B747030	Resistor	RT1	Telcordia Issue 1	Level I		1.00	0.011439	.0913	87420177.69
106B701032	Resistor	RT2, RT3, RT4, RT5	Telcordia Issue 1	Level I		4.00	0.011439	.3653	87420177.69
105A702263	Resistor	R1, R18, R290, R33, R364, R368, R369, R375, R377, R378	Telcordia Issue 1	Level I		10.00	0.002272	.1814	440111121.05
105A700003	Resistor	R12, R2, R20, R279, R325, R35, R350, R351, R352, R357, R384, R573, R726	Telcordia Issue 1	Level I		13.00	0.002272	.2358	440111121.05
105A704729	Resistor	R100, R15, R170, R172, R175, R184, R195, R198, R214, R217, R220, R223, R228, R229, R230, R232, R235, R308, R309, R310, R311, R358, R389, R413, R436, R442, R450, R48, R488, R572, R574, R72, R75, R97	Telcordia Issue 1	Level I		34.00	0.002272	.6168	440111121.05
105A733009	Resistor	R10, R14, R4, R504	Telcordia Issue 1	Level I		4.00	0.002272	.0726	440111121.05
105A500139	Resistor	R21, R255, R256, R257, R258, R260, R262, R340, R491, R5, R515, R520, R539, R541, R714	Telcordia Issue 1	Level I		15.00	0.002272	.2721	440111121.05
105A504723	Resistor	R24, R7	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A504733	Resistor	R8	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A701033	Resistor	R13, R29, R40, R9	Telcordia Issue 1	Level I		4.00	0.002272	.0726	440111121.05
105A702209	Resistor	R11, R213, R216, R343, R344, R345, R346, R524	Telcordia Issue 1	Level I		8.00	0.002272	.1451	440111121.05
105A500133	Resistor	R16, R27	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
1059704761	Resistor	R17	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10

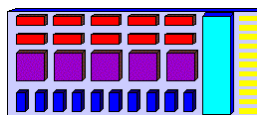


Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A701039	Resistor	R169,R174,R22,R297, R394,R398,R400, R403,R409,R421, R425,R433,R437, R467,R469,R470, R471,R472,R487, R493,R497,R532, R533,R55,R57,R58, R61,R66,R76,R79	Telcordia Issue 1	Level I		30.00	0.002272	.5442	440111121.05
105A700009	Resistor	R104,R105,R107, R113,R154,R167, R171,R173,R178, R200,R208,R209, R221,R225,R227,R23, R239,R242,R248, R264,R269,R273, R274,R276,R278, R281,R295,R296, R307,R341,R359, R372,R396,R404, R410,R411,R418, R427,R43,R44,R4	Telcordia Issue 1	Level I		72.00	0.002272	1.3061	440111121.05
105A566513	Resistor	R26,R366	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A575003	Resistor	R356	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A571513	Resistor	R28	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A501529	Resistor	R31,R419	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A705609	Resistor	R114,R118,R119, R122,R123,R125, R127,R129,R130, R132,R134,R135, R137,R138,R141, R142,R143,R144, R145,R147,R148, R150,R151,R152, R153,R157,R177, R318,R319,R320, R321,R38,R51,R514, R518,R519,R522, R525,R526,R530	Telcordia Issue 1	Level I		40.00	0.002272	.7256	440111121.05
105A515813	Resistor	R41	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A500233	Resistor	R348,R42	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A700139	Resistor	R149,R166,R182, R204,R226,R233, R388,R401,R45,R459, R494,R54,R548,R567, R575,R65	Telcordia Issue 1	Level I		16.00	0.002272	.2903	440111121.05
105A524963	Resistor	R126,R131,R391, R408,R47,R485	Telcordia Issue 1	Level I		6.00	0.002272	.1088	440111121.05
105A700133	Resistor	R50	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A703309	Resistor	R192,R215,R218, R521,R53,R592,R593, R63,R68,R74	Telcordia Issue 1	Level I		10.00	0.002272	.1814	440111121.05
105A500239	Resistor	R259,R261,R508,R64, R69	Telcordia Issue 1	Level I		5.00	0.002272	.0907	440111121.05
105A510009	Resistor	R112,R392,R395, R402,R447,R466, R475,R482,R507, R535,R537,R591,R70	Telcordia Issue 1	Level I		13.00	0.002272	.2358	440111121.05
105A708229	Resistor	R103,R110,R111, R116,R124,R128, R133,R136,R140, R210,R241,R251, R266,R267,R399, R405,R414,R416, R423,R426,R431, R435,R438,R445, R449,R453,R456, R457,R458,R462, R464,R465,R481, R513,R517,R712, R713,R73,R77,R7	Telcordia Issue 1	Level I		47.00	0.002272	.8526	440111121.05
1050502224	Resistor	R109,R90	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A515009	Resistor	R101,R328,R330, R332,R441,R91	Telcordia Issue 1	Level I		6.00	0.002272	.1088	440111121.05
105A710039	Resistor	R374,R390,R454, R455,R96	Telcordia Issue 1	Level I		5.00	0.002272	.0907	440111121.05
105A580663	Resistor	R115,R120	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A554969	Resistor	R139,R191,R222, R476	Telcordia Issue 1	Level I		4.00	0.002272	.0726	440111121.05
105A702039	Resistor	R146	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A703909	Resistor	R155,R430,R434, R477,R478,R479	Telcordia Issue 1	Level I		6.00	0.002272	.1088	440111121.05
105A701069	Resistor	R156,R196	Telcordia Issue 1	Level I		2.00	0.013633	.2177	73351853.51
105A533233	Resistor	R158	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A701053	Resistor	R159,R165	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A522663	Resistor	R160	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1050549904	Resistor	R161,R550	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A702229	Resistor	R180,R190,R212, R429,R439,R440, R474,R588,R596	Telcordia Issue 1	Level I		9.00	0.002272	.1633	440111121.05
105A527469	Resistor	R181,R219	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A502039	Resistor	R187	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1050512164	Resistor	R188,R194	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A705139	Resistor	R206,R716,R717, R718,R719	Telcordia Issue 1	Level I		5.00	0.002272	.0907	440111121.05
105A701533	Resistor	R224	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A501039	Resistor	R234,R249,R254, R263,R268,R451, R468,R536,R538	Telcordia Issue 1	Level I		9.00	0.002272	.1633	440111121.05
105A506829	Resistor	R240,R253,R342, R347	Telcordia Issue 1	Level I		4.00	0.002272	.0726	440111121.05
105A503039	Resistor	R244	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A756033	Resistor	R250,R559,R563	Telcordia Issue 1	Level I		3.00	0.002272	.0544	440111121.05
105A747033	Resistor	R265,R558,R562	Telcordia Issue 1	Level I		3.00	0.002272	.0544	440111121.05
105A540213	Resistor	R282	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A715009	Resistor	R285,R287,R288	Telcordia Issue 1	Level I		3.00	0.002272	.0544	440111121.05
105A700103	Resistor	R316	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A568113	Resistor	R317	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A549919	Resistor	R324	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A747009	Resistor	R327,R576	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A507509	Resistor	R329,R331,R333	Telcordia Issue 1	Level I		3.00	0.002272	.0544	440111121.05
1050537434	Resistor	R334	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A545313	Resistor	R335	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A535713	Resistor	R336	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A702269	Resistor	R337	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A752323	Resistor	R338	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A576813	Resistor	R339	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A517813	Resistor	R349	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A702033	Resistor	R353	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A504763	Resistor	R355,R360	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A522123	Resistor	R362	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A531613	Resistor	R367	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A701003	Resistor	R370,R379,R446, R578,R579	Telcordia Issue 1	Level I		5.00	0.002272	.0907	440111121.05
105A503333	Resistor	R380	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A518223	Resistor	R381	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A525503	Resistor	R432	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A522103	Resistor	R463,R484	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
1050501004	Resistor	R473	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1050520004	Resistor	R483	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A506803	Resistor	R528	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1059703623	Resistor	R542	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A524913	Resistor	R544	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A514733	Resistor	R564	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A563413	Resistor	R568	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A522113	Resistor	R580	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1122710091	Capacitor	TC1,TC10,TC26,TC27,TC28,TC3,TC30,TC56,TC62,TC63,TC64	Telcordia Issue 1	Level I		11.00	0.004544	.3991	220055560.52
1129610051	Capacitor	TC11,TC12,TC13,TC14,TC15,TC16,TC17,TC18,TC19,TC2,TC20,TC21,TC22,TC23,TC24,TC25,TC29,TC31,TC32,TC33,TC34,TC35,TC36,TC37,TC38,TC39,TC4,TC40,TC42,TC43,TC44,TC45,TC46,TC47,TC48,TC49,TC5,TC50,TC51,TC52,TC53,TC54,	Telcordia Issue 1	Level I		51.00	0.004544	1.8504	220055560.52
14S4653701	Integrated Circuit	U1	Telcordia Issue 1	Level I	31.50	1.00	0.480011	3.8324	2083285.93
14S4622800	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
14S4195710	Integrated Circuit	U4	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
14S5A00704	Integrated Circuit	U5	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
14S3102000	Integrated Circuit	U6	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
14S4081110	Integrated Circuit	U27,U34,U8	Telcordia Issue 1	Level I		3.00	0.059802	1.4324	16721916.86
14S428010D	Integrated Circuit	U9	Telcordia Issue 1	Level I	20.30	1.00	0.080438	.6422	12431897.35
14S4294503	Integrated Circuit	U10	Telcordia Issue 1	Level I	17.60	1.00	0.069914	.5582	14303285.39
14S3128421	Integrated Circuit	U11	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
14S5A01400	Integrated Circuit	U12,U21,U30,U31	Telcordia Issue 1	Level I		4.00	0.059802	1.9098	16721916.86
14S3950100	Integrated Circuit	U13	Telcordia Issue 1	Level I	39.30	1.00	0.202509	1.6168	4938047.75
14S4160020	Integrated Circuit	U14	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
14S4878100	Integrated Circuit	U38	Telcordia Issue 1	Level I	25.50	1.00	0.104685	.8358	9552455.19
14S1230400	Integrated Circuit	U17	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S5812502	Integrated Circuit	U18	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
14S4811100	Integrated Circuit	U19	Telcordia Issue 1	Level I	27.10	1.00	0.113333	.9048	8823567.84
14S5A12506	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
14S4021301	Integrated Circuit	U22,U25	Telcordia Issue 1	Level I		2.00	0.059802	.9549	16721916.86
14S4021301	Integrated Circuit	U40	Telcordia Issue 1	Level I	22.70	1.00	0.279535	2.2318	3577370.69
14S4021301	Integrated Circuit	U39	Telcordia Issue 1	Level I	25.20	1.00	0.326923	2.6101	3058828.73
14S4048502	Integrated Circuit	U23,U24	Telcordia Issue 1	Level I		2.00	0.059802	.9549	16721916.86
14S3626100	Integrated Circuit	U26	Telcordia Issue 1	Level I	19.70	1.00	0.230894	1.8435	4330986.96
14S9661200	Integrated Circuit	U28	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
1314780511	Integrated Circuit	U29	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
14S6334607	Integrated Circuit	U33	Telcordia Issue 1	Level I		1.00	0.023111	.1845	43268765.90
14S2200900	Integrated Circuit	U35	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
1231332721	Miscellaneous	Y1	Telcordia Issue 1	Level I		1.00	0.150000	1.1976	6666666.67
123131435B	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	1.1976	6666666.67
1231325058	Miscellaneous	Y3	Telcordia Issue 1	Level I		1.00	0.150000	1.1976	6666666.67
14S5A00821	Integrated Circuit	U36	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
1211104760	Inductor	L17	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
14S3170800	Integrated Circuit	U15	Telcordia Issue 1	Level I	25.40	1.00	0.331009	2.6428	3021064.16
105A702239	Resistor	R589,R595	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
1653213207	Connection	LPT1	Telcordia Issue 1	Level I		1.00	0.014871	.1187	67246290.53
105A517423	Resistor	R25,R365	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
105A536523	Resistor	R6	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
1315889612	Semiconductor	Q35	Telcordia Issue 1	Level I		1.00	0.079832	.6374	12526258.32
105A501233	Resistor	R19	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
105A510003	Resistor	R162,R163	Telcordia Issue 1	Level I		2.00	0.002272	.0363	440111121.05
131411171G	Integrated Circuit	Q16	Telcordia Issue 1	Level I		1.00	0.059802	.4775	16721916.86
1129710390	Capacitor	C122,C124,C132, C223,C224,C67,C90, C95	Telcordia Issue 1	Level I		8.00	0.004544	.2903	220055560.52
1653205201	Connection	COM3,COM4	Telcordia Issue 1	Level I		2.00	0.005720	.0913	174840355.39
1211000180	Inductor	L1	Telcordia Issue 1	Level I	27.20	1.00	0.003702	.0296	270137041.51
1211000180	Inductor	L2	Telcordia Issue 1	Level I	28.00	1.00	0.003751	.0299	266615164.06
1211000180	Inductor	L4	Telcordia Issue 1	Level I	33.30	1.00	0.004085	.0326	244805854.51
11E2501690	Capacitor	C219	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
14S6294510	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.026337	.2103	37969565.62
1211106872	Inductor	L18	Telcordia Issue 1	Level I		1.00	0.002272	.0181	440111121.05
14S3051000	Semiconductor	U41,U42	Telcordia Issue 1	Level I		2.00	0.023950	.3824	41754194.40

AAEON Reliability Prediction Report

Part Number 9697945G13-D
Reference Des
Date 09. 10, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.10



Description
File Name TF-FES-5130F-A10-01.RPJ
Time 14:20
Failure Rate 12.525071
MTBF 79,840

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11C2522660	Capacitor	C111	Telcordia Issue 1	Level I		1.00	0.004544	.0363	220055560.52
1112633190	Capacitor	EC7	Telcordia Issue 1	Level I		1.00	0.042896	.3425	23312047.39
1750220326	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001144	.0091	874201776.95
175011901H	Miscellaneous	BAT1	Telcordia Issue 1	Level I		1.00	0.900000	7.1856	11111111.11
175910000B	Miscellaneous	BZ1	Telcordia Issue 1	Level I		1.00	0.150000	1.1976	6666666.67
1655305020	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.002860	.0228	349680710.78
1653005201	Connection	AUDIO1,CN6,CN7	Telcordia Issue 1	Level I		3.00	0.005720	.1370	174840355.39
1653003101	Connection	COMV1,COMV2,JP1,JP10,JP11,JP3,JP4,JP5,JP6	Telcordia Issue 1	Level I		9.00	0.001716	.1233	582801184.63
1653205203	Connection	COM1	Telcordia Issue 1	Level I		1.00	0.005720	.0457	174840355.39
165440910B	Connection	COM2	Telcordia Issue 1	Level I		1.00	0.022878	.1827	43710088.85
1169656132	Capacitor	EC1,EC2	Telcordia Issue 1	Level I		2.00	0.005469	.0873	182842274.63
1169682192	Capacitor	EC3,EC5	Telcordia Issue 1	Level I		2.00	0.005469	.0873	182842274.63
165251420B	Connection	LAN1	Telcordia Issue 1	Level I		1.00	0.001144	.0091	874201776.95
1654907002	Connection	SATA1,SATA2	Telcordia Issue 1	Level I		2.00	0.004004	.0639	249771936.27
1654515308	Connection	VGA1	Telcordia Issue 1	Level I		1.00	0.008579	.0685	116560236.93
1654808309	Connection	USB1,USB2	Telcordia Issue 1	Level I		2.00	0.001144	.0183	874201776.95
1655004010	Connection	PWR2	Telcordia Issue 1	Level I		1.00	0.002288	.0183	437100888.47
1655302020	Connection	CN4,CN5	Telcordia Issue 1	Level I		2.00	0.001144	.0183	874201776.95
1654606100	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.003432	.0274	291400592.32
1655404120	Connection	ATX1	Telcordia Issue 1	Level I		1.00	0.022878	.1827	43710088.85
1655004100	Connection	PWR1	Telcordia Issue 1	Level I		1.00	0.001144	.0091	874201776.95
1653005210	Connection	FP1	Telcordia Issue 1	Level I		1.00	0.001144	.0091	874201776.95