

TKS-G50-QM77

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 17.806516 ppm MTBF: 56,159 Hours
---------	---

Issue date	Approval	Test Engineer
2012/09/27	Tom Lin	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TKS-G50-QM77-001-DX

II . Prediction Date: Sep. 27, 2012

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 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:

TKS-G50-QM77-001-DX(Not include FAN):

- Failure Rate: 17.806516 ppm
- MTBF: 56,159 Hours

Below component MTBF value was provided by supplier:

- (TF)CPU Cooler.FAN+Heat Sink.60*60*22.6mm.for GENE-QM67.C&C.CEFF0760602207-00
Life Expectance: 70,000 hours continuous operation at 40°C with 15~65%RH.

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description Top-level assembly
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TKS-G50-QM77	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	17.81	56159.22
GENE-QM77.Rev.A1.0	9697QM7714-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	17.81	56159.22

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11C2501790	Capacitor	C131,C132,C135, C137,C141,C145, C151,C153,C163, C277,C30,C314,C357, C378,C390,C396, C397,C398,C399, C416,C417,C429, C463,C590,C593, C594,C602,C607,C79	Telcordia Issue 1	Level I		29.00	0.004535	.7386	220487045.01
1129710090	Capacitor	C183,C184,C185, C217,C42	Telcordia Issue 1	Level I		5.00	0.004535	.1274	220487045.01
11E9522680	Capacitor	C164,C168,C45,C66	Telcordia Issue 1	Level I		4.00	0.004535	.1019	220487045.01
1129522790	Capacitor	C140,C308,C321, C323,C336,C354, C368,C369,C370, C407,C64	Telcordia Issue 1	Level I		11.00	0.004535	.2802	220487045.01
1124418090	Capacitor	C125,C127,C616, C617,C69,C70	Telcordia Issue 1	Level I		6.00	0.004535	.1528	220487045.01
11C4522290	Capacitor	C305,C306,C310, C373,C99	Telcordia Issue 1	Level I		5.00	0.004535	.1274	220487045.01
1124427091	Capacitor	C149,C155,C186, C190,C201,C202, C203	Telcordia Issue 1	Level I		7.00	0.004535	.1783	220487045.01
1124547190	Capacitor	C170,C181,C191, C193,C195,C196, C221,C222,C223, C224,C225,C226, C227,C230,C231, C233,C234,C236, C239,C382,C552, C553,C589,C610	Telcordia Issue 1	Level I		24.00	0.004535	.6113	220487045.01
11E1647650	Capacitor	C232	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
11E1622060	Capacitor	C242,C249	Telcordia Issue 1	Level I		2.00	0.004535	.0509	220487045.01
11E9547680	Capacitor	C288,C554	Telcordia Issue 1	Level I		2.00	0.004535	.0509	220487045.01
1124533191	Capacitor	C301,C319,C379	Telcordia Issue 1	Level I		3.00	0.004535	.0764	220487045.01
11C4515190	Capacitor	C302,C381	Telcordia Issue 1	Level I		2.00	0.004535	.0509	220487045.01
11E4433090	Capacitor	C307,C349,C361	Telcordia Issue 1	Level I		3.00	0.004535	.0764	220487045.01
11E9547790	Capacitor	C372	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
11C1501080	Capacitor	C400	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
11C1547890	Capacitor	C418	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
1122522890	Capacitor	C536,C537,C614	Telcordia Issue 1	Level I		3.00	0.004535	.0764	220487045.01
11E9647680	Capacitor	C603	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
11C4568190	Capacitor	C609	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
1301005444	Semiconductor	D1,D2,D27,D28,D29, D31,D37,D38	Telcordia Issue 1	Level I		8.00	0.023881	1.0729	41874327.58

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315700216	Semiconductor	Q10,Q11,Q13,Q15, Q19,Q2,Q20,Q21,Q22, Q23,Q26,Q27,Q3,Q30, Q32,Q33,Q34,Q35, Q36,Q37,Q38,Q39,Q4, Q40,Q41,Q42,Q43, Q44,Q45,Q5,Q6	Telcordia Issue 1	Level I		31.00	0.079603	13.8584	12562298.27
1310390413	Semiconductor	Q12,Q28,Q29,Q46, Q47,Q48,Q7	Telcordia Issue 1	Level I		7.00	0.023881	.9388	41874327.58
1311390612	Semiconductor	Q49,Q9	Telcordia Issue 1	Level I		2.00	0.023881	.2682	41874327.58
1540733085	Resistor	RP1	Telcordia Issue 1	Level I		1.00	0.006246	.0351	160102772.00
1540722281	Resistor	RP2	Telcordia Issue 1	Level I		1.00	0.006246	.0351	160102772.00
106B747030	Resistor	RT1,RT3	Telcordia Issue 1	Level I		2.00	0.011379	.1278	87878027.07
106B501032	Resistor	RT2,RT4	Telcordia Issue 1	Level I		2.00	0.011379	.1278	87878027.07
1050505134	Resistor	R2,R41,R656,R657, R658,R659,R660, R661,R662,R663	Telcordia Issue 1	Level I		10.00	0.002268	.1274	440974090.03
105A701059	Resistor	R109,R262,R272, R367,R504,R6,R640, R711,R714	Telcordia Issue 1	Level I		9.00	0.002268	.1146	440974090.03
105A700009	Resistor	R128,R152,R155, R157,R159,R162, R164,R166,R171, R176,R177,R179, R186,R188,R192, R194,R195,R203, R210,R212,R213, R215,R230,R251, R252,R280,R281, R296,R301,R306, R311,R318,R32,R320, R321,R323,R329, R332,R335,R350,	Telcordia Issue 1	Level I		108.00	0.002268	1.3754	440974090.03
105A702229	Resistor	R102,R104,R105, R106,R16,R17,R187, R190,R191,R234, R241,R244,R249, R454,R455,R516, R528,R559,R566, R572,R606,R95,R97, R98,R99	Telcordia Issue 1	Level I		25.00	0.002268	.3184	440974090.03
1050507530	Resistor	R18,R259,R305,R309, R633	Telcordia Issue 1	Level I		5.00	0.002268	.0637	440974090.03

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A703309	Resistor	R110,R112,R113, R129,R149,R168, R184,R207,R22,R27, R433,R45,R51,R60, R691	Telcordia Issue 1	Level I		15.00	0.002268	.1910	440974090.03
105A700003	Resistor	R174,R175,R185, R211,R226,R235, R258,R300,R315, R326,R38,R44,R453, R525,R527,R600, R618,R628,R723,R82	Telcordia Issue 1	Level I		20.00	0.002268	.2547	440974090.03
105A501139	Resistor	R317,R415,R49,R587	Telcordia Issue 1	Level I		4.00	0.002268	.0509	440974090.03
105A500139	Resistor	R165,R172,R189, R198,R199,R20,R246, R254,R266,R270, R273,R291,R295, R297,R298,R31,R33, R340,R359,R360, R361,R362,R363, R364,R378,R382, R383,R394,R432, R456,R457,R461,R48, R5,R519,R520,R54, R540,R541,R549, R574,R577,R592,	Telcordia Issue 1	Level I		55.00	0.002268	.7004	440974090.03
105A730009	Resistor	R55	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050584514	Resistor	R57,R619,R620	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
105A501539	Resistor	R499,R58,R602,R61	Telcordia Issue 1	Level I		4.00	0.002268	.0509	440974090.03
1050520034	Resistor	R631	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A501039	Resistor	R123,R124,R125, R132,R133,R135, R139,R145,R160, R167,R180,R182, R260,R271,R274, R276,R28,R287,R313, R316,R341,R345, R347,R348,R349,R35, R37,R386,R39,R42, R426,R43,R434,R441, R443,R448,R47,R474, R476,R477,R478, R482,R485,R486,	Telcordia Issue 1	Level I		100.00	0.002268	1.2735	440974090.03
105A566519	Resistor	R342,R612,R615,R68	Telcordia Issue 1	Level I		4.00	0.002268	.0509	440974090.03

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A747009	Resistor	R700,R701,R74,R79	Telcordia Issue 1	Level I		4.00	0.002268	.0509	440974090.03
1054700289	Resistor	R94	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A502039	Resistor	R107,R142,R147, R275,R307,R651, R669,R672,R693, R694,R708	Telcordia Issue 1	Level I		11.00	0.002268	.1401	440974090.03
105A702209	Resistor	R111,R115,R116	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
105A515009	Resistor	R117,R118,R119, R220,R221,R222, R237	Telcordia Issue 1	Level I		7.00	0.002268	.0891	440974090.03
105A580623	Resistor	R120	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A708229	Resistor	R121,R122,R127, R131,R134,R136, R137,R151,R154, R156,R158,R333, R337,R338,R500, R508,R513,R522, R585,R589,R590, R595,R703	Telcordia Issue 1	Level I		23.00	0.002268	.2929	440974090.03
105A549969	Resistor	R138,R532	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A575009	Resistor	R140,R578	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A503039	Resistor	R141,R632,R647, R668,R673	Telcordia Issue 1	Level I		5.00	0.002268	.0637	440974090.03
1050540224	Resistor	R143,R146	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050533214	Resistor	R144	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050505633	Resistor	R148	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A701069	Resistor	R150	Telcordia Issue 1	Level I		1.00	0.013606	.0764	73495681.67
1050520004	Resistor	R169,R437,R706	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
105A525563	Resistor	R173	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A747039	Resistor	R209,R327	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A733009	Resistor	R214,R219,R227, R229,R231,R255, R256,R529,R642, R675	Telcordia Issue 1	Level I		10.00	0.002268	.1274	440974090.03
105A524913	Resistor	R233	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A562034	Resistor	R261	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050505124	Resistor	R269,R285	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050505164	Resistor	R288	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050527424	Resistor	R303,R419	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A700109	Resistor	R304,R346,R427, R442	Telcordia Issue 1	Level I		4.00	0.002268	.0509	440974090.03
1050518714	Resistor	R312	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A526114	Resistor	R314,R428	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050542204	Resistor	R319	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050538314	Resistor	R324,R429	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050580614	Resistor	R325,R414	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050500334	Resistor	R328	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050586604	Resistor	R343,R416	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050536514	Resistor	R344,R425,R440	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
1050704304	Resistor	R358,R371,R399	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
105A505109	Resistor	R373,R374,R375, R376,R377	Telcordia Issue 1	Level I		5.00	0.002268	.0637	440974090.03
105A518229	Resistor	R379,R395	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050501004	Resistor	R384,R403,R510, R531,R542,R543	Telcordia Issue 1	Level I		6.00	0.002268	.0764	440974090.03
105A554969	Resistor	R387	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A513009	Resistor	R389,R401,R436	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
105A706209	Resistor	R390	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A702263	Resistor	R392,R431	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A705609	Resistor	R397	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A514009	Resistor	R404	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A510009	Resistor	R368,R407,R418	Telcordia Issue 1	Level I		3.00	0.002268	.0382	440974090.03
1050524924	Resistor	R408	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A730039	Resistor	R417	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050564904	Resistor	R420	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050539214	Resistor	R421	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050549904	Resistor	R423	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050590964	Resistor	R438	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A701003	Resistor	R447,R483	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A549919	Resistor	R450	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A523713	Resistor	R462	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A522663	Resistor	R470	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050700002	Resistor	R480	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050524904	Resistor	R481,R517	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050514324	Resistor	R496,R571	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050533034	Resistor	R497,R502	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
1050501234	Resistor	R498,R581	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A537463	Resistor	R547	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1059700001	Resistor	R554	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050510034	Resistor	R1,R10,R11,R114, R12,R126,R163,R19, R196,R202,R205,R21, R23,R24,R25,R257, R26,R263,R264,R265, R267,R268,R284,R29, R290,R292,R293, R294,R3,R30,R308, R330,R339,R351, R352,R353,R354,R36, R4,R459,R46,R469, R471,R535,R544,R56, R562,R608,R626, R59,R610	Telcordia Issue 1	Level I		57.00	0.002268	.7259	440974090.03
1050524934	Resistor	R153,R161,R206, R217,R218,R223, R224,R225,R228, R232,R238,R239, R240,R242,R243, R245,R282,R286, R289,R322,R381, R629,R643,R684	Telcordia Issue 1	Level I		24.00	0.002268	.3056	440974090.03
105A507509	Resistor	R372,R388,R654, R664,R665	Telcordia Issue 1	Level I		5.00	0.002268	.0637	440974090.03
105A536513	Resistor	R667	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1059710001	Resistor	R677	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050502234	Resistor	R685	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050502734	Resistor	R687	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1059520001	Resistor	R690	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A700239	Resistor	R707	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1189633193	Capacitor	TC1,TC11	Telcordia Issue 1	Level I		2.00	0.004535	.0509	220487045.01
1189622150	Capacitor	TC24,TC3,TC4	Telcordia Issue 1	Level I		3.00	0.004535	.0764	220487045.01
1189615151	Capacitor	TC10,TC12,TC13, TC26	Telcordia Issue 1	Level I		4.00	0.004535	.1019	220487045.01
1189656180	Capacitor	TC19,TC20,TC22, TC23	Telcordia Issue 1	Level I		4.00	0.004535	.1019	220487045.01
1315422410	Semiconductor	U1	Telcordia Issue 1	Level I		1.00	0.079603	.4470	12562298.27
14S2321900	Semiconductor	U2	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
1314111715	Integrated Circuit	U3	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S5A00704	Integrated Circuit	U104,U39,U5,U56, U57,U67,U74,U90	Telcordia Issue 1	Level I		8.00	0.026183	1.1763	38193355.79
14S5A00601	Integrated Circuit	U15,U6	Telcordia Issue 1	Level I		2.00	0.026183	.2941	38193355.79
14S634022E	Integrated Circuit	U7	Telcordia Issue 1	Level I		1.00	0.026372	.1481	37918485.54

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S3111701	Integrated Circuit	U8	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S3089200	Integrated Circuit	U11	Telcordia Issue 1	Level I	22.40	1.00	0.089107	.5004	11222490.21
1315482410	Semiconductor	U12,U21,U23,U29, U35,U37,U38,U52, U64,U70,U79,U81, U85	Telcordia Issue 1	Level I		13.00	0.079603	5.8116	12562298.27
1315482110	Semiconductor	U13,U16,U17,U19, U24,U28,U36,U40, U41,U55	Telcordia Issue 1	Level I		10.00	0.079603	4.4705	12562298.27
14S4872800	Semiconductor	U18	Telcordia Issue 1	Level I		1.00	0.159207	.8941	6281149.14
14S5A12506	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S4021301	Integrated Circuit	U22,U25,U30,U50	Telcordia Issue 1	Level I		4.00	0.059366	1.3336	16844654.92
14S9108500	Integrated Circuit	U26,U32,U33,U92, U93	Telcordia Issue 1	Level I		5.00	0.059366	1.6670	16844654.92
1651609883	Connection	U27	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1315667910	Semiconductor	U14,U4,U61	Telcordia Issue 1	Level I		3.00	0.159207	2.6823	6281149.14
1315667910	Semiconductor	U42	Telcordia Issue 1	Level I	14.30	1.00	0.235653	1.3234	4243519.72
14S5912300	Integrated Circuit	U43	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S9811500	Integrated Circuit	U44	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S2200900	Integrated Circuit	U45	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S4811102	Integrated Circuit	U47	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S4257900	Integrated Circuit	U48	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S3E00100	Integrated Circuit	U49,U51	Telcordia Issue 1	Level I		2.00	0.059366	.6668	16844654.92
1315970211	Semiconductor	U58	Telcordia Issue 1	Level I		1.00	0.159207	.8941	6281149.14
14S3111600	Integrated Circuit	U60	Telcordia Issue 1	Level I		1.00	0.032000	.1797	31250122.20
1314880510	Semiconductor	U65,U76	Telcordia Issue 1	Level I		2.00	0.079603	.8941	12562298.27
14S4048502	Integrated Circuit	U68,U72	Telcordia Issue 1	Level I		2.00	0.059366	.6668	16844654.92
14S5A01402	Integrated Circuit	U107,U69,U89	Telcordia Issue 1	Level I		3.00	0.026183	.4411	38193355.79
14S2083100	Integrated Circuit	U71	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S5A03200	Integrated Circuit	U73	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S4121601	Integrated Circuit	U75	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S9620800	Integrated Circuit	U77	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S5A00821	Integrated Circuit	U106,U78	Telcordia Issue 1	Level I		2.00	0.026183	.2941	38193355.79
14S2591200	Integrated Circuit	U80	Telcordia Issue 1	Level I	29.90	1.00	0.433383	2.4338	2307430.37
14S5A00702	Integrated Circuit	U82	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S3587000	Integrated Circuit	U83,U84	Telcordia Issue 1	Level I		2.00	0.059366	.6668	16844654.92
14S3121800	Integrated Circuit	U86	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S4081110	Integrated Circuit	U87	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
14S4600004	Integrated Circuit	U95	Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
14S5A00802	Integrated Circuit	U102,U103,U96,U97	Telcordia Issue 1	Level I		4.00	0.026183	.5882	38193355.79

AAEON Reliability Prediction Report

Part Number 9697QM7714-D
Reference Des
Date 09. 26, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-G50-QM77-001-DX.RPJ
Time 16:31
Failure Rate 17.806516
MTBF 56,159

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S3001501	Integrated Circuit	U100,U101	Telcordia Issue 1	Level I		2.00	0.059366	.6668	16844654.92
1315190100	Semiconductor	U105	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
123132505D	Miscellaneous	Y1,Y3,Y4	Telcordia Issue 1	Level I		3.00	0.150000	2.5272	6666666.67
1231332721	Miscellaneous	Y2	Telcordia Issue 1	Level I		1.00	0.150000	.8424	6666666.67
14S3128422	Integrated Circuit	U63	Telcordia Issue 1	Level I		1.00	0.059366	.3334	16844654.92
1304000043	Semiconductor	D10	Telcordia Issue 1	Level I		1.00	0.004877	.0274	205063180.81
105A521039	Resistor	R609	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
1050525524	Resistor	R580,R586	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A519629	Resistor	R568	Telcordia Issue 1	Level I		1.00	0.002268	.0127	440974090.03
105A500239	Resistor	R537,R613	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
105A505629	Resistor	R536,R614	Telcordia Issue 1	Level I		2.00	0.002268	.0255	440974090.03
14S4QM7700	Integrated Circuit	U31	Telcordia Issue 1	Level I	22.00	1.00	0.087310	.4903	11453400.75
1189633196	Capacitor	TC14,TC15,TC16,TC2,TC25,TC5,TC6,TC7	Telcordia Issue 1	Level I		8.00	0.004535	.2038	220487045.01
14S6212844	Integrated Circuit		Telcordia Issue 1	Level I		1.00	0.026183	.1470	38193355.79
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1655910131	Connection	CN8	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1654415308	Connection	CN26	Telcordia Issue 1	Level I		1.00	0.008535	.0479	117170702.76
1652602105	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1655003022	Connection	CN6	Telcordia Issue 1	Level I		1.00	0.001707	.0096	585853513.81
165321320G	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.014793	.0831	67598482.36
1655306020	Connection	CN18	Telcordia Issue 1	Level I		1.00	0.003414	.0192	292926756.90
1655003010	Connection	CN20	Telcordia Issue 1	Level I		1.00	0.001707	.0096	585853513.81
1655302020	Connection	CN22	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
165251420B	Connection	CN23,CN24	Telcordia Issue 1	Level I		2.00	0.001138	.0128	878780270.71
1654818301	Connection	CN25	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1654409103	Connection	CN27	Telcordia Issue 1	Level I		1.00	0.128018	.7189	7811380.18
1181610192	Capacitor	EC1	Telcordia Issue 1	Level I		1.00	0.004535	.0255	220487045.01
1653002101	Connection	JP1	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1653003101	Connection	JP11,JP12	Telcordia Issue 1	Level I		2.00	0.001707	.0192	585853513.81
1653003201	Connection	JP8	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1653005201	Connection	JP9	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
1653300102	Connection	JP12(2-3),JP8(3-4)	Telcordia Issue 1	Level I		2.00	0.001138	.0128	878780270.71
1653300108	Connection	JP11(1-2)	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
165390003B	Connection	CN28	Telcordia Issue 1	Level I		1.00	0.001138	.0064	878780270.71
175011901M	Miscellaneous	BAT1	Telcordia Issue 1	Level I		1.00	0.900000	5.0543	1111111.11

