

GCS-1100i

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 28.927565 ppm MTBF: 34,569 Hours
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Issue date	Approval	Test Engineer
2010/10/13	Jansin Lee	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TF-GCS-1100I-A10

II . Prediction Date: Oct. 13, 2010

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

IV . Predicted by: Jessica Chou

V . Equipment: Relx Ver.7.3 Visual Reliability Software

VI . Simulation Environment:

- Temperature: 24.9 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-GCS-1100I-A10 (Not include Power supply):

- Failure Rate: 28.927565 ppm
- MTBF: 34,569 Hours

Below components value were provided by the suppliers:

- (TF)SPS.9/36V.70W.DC/DC 1U HEIGHT ATX.Magic Power.MPD-807H
MTBF: >130,000 hours (MIL-217F)

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description Top-level assembly
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 28.927565
MTBF 34,569

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-GCS-1100I-A10	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	28.93	34569.10
ASS'Y PER-T171-A10	9697T17102-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	.10	9602020.02
ASS'Y PER-T167-A10	9697T16704-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	12.54	79737.89
ASS'Y PER-T166-A10	9697T16602-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	.19	5347096.86
ASS'Y EMB-9459T-B10	9697945921-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	16.10	62129.89

AAEON Reliability Prediction Report

Part Number 9697T16704-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 12.541090
MTBF 79,738

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1310390410	Semiconductor	Q103,Q107,Q111, Q115,Q118,Q12,Q121, Q124,Q127,Q16,Q20, Q24,Q28,Q32,Q4,Q8	Telcordia Issue 1	Level I		16.00	0.023812	3.0380	41994887.40
1059700001	Resistor	R22,R6	Telcordia Issue 1	Level I		2.00	0.002263	.0361	441839332.19
105A700003	Resistor	R100,R121,R125, R146,R150,R151, R156,R175,R179, R200,R204,R205, R210,R229,R23,R233, R254,R256,R258, R262,R504,R517,R67, R7,R71,R93,R94,R96	Telcordia Issue 1	Level I		28.00	0.002263	.5053	441839332.19
105A524913	Resistor	R25,R9	Telcordia Issue 1	Level I		2.00	0.002263	.0361	441839332.19
105A500139	Resistor	R10,R1002,R1007, R101,R1014,R1021, R1028,R1035,R1042, R1049,R116,R122, R123,R126,R141, R147,R148,R153, R161,R176,R180, R193,R202,R207, R215,R230,R232, R234,R249,R259,R26, R260,R263,R279,R68, R69,R72,R87,R97, R98	Telcordia Issue 1	Level I		40.00	0.002263	.7219	441839332.19
105A501533	Resistor	R11,R27	Telcordia Issue 1	Level I		2.00	0.002263	.0361	441839332.19
105A700009	Resistor	R107,R108,R109,R12, R132,R133,R134,R15, R169,R170,R171, R177,R186,R187, R188,R203,R223, R224,R225,R240, R241,R242,R269, R270,R271,R28,R32, R33,R345,R346,R36, R373,R374,R375, R376,R377,R378, R379,R380,R381, R382,R383,R384,	Telcordia Issue 1	Level I		60.00	0.002263	1.0828	441839332.19
105A515009	Resistor	R13,R20,R21,R29, R37,R38	Telcordia Issue 1	Level I		6.00	0.002263	.1083	441839332.19
1059703623	Resistor	R18,R34	Telcordia Issue 1	Level I		2.00	0.002263	.0361	441839332.19

AAEON Reliability Prediction Report

Part Number 9697T16704-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 12.541090
MTBF 79,738

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A704729	Resistor	R1000,R1008,R1015, R1022,R1029,R1036, R1043,R1050,R111, R115,R136,R140, R158,R160,R190, R192,R212,R214, R245,R248,R273, R277,R83,R86	Telcordia Issue 1	Level I		24.00	0.002263	.4331	441839332.19
105A530003	Resistor	R397,R398,R399, R400,R401,R402, R403,R404,R405, R406,R407,R408, R409,R410,R411, R412	Telcordia Issue 1	Level I		16.00	0.002263	.2887	441839332.19
11E1510050	Capacitor	TC1,TC10,TC11,TC12, TC13,TC14,TC15, TC16,TC17,TC18, TC19,TC2,TC20,TC21, TC22,TC23,TC24, TC25,TC26,TC27, TC28,TC29,TC3,TC30, TC31,TC32,TC33, TC34,TC35,TC36,TC4, TC5,TC6,TC7,TC8, TC9	Telcordia Issue 1	Level I		36.00	0.004527	1.2994	220919666.10
14S4811100	Integrated Circuit	U1	Telcordia Issue 1	Level I	17.90	1.00	0.070281	.5604	14228587.01
14S4811100	Integrated Circuit	U3	Telcordia Issue 1	Level I	17.50	1.00	0.068823	.5488	14530034.10
14S6334610	Integrated Circuit	U2,U4	Telcordia Issue 1	Level I		2.00	0.022776	.3632	43906493.83
14S7140100	Integrated Circuit	U17,U25,U33,U41, U49,U57,U65,U9	Telcordia Issue 1	Level I		8.00	0.058933	3.7594	16968377.18
14S4021301	Integrated Circuit	U10,U18,U26,U35, U42,U51,U58,U66	Telcordia Issue 1	Level I		8.00	0.058933	3.7594	16968377.18
14S7340000	Integrated Circuit	U11,U19,U27,U34, U43,U50,U59,U67	Telcordia Issue 1	Level I		8.00	0.058933	3.7594	16968377.18
14S4848500	Integrated Circuit	U12,U15,U21,U23, U28,U31,U36,U39, U45,U47,U52,U55, U60,U63,U68,U71	Telcordia Issue 1	Level I		16.00	0.058933	7.5187	16968377.18
14S5A12506	Integrated Circuit	U13,U20,U29,U37, U44,U53,U61,U69	Telcordia Issue 1	Level I		8.00	0.026029	1.6604	38418616.55
14S5A01400	Integrated Circuit	U14,U22,U30,U38, U46,U54,U62,U70	Telcordia Issue 1	Level I		8.00	0.058933	3.7594	16968377.18
14S5812502	Integrated Circuit	U16,U24,U32,U40, U48,U56,U64,U72	Telcordia Issue 1	Level I		8.00	0.026029	1.6604	38418616.55
1231325058	Miscellaneous	Y1,Y2	Telcordia Issue 1	Level I		2.00	0.150000	2.3921	6666666.67

AAEON Reliability Prediction Report

Part Number 9697T16704-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90

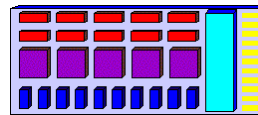


Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 12.541090
MTBF 79,738

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1305005040	Semiconductor	R283,R284,R289, R290,R291,R293, R294,R295	Telcordia Issue 1	Level I		8.00	0.023812	1.5190	41994887.40
14S9105800	Integrated Circuit	U100	Telcordia Issue 1	Level I	13.40	1.00	0.055343	.4413	18069290.32
105A564913	Resistor	R1003,R1005,R1011, R1013,R1018,R1020, R1025,R1027,R1032, R1034,R1039,R1041, R1046,R1048,R1053, R1055	Telcordia Issue 1	Level I		16.00	0.002263	.2887	441839332.19
105A501039	Resistor	R1004,R1012,R1019, R1026,R1033,R1040, R1047,R1054,R118, R144,R166,R197, R217,R252,R280,R90	Telcordia Issue 1	Level I		16.00	0.002263	.2887	441839332.19
1129601080	Capacitor	BC29,BC30,BC54, BC55	Telcordia Issue 1	Level I		4.00	0.004527	.1444	220919666.10
14S6334615	Integrated Circuit	U101	Telcordia Issue 1	Level I		1.00	0.022776	.1816	43906493.83
14S6334607	Integrated Circuit		Telcordia Issue 1	Level I		1.00	0.022776	.1816	43906493.83
1600012403	Connection	SW1,SW2	Telcordia Issue 1	Level I		2.00	0.001132	.0181	883385841.65
1654418103	Connection	CN1,CN2,CN3,CN4	Telcordia Issue 1	Level I		4.00	0.010188	.3250	98153982.41
1653240200	Connection	CN10	Telcordia Issue 1	Level I		1.00	0.001132	.0090	883385841.65
1652528201	Connection	CN16	Telcordia Issue 1	Level I		1.00	0.001132	.0090	883385841.65
1251002500	Integrated Circuit	U76,U77,U78,U79	Telcordia Issue 1	Level I		4.00	0.058933	1.8797	16968377.18
1655003022	Connection	CN19	Telcordia Issue 1	Level I		1.00	0.001698	.0135	588923894.43
1119633191	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.042450	.3385	23556955.78
1119622196	Capacitor	EC2	Telcordia Issue 1	Level I		1.00	0.070751	.5641	14134173.47

AAEON Reliability Prediction Report

Part Number 9697T16602-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90

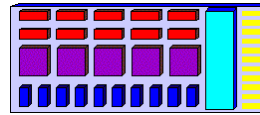


Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 0.187017
MTBF 5,347,097

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1653002200	Connection	CN4	Telcordia Issue 1	Level I		1.00	0.002264	1.2106	441692920.82
1653240200	Connection	CN10	Telcordia Issue 1	Level I		1.00	0.001132	.6053	883385841.65
1304023000	Semiconductor	IDE_LED	Telcordia Issue 1	Level I		1.00	0.004832	2.5838	206947616.14
1304100200	Semiconductor	LED1_COM10, LED1_COM11, LED1_COM12, LED1_COM5, LED1_COM6, LED1_COM7, LED1_COM8, LED1_COM9, LED3_COM10, LED3_COM12, LED3_COM11, LED3_COM12, LED3_COM5, LED3_COM6,	Telcordia Issue 1	Level I		25.00	0.004832	64.5948	206947616.14
1304439600	Semiconductor	LED1_LAN3, LED1_LAN4, LED2_COM10, LED2_COM12, LED2_COM11, LED2_COM5, LED2_COM6, LED2_COM7, LED2_COM8, LED2_COM9	Telcordia Issue 1	Level I		10.00	0.004832	25.8379	206947616.14
1304200200	Semiconductor	LED2_LAN3, LED2_LAN4	Telcordia Issue 1	Level I		2.00	0.004832	5.1676	206947616.14

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11E9501091	Capacitor	BC106,BC158,BC160, BC165,BC166,BC293, BC82,C109,C148,C15, C150,C16,C17,C181, C191,C200,C202, C203,C208,C219,C22, C221,C224,C230, C233,C234,C241, C250,C262,C265, C266,C268,C269,C27, C277,C28,C282,C283, C285,C286,C287, C288,C289,C29,C	Telcordia Issue 1	Level I		65.00	0.004527	1.8280	220919666.10
1124410190	Capacitor	C121,C122,C123, C124,C125,C126, C127,C128,C129, C130,C131,C132, C133,C134,C135, C136,C137,C338, C349,C36,C749	Telcordia Issue 1	Level I		21.00	0.004527	.5906	220919666.10
11E1522680	Capacitor	C115,C167,C228, C232,C237,C240, C247,C248,C306, C314,C37,C47	Telcordia Issue 1	Level I		12.00	0.004527	.3375	220919666.10
11E9622050	Capacitor	C113,C114,C303, C304,C307,C308, C310,C45,C46,C51, C54	Telcordia Issue 1	Level I		11.00	0.004527	.3094	220919666.10
11E9647680	Capacitor	C220,C235,C249, C272,C48,C709,C77, C78,C80,C83,C85, C96	Telcordia Issue 1	Level I		12.00	0.004527	.3375	220919666.10
11E1647650	Capacitor	C186,C187,C215, C218,C281,C284,C56, C57	Telcordia Issue 1	Level I		8.00	0.004527	.2250	220919666.10
1124582880	Capacitor	C313	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
11C1501080	Capacitor	C166,C211,C319, C668,C73,C74,C752, C87,C88,C92,C94, C98	Telcordia Issue 1	Level I		12.00	0.004527	.3375	220919666.10
1122522890	Capacitor	C242,C244,C255,C82, C84,C86,C89	Telcordia Issue 1	Level I		7.00	0.004527	.1969	220919666.10
1121647480	Capacitor	C110,C112,C243, C251,C647,C648,C91	Telcordia Issue 1	Level I		7.00	0.004527	.1969	220919666.10
11C2539290	Capacitor	C100,C138,C139, C141,C143,C93,C95, C99	Telcordia Issue 1	Level I		8.00	0.004527	.2250	220919666.10
1129522790	Capacitor	BC131,BC132,C104, C105,C106,C107, C108,C160,C97	Telcordia Issue 1	Level I		9.00	0.004527	.2531	220919666.10
1124433080	Capacitor	C101,C117	Telcordia Issue 1	Level I		2.00	0.004527	.0562	220919666.10

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90

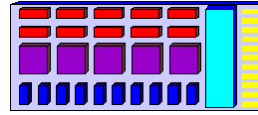


Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
1059700001	Resistor	FB1,FB2,FB3,FB4, L12,L40,L44,L45, L49,L55,L61,L62, L63,R155,R156,R253, R37,R43,R461,R519, R787	Telcordia Issue 1	Level I		21.00	0.002263	.2953	441839332.19
1752001601	Miscellaneous	FS1,FS2,FS5	Telcordia Issue 1	Level I		3.00	0.003000	.0559	333333333.33
1304001340	Semiconductor	LED1	Telcordia Issue 1	Level I		1.00	0.004832	.0300	206947616.14
1304101340	Semiconductor	LED2,LED3	Telcordia Issue 1	Level I		2.00	0.004832	.0600	206947616.14
1212306033	Inductor	L1,L10,L11,L18,L2, L20,L21,L22,L23, L24,L27,L28,L3,L34, L35,L36,L37,L38, L39,L4,L5,L54,L56, L6,L7,L8,L9	Telcordia Issue 1	Level I		27.00	0.002263	.3797	441839332.19
121230603H	Inductor	L26,L59,L60,L64, L65	Telcordia Issue 1	Level I		5.00	0.002263	.0703	441839332.19
121230805Z	Inductor	L19	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1211100102	Inductor	L25,L53	Telcordia Issue 1	Level I		2.00	0.086004	1.0687	11627350.85
121230805X	Inductor	L29,L30,L33,L42, L50	Telcordia Issue 1	Level I		5.00	0.002263	.0703	441839332.19
1211104760	Inductor	L47,L48	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
1211101002	Inductor	L51,L52	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
1231325058	Miscellaneous	Y1,Y2	Telcordia Issue 1	Level I		2.00	0.150000	1.8639	6666666.67
1654262300	Connection	MPCI1	Telcordia Issue 1	Level I		1.00	0.070185	.4361	14248158.74
1311390610	Semiconductor	Q1,Q52	Telcordia Issue 1	Level I		2.00	0.023812	.2959	41994887.40
1310390410	Semiconductor	Q2,Q33,Q45,Q46,Q48, Q7	Telcordia Issue 1	Level I		6.00	0.023812	.8877	41994887.40
1315700211	Semiconductor	Q11,Q12,Q13,Q14, Q15,Q17,Q18,Q3,Q38, Q39,Q4,Q42,Q43,Q44, Q60,Q8,Q9	Telcordia Issue 1	Level I		17.00	0.079375	8.3836	12598466.22
14S3524700	Integrated Circuit	Q6	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
1315230511	Semiconductor	Q47,Q59	Telcordia Issue 1	Level I		2.00	0.079375	.9863	12598466.22
1305099140	Semiconductor	Q51,Q53	Telcordia Issue 1	Level I		2.00	0.079375	.9863	12598466.22
1540710080	Resistor	RN1,RN10,RN11,RN12, RN2,RN3,RN4,RN5, RN6,RN7,RN8,RN9	Telcordia Issue 1	Level I		12.00	0.006217	.4636	160836724.71
106B501031	Resistor	RT1,RT2,RT3	Telcordia Issue 1	Level I		3.00	0.011320	.2110	88338584.16

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A701039	Resistor	R1,R157,R158,R162, R165,R180,R182, R183,R184,R185, R186,R189,R192, R194,R248,R249,R26, R369,R39,R445,R454, R514,R55,R56,R57, R584,R593,R613, R647,R648,R649, R657,R658,R666, R670,R676,R677, R679,R680,R681, R686,R692,R710,	Telcordia Issue 1	Level I		49.00	0.002263	.6890	441839332.19
105A700139	Resistor	R10,R11,R111,R112, R119,R124,R133, R134,R135,R147, R153,R2,R214,R217, R258,R28,R387,R456, R476,R484,R497, R499,R567,R582, R590,R605,R626, R661,R713,R719,R88	Telcordia Issue 1	Level I		31.00	0.002263	.4359	441839332.19
1050502204	Resistor	R3,R320,R321,R438, R5,R6,R604,R79,R8, R80	Telcordia Issue 1	Level I		10.00	0.002263	.1406	441839332.19
105A506823	Resistor	R4,R441,R7,R797	Telcordia Issue 1	Level I		4.00	0.002263	.0562	441839332.19
105A700009	Resistor	L69,L70,L71,L72, R106,R107,R108, R109,R110,R113, R114,R115,R116, R117,R118,R12,R131, R137,R141,R145, R151,R152,R154, R160,R161,R163, R164,R166,R167, R187,R21,R212,R22, R242,R247,R250, R261,R263,R273, R274,R275,R276,	Telcordia Issue 1	Level I		146.00	0.002263	2.0530	441839332.19
105A515009	Resistor	R13,R16,R17,R512, R513,R516,R60,R61, R62,R64,R65,R66, R682,R688,R689, R697,R701,R702	Telcordia Issue 1	Level I		18.00	0.002263	.2531	441839332.19

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A507509	Resistor	R14,R15,R18	Telcordia Issue 1	Level I		3.00	0.002263	.0422	441839332.19
105A747003	Resistor	R23,R24	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A704729	Resistor	R193,R199,R27,R29, R370,R396,R402, R403,R406,R412, R422,R429,R430, R431,R432,R433, R434,R435,R436,R44, R45,R46,R47,R495, R562,R565,R575, R580,R588,R589, R687,R693,R709, R755,R762,R763, R792,R824,R836, R874,R875,R93,R	Telcordia Issue 1	Level I		44.00	0.002263	.6187	441839332.19
1050556269	Resistor	R252,R254,R255, R257,R259,R265, R279,R282,R283, R286,R287,R288, R290,R291,R297,R32, R327,R328,R33,R334, R34,R342,R343,R344, R345,R346,R347,R35, R365,R366,R390, R411,R414,R416, R419,R421,R426, R440,R673,R700	Telcordia Issue 1	Level I		40.00	0.002263	.5625	441839332.19
105A702239	Resistor	R293,R302,R324,R50, R535,R761	Telcordia Issue 1	Level I		6.00	0.002263	.0844	441839332.19
105A708229	Resistor	R168,R169,R170, R171,R172,R173, R174,R175,R177, R179,R195,R197, R269,R270,R272, R316,R385,R386, R388,R389,R606, R607,R608,R609, R614,R615,R622, R623,R629,R633, R634,R635,R636, R638,R639,R656, R685,R694,R695,	Telcordia Issue 1	Level I		44.00	0.002263	.6187	441839332.19
14S5A01400	Integrated Circuit	U45,U46	Telcordia Issue 1	Level I		2.00	0.058933	.7323	16968377.18

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A510009	Resistor	R181,R232,R245, R330,R331,R475, R481,R625,R631, R660,R663,R671, R720,R802,R803	Telcordia Issue 1	Level I		15.00	0.002263	.2109	441839332.19
105A522663	Resistor	R188	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A701033	Resistor	R498	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A576813	Resistor	R844	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A501003	Resistor	R256,R348,R349, R350,R351,R352, R353,R354,R355, R356,R357,R358, R359,R360,R361, R362,R363,R364, R506,R617,R852	Telcordia Issue 1	Level I		21.00	0.002263	.2953	441839332.19
105A701009	Resistor	R640,R840,R841, R866,R867,R869	Telcordia Issue 1	Level I		6.00	0.002263	.0844	441839332.19
105A702263	Resistor	R105,R821,R830	Telcordia Issue 1	Level I		3.00	0.002263	.0422	441839332.19
105A702269	Resistor	R490	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A703909	Resistor	R213,R215,R216, R219,R229,R230, R236,R237,R650, R651,R672	Telcordia Issue 1	Level I		11.00	0.002263	.1547	441839332.19
1050510034	Resistor	R231,R564,R574, R578,R870	Telcordia Issue 1	Level I		5.00	0.002263	.0703	441839332.19
105A533233	Resistor	R243	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A701053	Resistor	R244,R397,R733,R99	Telcordia Issue 1	Level I		4.00	0.002263	.0562	441839332.19
105A510053	Resistor	R246,R341	Telcordia Issue 1	Level I		2.00	0.013580	.1687	73639888.70
105A580663	Resistor	R266,R285	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A524963	Resistor	R280,R301,R339, R624,R642,R698	Telcordia Issue 1	Level I		6.00	0.002263	.0844	441839332.19
105A700103	Resistor	R284,R845	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A701203	Resistor	R294,R295,R296	Telcordia Issue 1	Level I		3.00	0.002263	.0422	441839332.19
105A554963	Resistor	R323,R340,R408, R446	Telcordia Issue 1	Level I		4.00	0.002263	.0562	441839332.19
105A520003	Resistor	R337	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A522103	Resistor	R338,R721	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A527463	Resistor	R410,R443	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A500239	Resistor	R420,R442,R444	Telcordia Issue 1	Level I		3.00	0.002263	.0422	441839332.19
105A706809	Resistor	R428	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A705139	Resistor	R483,R556,R559, R560,R561,R568, R570	Telcordia Issue 1	Level I		7.00	0.002263	.0984	441839332.19

AAEON Reliability Prediction Report

Part Number 9697945921-D
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Environment GF, GU - Ground Fixed, Uncontrolled
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Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
105A752323	Resistor	R500	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A549913	Resistor	R690	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A549919	Resistor	R834	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1050537434	Resistor	R835	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A502039	Resistor	R36,R652,R886	Telcordia Issue 1	Level I		3.00	0.002263	.0422	441839332.19
105A525503	Resistor	R655	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A501523	Resistor	R659	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A549969	Resistor	R737,R738,R740, R741,R742,R743, R744,R745,R746, R747,R748,R749, R769,R770,R771, R772,R773,R774, R775,R776,R777, R778	Telcordia Issue 1	Level I		22.00	0.002263	.3094	441839332.19
105A547503	Resistor	R766	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A503033	Resistor	R796	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
14S4021301	Integrated Circuit	U36,U37,U39,U40	Telcordia Issue 1	Level I		4.00	0.058933	1.4646	16968377.18
1315970211	Semiconductor	U47,U48,U7,U8	Telcordia Issue 1	Level I		4.00	0.158749	3.9452	6299233.11
14S4811100	Integrated Circuit	U17	Telcordia Issue 1	Level I	26.30	1.00	0.107858	.6701	9271471.04
14S4811100	Integrated Circuit	U18	Telcordia Issue 1	Level I	26.30	1.00	0.107858	.6701	9271471.04
14S5A00700	Integrated Circuit	U19	Telcordia Issue 1	Level I		1.00	0.025097	.1559	39845032.76
14S5812300	Integrated Circuit	U25	Telcordia Issue 1	Level I		1.00	0.026029	.1617	38418616.55
14S428010D	Integrated Circuit	U28	Telcordia Issue 1	Level I	50.10	1.00	0.324431	2.0157	3082317.31
14S4294503	Integrated Circuit	U30	Telcordia Issue 1	Level I	40.30	1.00	0.210058	1.3051	4760585.44
14S3422600	Integrated Circuit	U33	Telcordia Issue 1	Level I	40.60	1.00	0.805966	5.0075	1240746.90
14S4121601	Integrated Circuit	U34	Telcordia Issue 1	Level I		1.00	0.026029	.1617	38418616.55
14S4871204	Integrated Circuit	U35	Telcordia Issue 1	Level I	34.60	1.00	0.161220	1.0017	6202706.64
14S4160020	Integrated Circuit	U38	Telcordia Issue 1	Level I	44.00	1.00	0.248248	1.5424	4028222.22
14S3626100	Integrated Circuit	U42	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
1315030110	Semiconductor	Q49,Q50,Q70	Telcordia Issue 1	Level I		3.00	0.000000	.0000	.00
1300414840	Semiconductor	D19	Telcordia Issue 1	Level I		1.00	0.023812	.1479	41994887.40
105A704723	Resistor	R861,R864	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
1059710003	Resistor	R863	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A703303	Resistor	R865	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A522003	Resistor	R485	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1315313800	Semiconductor	Q66	Telcordia Issue 1	Level I		1.00	0.079375	.4932	12598466.22
1315170310	Semiconductor	Q10,Q19,Q29,Q36, Q62,Q64,Q68	Telcordia Issue 1	Level I		7.00	0.079375	3.4521	12598466.22

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
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Temp. (°C) 24.90



Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315170310	Semiconductor	Q69	Telcordia Issue 1	Level I	25.40	1.00	0.155597	.9667	6426855.73
1122710080	Capacitor	C580	Telcordia Issue 1	Level I		1.00	0.005462	.0339	183081288.02
105A584513	Resistor	R501	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A705129	Resistor	R41,R527	Telcordia Issue 1	Level I		2.00	0.002263	.0281	441839332.19
105A501413	Resistor	R910	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1189633162	Capacitor	C223,C591,C62	Telcordia Issue 1	Level I		3.00	0.004527	.0844	220919666.10
14S4195710	Integrated Circuit	U16,U29	Telcordia Issue 1	Level I		2.00	0.058933	.7323	16968377.18
14S6334610	Integrated Circuit	U20,U21	Telcordia Issue 1	Level I		2.00	0.022776	.2830	43906493.83
1315700217	Semiconductor	Q54,Q55,Q56,Q57, Q58	Telcordia Issue 1	Level I		5.00	0.079375	2.4658	12598466.22
1122722080	Capacitor	C103,C151	Telcordia Issue 1	Level I		2.00	0.004527	.0562	220919666.10
14S2048800	Integrated Circuit	U53	Telcordia Issue 1	Level I	29.30	1.00	0.223910	1.3912	4466079.02
105A523713	Resistor	R728	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1050501234	Resistor	R729	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A501633	Resistor	R599	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
105A507523	Resistor	R577	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1124533280	Capacitor	C357	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
121110336L	Inductor	L57	Telcordia Issue 1	Level I		1.00	0.086004	.5343	11627350.85
1211000180	Inductor	L14	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
121110156A	Inductor	L58	Telcordia Issue 1	Level I	28.70	1.00	0.143697	.8928	6959104.38
1142522080	Capacitor	TC8	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
1189622151	Capacitor	EC20,EC21,EC23	Telcordia Issue 1	Level I		3.00	0.042450	.7912	23556955.78
1301053040	Semiconductor	D43	Telcordia Issue 1	Level I		1.00	0.023812	.1479	41994887.40
14S2632100	Integrated Circuit	U52	Telcordia Issue 1	Level I	26.00	1.00	0.339321	2.1082	2947062.25
105A563419	Resistor	R887	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
14S4650601	Integrated Circuit	U24	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
14S2041500	Integrated Circuit	U27	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
1189633191	Capacitor	EC14	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
1189622183	Capacitor	EC4	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
105A539223	Resistor	R42	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1129722091	Capacitor	C625	Telcordia Issue 1	Level I		1.00	0.004527	.0281	220919666.10
14S2200900	Integrated Circuit	U6	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
105A518223	Resistor	R885	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
1301002240	Semiconductor	D45	Telcordia Issue 1	Level I		1.00	0.023812	.1479	41994887.40
1301581943	Semiconductor	D20	Telcordia Issue 1	Level I		1.00	0.023812	.1479	41994887.40
1214309006	Inductor	L46,L73,L74,L75, L76,L77,L78,L79	Telcordia Issue 1	Level I		8.00	0.002263	.1125	441839332.19
1121610060	Capacitor	C324,C383,C398,C59, TC18	Telcordia Issue 1	Level I		5.00	0.004527	.1406	220919666.10

AAEON Reliability Prediction Report

Part Number 9697945921-D
Reference Des
Date 10. 13, 2010
Environment GF, GU - Ground Fixed, Uncontrolled
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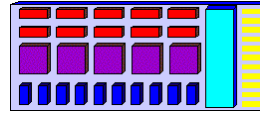


Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S9070800	Integrated Circuit	U54	Telcordia Issue 1	Level I		1.00	0.026029	.1617	38418616.55
1315943514	Semiconductor	Q63	Telcordia Issue 1	Level I		1.00	0.079375	.4932	12598466.22
1315422410	Semiconductor	Q61	Telcordia Issue 1	Level I		1.00	0.079375	.4932	12598466.22
1314613010	Integrated Circuit	U50	Telcordia Issue 1	Level I		1.00	0.058933	.3662	16968377.18
105A501223	Resistor	R58	Telcordia Issue 1	Level I		1.00	0.002263	.0141	441839332.19
14S4730701	Integrated Circuit	U10	Telcordia Issue 1	Level I	25.50	1.00	0.328960	2.0438	3039881.97
1655303020	Connection	CN23	Telcordia Issue 1	Level I		1.00	0.001698	.0105	588923894.43
175011901C	Miscellaneous	BAT2	Telcordia Issue 1	Level I		1.00	0.900000	5.5917	11111111.11
175910000B	Miscellaneous	BUZZ1	Telcordia Issue 1	Level I		1.00	0.150000	.9319	6666666.67
1653004201	Connection	CN4	Telcordia Issue 1	Level I		1.00	0.004528	.0281	220846460.41
1655305020	Connection	CN5	Telcordia Issue 1	Level I		1.00	0.002830	.0176	353354336.66
1654232200	Connection	CN11	Telcordia Issue 1	Level I		1.00	0.036224	.2251	27605807.55
1653006101	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.003396	.0211	294461947.22
1655003010	Connection	CN19	Telcordia Issue 1	Level I		1.00	0.001698	.0105	588923894.43
1653005200	Connection	CN20	Telcordia Issue 1	Level I		1.00	0.022640	.1407	44169292.08
16515C0492	Connection	DIMM1	Telcordia Issue 1	Level I		1.00	0.001132	.0070	883385841.65
1119622196	Capacitor	EC1,EC2,EC7	Telcordia Issue 1	Level I		3.00	0.070751	1.3187	14134173.47
1119633191	Capacitor	EC22	Telcordia Issue 1	Level I		1.00	0.042450	.2637	23556955.78
1653003101	Connection	JP1,JP3,JP4,JP6	Telcordia Issue 1	Level I		4.00	0.001698	.0422	588923894.43
1654612307	Connection	KBMS1	Telcordia Issue 1	Level I		1.00	0.001132	.0070	883385841.65
1654260207	Connection	PC11	Telcordia Issue 1	Level I		1.00	0.067920	.4220	14723097.36
1655004011	Connection	PWR1	Telcordia Issue 1	Level I		1.00	0.022640	.1407	44169292.08
1653300102	Connection	JP4(1-2),JP6(2-3)	Telcordia Issue 1	Level I		2.00	0.001132	.0141	883385841.65
1652522202	Connection	USBRJ1,USBRJ2	Telcordia Issue 1	Level I		2.00	0.012452	.1547	80307803.79
1211104767	Inductor	L32	Telcordia Issue 1	Level I		1.00	0.086004	.5343	11627350.85
1169682192	Capacitor	C633,C643	Telcordia Issue 1	Level I		2.00	0.005462	.0679	183081288.02
1654907002	Connection	SATA1,SATA2	Telcordia Issue 1	Level I		2.00	0.003962	.0492	252395954.76
1653300108	Connection	JP1(1-2)	Telcordia Issue 1	Level I		1.00	0.001132	.0070	883385841.65
1653300107	Connection	JP3(2-3),JP5(2-3), JP7(1-2)	Telcordia Issue 1	Level I		3.00	0.001132	.0211	883385841.65
1231232720	Miscellaneous	Y3	Telcordia Issue 1	Level I		1.00	0.150000	.9319	6666666.67
1655906032	Connection	CN24	Telcordia Issue 1	Level I		1.00	0.003396	.0211	294461947.22
1111622102	Capacitor	EC6	Telcordia Issue 1	Level I		1.00	0.042450	.2637	23556955.78
1112633190	Capacitor	EC10	Telcordia Issue 1	Level I		1.00	0.042450	.2637	23556955.78
121110336G	Inductor	L66	Telcordia Issue 1	Level I	28.60	1.00	0.003775	.0235	264877852.62
1655417020	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.011320	.0703	88338584.16
1655902030	Connection	BAT2	Telcordia Issue 1	Level I		1.00	0.001132	.0070	883385841.65

AAEON Reliability Prediction Report

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Description
File Name TF-GCS-1100I-A10.RPJ
Time 11:22
Failure Rate 16.095313
MTBF 62,130

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1654445300	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.025470	.1582	39261592.96