

# ACP-5185

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 22.658794 ppm MTBF: 44,133 Hours
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Issue date	Approval	Test Engineer
2011/11/14	Jansin Lee	Rex Chang

# Reliability Prediction (MTBF)

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**I . Model Name:** TF-ACP-5185HTT-A1-1010

**II . Prediction Date:** Nov, 14<sup>th</sup>, 2011

**III . Prediction Site:** AAEON Q.E. Dept.

**IV . Predicted by:** Rex Chang

**V . Equipment:** Relex Ver.7.3 Visual Reliability Software

**VI. Simulation Environment:**

- Temperature: 25.0 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-ACP-5185HTT-A1-1010(Not include Inverter, LCD, Touch screen and Adapter):

- Failure Rate: 22.658794 ppm
- MTBF: 44,133 Hours

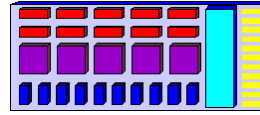
Below component MTBF value were provided by the supplier:

- (TF)Inverter.DC to AC 2 Lamps.For AUO 15.6 G156XW010 V0.Sampo.YIVLAA0730D21  
MTBF: 50,000 hours
- (TF)TFT LCD.18.5.AUO.G185XW01 V0.LVDS 24bit.1366\*768.300 nits  
MTBF: 50,000 hours  
(Note: Definition of life time: brightness becomes 50%. The minimum life time of CCFL unit is on the condition of 7.5mA CCFL current and 25±2°C)
- (TF)Adaptor.AC.100/240V.12V/7A.84W.FSP.FSP084-DMAA1 P/N:9NA084040X  
MTBF: 30,000 hours  
(Note: The subject adapter have a minimum predicted MTBF(MIL-STD-217F) of 30000 hours of continuous operation at 25°C, maximum-output load, and nominal AC input voltage.)

**(Note: Above not include Touch screen and Touch Control Board)**

**AAEON Reliability Prediction Report**

**Part Number** System  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description** Top-level assembly  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 22.658794  
**MTBF** 44,133

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-ACP-5185HTT-A1-1010	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	22.66	44132.97
PER-189 A1.0	9697T18904-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	2.15	464494.58
PER-180 B1.0	9697T18008-S	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	.25	3973085.79
PER-194 A0.2	9697T19401-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	.01	97642252.30
EPIC-QM57 A1.0	9697QM5735-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	19.59	51057.16



### AAEON Reliability Prediction Report

**Part Number** 9697T18904-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 2.152878  
**MTBF** 464,495

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1654030003	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.017069	.7929	58585351.38
1129610051	Capacitor	C1,C10,C14,C17,C20, C31,C34,C36,C57,C7	Telcordia Issue 1	Level I		10.00	0.004535	2.1067	220487045.01
1122701680	Capacitor	C11,C12,C15,C16, C18,C19,C2,C22,C26, C27,C28,C30,C32, C33,C35,C4,C43,C44, C49,C5,C51,C52,C53, C55,C56,C58,C6,C8,C9	Telcordia Issue 1	Level I		29.00	0.004535	6.1094	220487045.01
1121701080	Capacitor	C13,C23,C25,C29, C38	Telcordia Issue 1	Level I		5.00	0.004535	1.0533	220487045.01
1129722680	Capacitor	C24	Telcordia Issue 1	Level I		1.00	0.004535	.2107	220487045.01
1124420080	Capacitor	C39,C40	Telcordia Issue 1	Level I		2.00	0.004535	.4213	220487045.01
11B4747660	Capacitor	C42	Telcordia Issue 1	Level I		1.00	0.004535	.2107	220487045.01
1124522880	Capacitor	C47	Telcordia Issue 1	Level I		1.00	0.004535	.2107	220487045.01
11C4501380	Capacitor	C48	Telcordia Issue 1	Level I		1.00	0.004535	.2107	220487045.01
11E1522680	Capacitor	C50	Telcordia Issue 1	Level I		1.00	0.004535	.2107	220487045.01
1301005442	Semiconductor	D2,D3	Telcordia Issue 1	Level I		2.00	0.023881	2.2185	41874327.58
1301010340	Semiconductor	D4	Telcordia Issue 1	Level I		1.00	0.023881	1.1093	41874327.58
1302005642	Semiconductor	D5	Telcordia Issue 1	Level I		1.00	0.027212	1.2640	36747840.84
105A700003	Resistor	FB1,FB2,FB3,FB4, FB6,R15,R16,R39, R49,R50	Telcordia Issue 1	Level I		10.00	0.002268	1.0533	440974090.03
1752340000	Miscellaneous	F1	Telcordia Issue 1	Level I		1.00	0.003000	.1393	333333333.33
121110226M	Inductor	L1	Telcordia Issue 1	Level I	36.30	1.00	0.004275	.1986	233904989.68
1310390411	Semiconductor	Q1	Telcordia Issue 1	Level I		1.00	0.023881	1.1093	41874327.58
1315700214	Semiconductor	Q2,Q3,Q5,Q6,Q7	Telcordia Issue 1	Level I		5.00	0.079603	18.4876	12562298.27
1310X61910	Semiconductor	Q4	Telcordia Issue 1	Level I		1.00	0.023881	1.1093	41874327.58
105A747003	Resistor	R1	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A704733	Resistor	R4,R55	Telcordia Issue 1	Level I		2.00	0.002268	.2107	440974090.03
105A703303	Resistor	R8	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A704723	Resistor	R10,R11,R12,R13, R14,R19,R2,R20,R58, R60,R61,R9	Telcordia Issue 1	Level I		12.00	0.002268	1.2640	440974090.03
105A710003	Resistor	R18	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A501033	Resistor	R21,R23,R26,R27, R30,R32,R41,R52, R56,R69,R71	Telcordia Issue 1	Level I		11.00	0.002268	1.1587	440974090.03
105A733003	Resistor	R22,R28,R29	Telcordia Issue 1	Level I		3.00	0.002268	.3160	440974090.03
105A705623	Resistor	R24	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A722003	Resistor	R25,R34,R38	Telcordia Issue 1	Level I		3.00	0.002268	.3160	440974090.03
105A500133	Resistor	R3,R31,R40,R44,R45, R5,R6,R7	Telcordia Issue 1	Level I		8.00	0.002268	.8427	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697T18904-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 2.152878  
**MTBF** 464,495

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A710033	Resistor	R42,R43,R51	Telcordia Issue 1	Level I		3.00	0.002268	.3160	440974090.03
105A703933	Resistor	R46	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A708223	Resistor	R48	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A703033	Resistor	R53,R54	Telcordia Issue 1	Level I		2.00	0.002268	.2107	440974090.03
105A568003	Resistor	R57	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A751033	Resistor	R59	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
1059501261	Resistor	R67,R68	Telcordia Issue 1	Level I		2.00	0.002268	.2107	440974090.03
105A705123	Resistor	R70	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
105A702223	Resistor	R64,R75	Telcordia Issue 1	Level I		2.00	0.002268	.2107	440974090.03
105A519113	Resistor	R72	Telcordia Issue 1	Level I		1.00	0.002268	.1053	440974090.03
14S5207402	Integrated Circuit	U4	Telcordia Issue 1	Level I		1.00	0.070411	3.2706	14202225.56
14S3522800	Integrated Circuit	U5,U6	Telcordia Issue 1	Level I		2.00	0.059366	5.5150	16844654.92
1759334500	Semiconductor	U7	Telcordia Issue 1	Level I		1.00	0.159207	7.3951	6281149.14
14S1206800	Integrated Circuit	U8	Telcordia Issue 1	Level I		1.00	0.059366	2.7575	16844654.92
14S4850002	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.026183	1.2162	38193355.79
14S634022E	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.022943	1.0657	43586356.53
14S3269500	Integrated Circuit	U11	Telcordia Issue 1	Level I		1.00	0.059366	2.7575	16844654.92
1314880511	Integrated Circuit	U12	Telcordia Issue 1	Level I		1.00	0.059366	2.7575	16844654.92
1314880512	Integrated Circuit	U13	Telcordia Issue 1	Level I		1.00	0.059366	2.7575	16844654.92
1314881910	Integrated Circuit	U14	Telcordia Issue 1	Level I		1.00	0.059366	2.7575	16844654.92
14S6200100	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.022943	1.0657	43586356.53
1655910123	Connection	CN5	Telcordia Issue 1	Level I		1.00	0.005690	.2643	175756054.14
1653006101	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.003414	.1586	292926756.90
1655305020	Connection	CN4	Telcordia Issue 1	Level I		1.00	0.002845	.1321	351512108.28
1655302020	Connection	CN12,CN8	Telcordia Issue 1	Level I		2.00	0.001138	.1057	878780270.71
1652505203	Connection	CN11	Telcordia Issue 1	Level I		1.00	0.002845	.1321	351512108.28
1655909031	Connection	CN13	Telcordia Issue 1	Level I		1.00	0.005121	.2379	195284504.60
1655905032	Connection	CN19,CN20,CN21, CN22,CN23	Telcordia Issue 1	Level I		5.00	0.002845	.6607	351512108.28
1655904030	Connection	CN16	Telcordia Issue 1	Level I		1.00	0.002276	.1057	439390135.35
1655002020	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.001138	.0529	878780270.71
1112610211	Capacitor	C41	Telcordia Issue 1	Level I		1.00	0.071121	3.3035	14060484.33
1119610299	Capacitor	C46	Telcordia Issue 1	Level I		1.00	0.071121	3.3035	14060484.33
1653003201	Connection	SW1	Telcordia Issue 1	Level I		1.00	0.003414	.1586	292926756.90
1653003108	Connection	JP1,JP2	Telcordia Issue 1	Level I		2.00	0.001707	.1586	585853513.81
1111610192	Capacitor	CE1,CE2	Telcordia Issue 1	Level I		2.00	0.042673	3.9643	23434140.55
1655304020	Connection	CN6	Telcordia Issue 1	Level I		1.00	0.056897	2.6428	17575605.41

### AAEON Reliability Prediction Report

**Part Number** 9697T18904-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



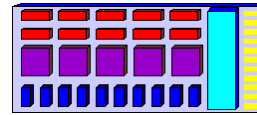
**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 2.152878  
**MTBF** 464,495

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1231112050	Miscellaneous	X1	Telcordia Issue 1	Level I		1.00	0.150000	6.9674	6666666.67



### AAEON Reliability Prediction Report

**Part Number** 9697T18008-S  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 0.251694  
**MTBF** 3,973,086

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1655910123	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.005690	2.2606	175756054.14
1124420080	Capacitor	C2,C3,C4,C5	Telcordia Issue 1	Level I		4.00	0.004535	7.2078	220487045.01
1124415080	Capacitor	C1	Telcordia Issue 1	Level I		1.00	0.004535	1.8020	220487045.01
1122701680	Capacitor	C10,C6,C7,C8,C9	Telcordia Issue 1	Level I		5.00	0.004535	9.0098	220487045.01
1129610080	Capacitor	C11,C12	Telcordia Issue 1	Level I		2.00	0.004535	3.6039	220487045.01
1304600040	Semiconductor	D1,D2,D3,D4	Telcordia Issue 1	Level I		4.00	0.004877	7.7500	205063180.81
1304300042	Semiconductor	D5	Telcordia Issue 1	Level I		1.00	0.004877	1.9375	205063180.81
105A700003	Resistor	R1,R10,R13,R14,R17, R19,R21,R3,R5,R6, R9	Telcordia Issue 1	Level I		11.00	0.002268	9.9108	440974090.03
105A722003	Resistor	R22,R23,R24,R25	Telcordia Issue 1	Level I		4.00	0.002268	3.6039	440974090.03
105A747003	Resistor	R26	Telcordia Issue 1	Level I		1.00	0.002268	.9010	440974090.03
14S9223B00	Integrated Circuit	U1,U2,U3,U4,U5	Telcordia Issue 1	Level I		5.00	0.026183	52.0128	38193355.79









**AAEON Reliability Prediction Report**

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00

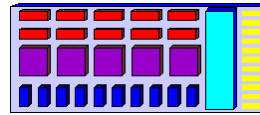


**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A700009	Resistor	C225,C226,C227, C228,C644,C645, C646,C647,L15,L21, L26,L30,L40,L8,R12, R125,R126,R130, R131,R140,R153,R16, R161,R162,R164, R166,R167,R170, R171,R174,R175, R177,R189,R191, R192,R193,R194, R195,R196,R197, R198,R199,R2,R2	Telcordia Issue 1	Level I		220.00	0.002268	2.5472	440974090.03
1129710090	Capacitor	C249,C251,C252, C253,C695,C697, C701	Telcordia Issue 1	Level I		7.00	0.004535	.1621	220487045.01
1124515281	Capacitor	C255	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
1124427090	Capacitor	C259,C260,C261, C262,C605,C617, C639,C648,C689, C692,C698,C710, C713	Telcordia Issue 1	Level I		13.00	0.004535	.3010	220487045.01
11E1510050	Capacitor	C271,C272	Telcordia Issue 1	Level I		2.00	0.004535	.0463	220487045.01
11A4422180	Capacitor	C274	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
1129722091	Capacitor	C282,C380	Telcordia Issue 1	Level I		2.00	0.004535	.0463	220487045.01
11E2647650	Capacitor	C314,C323,C344, C348	Telcordia Issue 1	Level I		4.00	0.004535	.0926	220487045.01
1124522880	Capacitor	C356	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
11E9610190	Capacitor	C389,C410	Telcordia Issue 1	Level I		2.00	0.004535	.0463	220487045.01
1189622150	Capacitor	C442,C454	Telcordia Issue 1	Level I		2.00	0.004535	.0463	220487045.01
11E1547090	Capacitor	C515,C519	Telcordia Issue 1	Level I		2.00	0.004535	.0463	220487045.01
1124433090	Capacitor	C623,C624,C670	Telcordia Issue 1	Level I		3.00	0.004535	.0695	220487045.01
1124522680	Capacitor	C678	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
11C4533180	Capacitor	C712	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
1300001440	Semiconductor	D1,D2,D8	Telcordia Issue 1	Level I		3.00	0.023881	.3658	41874327.58
1211105673	Inductor	D4,D5	Telcordia Issue 1	Level I		2.00	0.086173	.8799	11604581.32
1305100541	Semiconductor	D24,D25,D26,D27, D30,D31,D32,D33, D34,D35,D36,D37,D6	Telcordia Issue 1	Level I		13.00	0.023881	1.5851	41874327.58
1301005440	Semiconductor	D17,D18,D20,D28, D38,D42,D7	Telcordia Issue 1	Level I		7.00	0.023881	.8535	41874327.58
1300414848	Semiconductor	D9	Telcordia Issue 1	Level I		1.00	0.023881	.1219	41874327.58
1301002240	Semiconductor	D11,D15,D21,D22	Telcordia Issue 1	Level I		4.00	0.023881	.4877	41874327.58

**AAEON Reliability Prediction Report**

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1301400642	Semiconductor	D29,D40,D41	Telcordia Issue 1	Level I		3.00	0.023881	.3658	41874327.58
1752001601	Miscellaneous	FS1,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0306	333333333.33
1752011000	Miscellaneous	FS2	Telcordia Issue 1	Level I		1.00	0.003000	.0153	333333333.33
1752000501	Miscellaneous	FS4	Telcordia Issue 1	Level I		1.00	0.003000	.0153	333333333.33
1304001340	Semiconductor	LED2,LED3,LED4	Telcordia Issue 1	Level I		3.00	0.004877	.0747	205063180.81
1211101064	Inductor	L1	Telcordia Issue 1	Level I		1.00	0.086173	.4400	11604581.32
1211103671	Inductor	L10,L2,L3	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
121230603S	Inductor	L36,L39,L47,L6,L9	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03
121110226E	Inductor	L11	Telcordia Issue 1	Level I		1.00	0.086173	.4400	11604581.32
1059700001	Resistor	L16,L41,L42,L48, L49	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03
105A700003	Resistor	L17,L18,L19,L20, L22,L23,L28,R106, R109,R119,R315, R428,R438,R64,R68, R69,R692,R70	Telcordia Issue 1	Level I		18.00	0.002268	.2084	440974090.03
121110100F	Inductor	L27,L31,L33	Telcordia Issue 1	Level I		3.00	0.086173	1.3199	11604581.32
1211100160	Inductor	L29	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1214309006	Inductor	L37,L38,L43,L44, L45,L46	Telcordia Issue 1	Level I		6.00	0.002268	.0695	440974090.03
105A501039	Resistor	PR1,R102,R117,R122, R134,R135,R141, R143,R144,R147, R148,R15,R154,R157, R179,R224,R225, R229,R235,R236, R237,R238,R247, R263,R272,R275, R278,R280,R299, R306,R307,R316, R318,R32,R33,R335, R338,R367,R375, R415,R416,R418,	Telcordia Issue 1	Level I		100.00	0.002268	1.1578	440974090.03
1315700216	Semiconductor	Q1,Q11,Q16,Q17,Q19, Q23,Q24,Q3,Q30,Q31, Q32,Q35,Q39,Q40, Q41,Q47,Q48,Q49, Q50,Q51,Q54,Q56, Q58,Q59,Q63,Q64, Q65,Q66,Q67,Q76, Q77,Q78,Q79,Q80, Q81,Q82,Q85,Q88, Q89,Q90,Q91	Telcordia Issue 1	Level I		41.00	0.079603	16.6637	12562298.27

### AAEON Reliability Prediction Report

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1310390410	Semiconductor	Q2,Q20,Q21,Q33,Q34, Q36,Q37,Q43,Q44, Q45,Q57,Q69,Q71, Q73	Telcordia Issue 1	Level I		14.00	0.023881	1.7070	41874327.58
1315442410	Integrated Circuit	Q28,Q4,Q53,Q72	Telcordia Issue 1	Level I		4.00	0.059366	1.2124	16844654.92
1315050311	Semiconductor	Q10,Q12,Q27,Q5,Q9	Telcordia Issue 1	Level I		5.00	0.079603	2.0322	12562298.27
1315R30310	Semiconductor	Q13,Q29,Q6,Q7,Q8	Telcordia Issue 1	Level I		5.00	0.079603	2.0322	12562298.27
1315441012	Integrated Circuit	Q15,Q52,Q55,Q61	Telcordia Issue 1	Level I		4.00	0.059366	1.2124	16844654.92
1311138610	Semiconductor	Q25,Q26	Telcordia Issue 1	Level I		2.00	0.023881	.2439	41874327.58
1315230511	Semiconductor	Q38	Telcordia Issue 1	Level I		1.00	0.079603	.4064	12562298.27
14S3524700	Integrated Circuit	Q42	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
1314108416	Integrated Circuit	Q46,Q68	Telcordia Issue 1	Level I		2.00	0.059366	.6062	16844654.92
131411171C	Integrated Circuit	Q60,Q62	Telcordia Issue 1	Level I		2.00	0.059366	.6062	16844654.92
1311390610	Semiconductor	Q74	Telcordia Issue 1	Level I		1.00	0.023881	.1219	41874327.58
1315667910	Semiconductor	Q75	Telcordia Issue 1	Level I		1.00	0.159207	.8129	6281149.14
1315668510	Semiconductor	Q83	Telcordia Issue 1	Level I	50.40	1.00	0.549575	2.8060	1819586.55
1231332722	Miscellaneous	Y4	Telcordia Issue 1	Level I		1.00	0.150000	.7659	6666666.67
1315230300	Semiconductor	Q86	Telcordia Issue 1	Level I		1.00	0.159207	.8129	6281149.14
1540782282	Resistor	RP1,RP15,RP2,RP21, RP22,RP3	Telcordia Issue 1	Level I		6.00	0.006246	.1913	160102772.00
1540700081	Resistor	RP23,RP4,RP7	Telcordia Issue 1	Level I		3.00	0.006246	.0957	160102772.00
1540733085	Resistor	RP10,RP5,RP6,RP8, RP9	Telcordia Issue 1	Level I		5.00	0.006246	.1595	160102772.00
1540710084	Resistor	RP16,RP17,RP18, RP19,RP20,RP26, RP27,RP28,RP29, RP31,RP33,RP34	Telcordia Issue 1	Level I		12.00	0.006246	.3827	160102772.00
1540710280	Resistor	RP30,RP32	Telcordia Issue 1	Level I		2.00	0.006246	.0638	160102772.00
106B501032	Resistor	RT1,RT3,RT4,RT5, RT6	Telcordia Issue 1	Level I		5.00	0.011379	.2905	87878027.07
106B747030	Resistor	RT2	Telcordia Issue 1	Level I		1.00	0.011379	.0581	87878027.07
105A733009	Resistor	R158,R159,R160, R168,R169,R185, R301,R336,R337,R5, R6,R7,R831	Telcordia Issue 1	Level I		13.00	0.002268	.1505	440974090.03
105A502033	Resistor	R100,R341,R63,R822, R9	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03





**AAEON Reliability Prediction Report**

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00

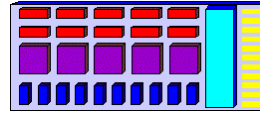


**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A702229	Resistor	R210,R265,R381, R395,R401,R420, R436,R449,R455, R608,R65,R661,R740, R741,R792,R793, R794,R795,R801, R808,R819,R820	Telcordia Issue 1	Level I		22.00	0.002268	.2547	440974090.03
105A512103	Resistor	R215,R72	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A708229	Resistor	R146,R178,R209, R619,R77	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03
105A703309	Resistor	R187,R190,R219, R221,R239,R242, R243,R244,R245, R249,R250,R252, R253,R254,R273, R276,R404,R560, R605,R676,R766,R86, R87,R88	Telcordia Issue 1	Level I		24.00	0.002268	.2779	440974090.03
1050520004	Resistor	R110,R111,R113, R165,R182,R186, R220,R344,R89	Telcordia Issue 1	Level I		9.00	0.002268	.1042	440974090.03
105A515009	Resistor	R128,R136,R137, R173,R309,R310, R325,R326,R328, R696,R780,R784, R785	Telcordia Issue 1	Level I		13.00	0.002268	.1505	440974090.03
105A510009	Resistor	R104,R105,R116, R569,R602,R615, R626,R636	Telcordia Issue 1	Level I		8.00	0.002268	.0926	440974090.03
1059704703	Resistor	R114	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A704334	Resistor	R133,R493	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
123132505C	Miscellaneous	Y1,Y3,Y5	Telcordia Issue 1	Level I		3.00	0.150000	2.2976	6666666.67
105A508203	Resistor	R172,R176,R565	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A500139	Resistor	R180,R183,R207, R208,R256,R261, R300,R345,R346, R397,R555,R556, R677	Telcordia Issue 1	Level I		13.00	0.002268	.1505	440974090.03
105A506823	Resistor	R227,R251,R439	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A700103	Resistor	R240,R362,R377	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A503033	Resistor	R241	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A705609	Resistor	R267,R548,R716, R722,R724,R733	Telcordia Issue 1	Level I		6.00	0.002268	.0695	440974090.03
105A702209	Resistor	R270,R332,R478, R481,R545,R554, R561,R769,R772, R773	Telcordia Issue 1	Level I		10.00	0.002268	.1158	440974090.03
105A502003	Resistor	R292,R293	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03

**AAEON Reliability Prediction Report**

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A505103	Resistor	R294,R664	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A549969	Resistor	R296,R523,R568, R572,R623	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03
105A513333	Resistor	R297	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A549913	Resistor	R298,R624,R625	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A702263	Resistor	R302,R303,R698	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
1050519114	Resistor	R314	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A704733	Resistor	R319,R469	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A580613	Resistor	R320	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A573213	Resistor	R323	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A507509	Resistor	R324,R327,R329, R424,R425,R426, R427,R503,R515	Telcordia Issue 1	Level I		9.00	0.002268	.1042	440974090.03
105A541233	Resistor	R330	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A556203	Resistor	R331	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A540213	Resistor	R351	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A512423	Resistor	R356	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A700233	Resistor	R363,R521	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A549903	Resistor	R366	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A514733	Resistor	R374	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A510523	Resistor	R387,R389	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A706803	Resistor	R388,R666	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A710053	Resistor	R390,R689	Telcordia Issue 1	Level I		2.00	0.013606	.1389	73495681.67
105A547033	Resistor	R394	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1050530034	Resistor	R396	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A533213	Resistor	R412,R423	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A522663	Resistor	R429	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A537463	Resistor	R508	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A590963	Resistor	R513	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A515413	Resistor	R526	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A705123	Resistor	R527	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A575003	Resistor	R528,R612	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A523713	Resistor	R539	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A532463	Resistor	R544	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A554963	Resistor	R551	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A501503	Resistor	R552,R627	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A522003	Resistor	R583,R587	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A501523	Resistor	R613	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03

### AAEON Reliability Prediction Report

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A530113	Resistor	R614,R640,R641, R705	Telcordia Issue 1	Level I		4.00	0.002268	.0463	440974090.03
105A524963	Resistor	R639	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A513003	Resistor	R649	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A507533	Resistor	R683	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A542233	Resistor	R697	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A517423	Resistor	R711	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A509133	Resistor	R714	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1050582514	Resistor	R718	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1059704761	Resistor	R720	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A705139	Resistor	R727,R728,R729, R732,R776	Telcordia Issue 1	Level I		5.00	0.002268	.0579	440974090.03
105A747003	Resistor	R731,R757	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A536513	Resistor	R748	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A501529	Resistor	R750	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A526113	Resistor	R761	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A701003	Resistor	R764	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1059710001	Resistor	R802,R803,R810	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A700109	Resistor	R832,R833,R834, R835,R836,R837, R838,R839	Telcordia Issue 1	Level I		8.00	0.002268	.0926	440974090.03
1189633160	Capacitor	TC1,TC10,TC11,TC12, TC13,TC14,TC15, TC16,TC17,TC18, TC19,TC20,TC21, TC22,TC24,TC27, TC28,TC5,TC6,TC7, TC8,TC9	Telcordia Issue 1	Level I		22.00	0.004535	.5094	220487045.01
1189915180	Capacitor	TC2,TC3,TC30,TC32	Telcordia Issue 1	Level I		4.00	0.004535	.0926	220487045.01
1182633080	Capacitor	TC4	Telcordia Issue 1	Level I		1.00	0.004535	.0232	220487045.01
14S5A00821	Integrated Circuit	U1,U12,U13,U15,U39, U43,U45,U46,U6,U7	Telcordia Issue 1	Level I		10.00	0.026183	1.3368	38193355.79
14S2047500	Integrated Circuit	U2,U8	Telcordia Issue 1	Level I		2.00	0.059366	.6062	16844654.92
14S4288200	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79
14S5912300	Integrated Circuit	U5	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79
14S9811500	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S4BD8200	Integrated Circuit	U11	Telcordia Issue 1	Level I	45.10	1.00	0.261866	1.3370	3818746.21
14S4036800	Integrated Circuit	U14	Telcordia Issue 1	Level I	52.90	1.00	1.588024	8.1080	629713.30
14S4021301	Integrated Circuit	U16,U24,U25,U48	Telcordia Issue 1	Level I		4.00	0.059366	1.2124	16844654.92
14S5A00401	Integrated Circuit	U17,U32	Telcordia Issue 1	Level I		2.00	0.026183	.2674	38193355.79
14S5812502	Integrated Circuit	U18	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79
14S5A12506	Integrated Circuit	U19	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79

### AAEON Reliability Prediction Report

**Part Number** 9697QM5735-D  
**Reference Des**  
**Date** 11. 10, 2011  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.00



**Description**  
**File Name** TF-ACP-5185HTT-A1-1010.RPJ  
**Time** 13:24  
**Failure Rate** 19.585893  
**MTBF** 51,057

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
123131435F	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.7659	6666666.67
14S4048502	Integrated Circuit	U28,U49	Telcordia Issue 1	Level I		2.00	0.059366	.6062	16844654.92
14S3050500	Integrated Circuit	U30	Telcordia Issue 1	Level I	44.70	1.00	1.019688	5.2062	980691.74
14S3128421	Integrated Circuit	U31	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S4825740	Integrated Circuit	U33	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79
14S2041800	Integrated Circuit	U34	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S4288100	Integrated Circuit	U35	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
1314780511	Integrated Circuit	U36	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S2048800	Integrated Circuit	U38	Telcordia Issue 1	Level I		1.00	0.032000	.1634	31250122.20
14S3170800	Integrated Circuit	U41	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S4878100	Integrated Circuit	U50	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
1315970211	Semiconductor	U52,U56,U57	Telcordia Issue 1	Level I		3.00	0.079603	1.2193	12562298.27
14S4257701	Integrated Circuit	U53	Telcordia Issue 1	Level I		1.00	0.026183	.1337	38193355.79
14S2200900	Integrated Circuit	U54	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S9341101	Integrated Circuit	U55	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S3E00100	Integrated Circuit	U58	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
14S3S00900	Integrated Circuit	U59	Telcordia Issue 1	Level I		1.00	0.059366	.3031	16844654.92
1654920302	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
121230603D	Inductor	L12,L13,L14	Telcordia Issue 1	Level I		3.00	0.002268	.0347	440974090.03
105A505623	Resistor	R163,R358	Telcordia Issue 1	Level I		2.00	0.002268	.0232	440974090.03
105A501133	Resistor	R53	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A518713	Resistor	R26	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
14S6308002	Integrated Circuit	U51	Telcordia Issue 1	Level I		1.00	0.022943	.1171	43586356.53
105A703039	Resistor	R841	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
105A701539	Resistor	R843	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1050584514	Resistor	R402	Telcordia Issue 1	Level I		1.00	0.002268	.0116	440974090.03
1600030203	Connection	SW1(1-ON,2-OFF)	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
1651609882	Connection	U23	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
1654226303	Connection	CN19	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
1655306023	Connection	CN23	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
1654415308	Connection	CN35	Telcordia Issue 1	Level I		1.00	0.008535	.0436	117170702.76
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
175011901C	Miscellaneous	BAT2	Telcordia Issue 1	Level I		1.00	0.900000	4.5951	1111111.11
175910000B	Miscellaneous	BUZZ1	Telcordia Issue 1	Level I		1.00	0.150000	.7659	6666666.67
1655910131	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71
1655305020	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.001138	.0058	878780270.71

