

TKS-E21-HD07

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 16.357706 ppm MTBF: 61,133 Hours
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Issue date	Approval	Test Engineer
2012/07/12	Tom Lin	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TKS-E21-HD07-MS-T40N-A10

II . Prediction Date: Jul 12, 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-E21-HD07-MS-T40N-A10(Not include power adapter):

- Failure Rate: 16.357706 ppm
- MTBF: 61,133 Hours

Below component value was provided by the supplier:

- (TF)PowerAdapter.100/240V.12V.5A.60W.DC.W/ Lock.FSP.FSP060-DBAE1/9NA0603125
MTBF: The subject adapter have a minimum predicted MTBF of 100,000 hours of continuous operation at 25°C , maximum-output load, and nominal AC input voltage.

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description Top-level assembly
File Name TKS-E21-HD07-MS-T40N-A10.-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TKS-E21-HD07-MS-T40N-- A10	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	16.36	61133.27
ASS'Y EPIC-HD07 Rev.A1.0	9697HD0709-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	16.36	61133.27

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1214309008	Inductor	CH1,CH2,CH3,CH4, CH5,CH6,CH7,CH8	Telcordia Issue 1	Level I		8.00	0.002268	.1109	440974090.03
1653212100	Connection	CN3	Telcordia Issue 1	Level I		1.00	0.006828	.0417	146463378.45
1654226303	Connection	CN14A,CN15A	Telcordia Issue 1	Level I		2.00	0.001138	.0139	878780270.71
1654926900	Connection	CN14B,CN15B	Telcordia Issue 1	Level I		2.00	0.029586	.3617	33799241.18
1121501690	Capacitor	C1,C101,C103,C104, C105,C106,C107, C108,C109,C11,C110, C111,C112,C114, C117,C12,C121,C124, C125,C126,C13,C132, C133,C135,C136, C138,C139,C140, C143,C144,C145, C147,C148,C149, C153,C154,C155, C157,C158,C159, C160,C162,C166,	Telcordia Issue 1	Level I		286.00	0.004535	7.9298	220487045.01
1129701790	Capacitor	C226,C228,C231, C236,C461,C466, C468,C470,C471, C474,C477,C479, C498,C5,C500,C501, C503,C6,C95	Telcordia Issue 1	Level I		19.00	0.004535	.5268	220487045.01
1122710080	Capacitor	C14,C15,C16,C24, C25,C26	Telcordia Issue 1	Level I		6.00	0.005466	.2005	182961702.19
1124433090	Capacitor	C17,C19,C22,C23, C405,C407,C410, C414,C416,C418, C424,C436,C437, C440,C445,C447, C449,C450,C453, C456,C463	Telcordia Issue 1	Level I		21.00	0.004535	.5823	220487045.01
1129610051	Capacitor	C115,C118,C127, C131,C180,C183, C189,C192,C196, C197,C198,C201, C202,C252,C256, C257,C263,C265, C266,C272,C277, C290,C370,C384,C40, C403,C408,C409, C421,C43,C430,C45, C454,C490,C494,C50, C512,C541,C55,C75, C83,C91	Telcordia Issue 1	Level I		42.00	0.004535	1.1645	220487045.01

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1121610060	Capacitor	C215,C242,C244, C246,C251,C262, C267,C318,C319, C411,C523,C71	Telcordia Issue 1	Level I		12.00	0.004535	.3327	220487045.01
11E9501090	Capacitor	C100,C102,C113, C119,C120,C122, C123,C134,C137, C141,C142,C146, C150,C151,C152, C156,C161,C163, C170,C173,C175, C184,C187,C188, C214,C227,C238, C254,C268,C282, C283,C284,C285, C303,C310,C423, C473,C480,C483,	Telcordia Issue 1	Level I		57.00	0.004535	1.5804	220487045.01
1124427080	Capacitor	C116,C128,C324, C326,C341,C342, C496,C537,C538	Telcordia Issue 1	Level I		9.00	0.004535	.2495	220487045.01
1122722080	Capacitor	C129,C130,C194, C219	Telcordia Issue 1	Level I		4.00	0.000428	.0105	2335167589.64
1189622152	Capacitor	C164,C165,C203, C205,C206,C269, C469	Telcordia Issue 1	Level I		7.00	0.004535	.1941	220487045.01
1189610151	Capacitor	C199,C200,C270, C313,C315	Telcordia Issue 1	Level I		5.00	0.004535	.1386	220487045.01
1124522280	Capacitor	C204,C230,C233, C234,C237,C249, C250	Telcordia Issue 1	Level I		7.00	0.004535	.1941	220487045.01
1124418080	Capacitor	C232,C259	Telcordia Issue 1	Level I		2.00	0.004535	.0555	220487045.01
11E2501080	Capacitor	C243,C245,C248, C258,C273,C274, C275,C278,C279, C513	Telcordia Issue 1	Level I		10.00	0.004535	.2773	220487045.01
1124522680	Capacitor	C271,C286,C288, C293	Telcordia Issue 1	Level I		4.00	0.004535	.1109	220487045.01
11C2510480	Capacitor	C276,C299	Telcordia Issue 1	Level I		2.00	0.004535	.0555	220487045.01
1124410190	Capacitor	C292,C297,C298, C312,C314,C316, C317,C504	Telcordia Issue 1	Level I		8.00	0.004535	.2218	220487045.01
11E1647650	Capacitor	C294,C296,C304, C305,C306,C311	Telcordia Issue 1	Level I		6.00	0.004535	.1664	220487045.01
1124510280	Capacitor	C323,C533,C534	Telcordia Issue 1	Level I		3.00	0.004535	.0832	220487045.01
11E1522680	Capacitor	C428,C432,C434, C452,C460	Telcordia Issue 1	Level I		5.00	0.004535	.1386	220487045.01
1189933180	Capacitor	C441	Telcordia Issue 1	Level I		1.00	0.004535	.0277	220487045.01
11C4547380	Capacitor	C495,C497,C505, C529	Telcordia Issue 1	Level I		4.00	0.004535	.1109	220487045.01
1124522180	Capacitor	C502	Telcordia Issue 1	Level I		1.00	0.004535	.0277	220487045.01
11C1522650	Capacitor	C507	Telcordia Issue 1	Level I		1.00	0.004535	.0277	220487045.01

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
1124568280	Capacitor	C508,C531	Telcordia Issue 1	Level I		2.00	0.004535	.0555	220487045.01
1124447180	Capacitor	C522	Telcordia Issue 1	Level I		1.00	0.004535	.0277	220487045.01
1301400541	Semiconductor	D1,D13,D14,D15,D17, D29,D35,D40,D43, D46	Telcordia Issue 1	Level I		10.00	0.023881	1.4599	41874327.58
1305100541	Semiconductor	D10,D2,D21,D22,D23, D24,D25,D26,D27, D28,D3,D4,D47,D48, D49,D5,D50,D51,D6, D7,D8,D9	Telcordia Issue 1	Level I		22.00	0.023881	3.2118	41874327.58
1301400642	Semiconductor	D11,D12,D16,D30, D31,D32,D33,D34, D36,D37,D39,D45	Telcordia Issue 1	Level I		12.00	0.023881	1.7519	41874327.58
1301005444	Semiconductor	D19,D20,D38	Telcordia Issue 1	Level I		3.00	0.023881	.4380	41874327.58
12123C0010	Inductor	FB1,FB10,FB14,FB19, FB2,FB20,FB21,FB22, FB23,FB24,FB25, FB26,FB27,FB29, FB36,FB39,FB40,FB6, FB7,FB8,FB9	Telcordia Issue 1	Level I		21.00	0.002268	.2911	440974090.03
12123D0001	Inductor	FB3,FB4,FB5	Telcordia Issue 1	Level I		3.00	0.002268	.0416	440974090.03
12123C0003	Inductor	FB11,FB12,FB13, FB15,FB16,FB17, FB18,FB28	Telcordia Issue 1	Level I		8.00	0.002268	.1109	440974090.03
12123C0006	Inductor	FB30,FB31,FB32, FB33,FB34,FB35, FB37,FB38	Telcordia Issue 1	Level I		8.00	0.002268	.1109	440974090.03
1752000501	Miscellaneous	FS1	Telcordia Issue 1	Level I		1.00	0.003000	.0183	333333333.33
1752001601	Miscellaneous	FS2,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0367	333333333.33
1304101440	Semiconductor	LED1	Telcordia Issue 1	Level I		1.00	0.004877	.0298	205063180.81
1304000043	Semiconductor	LED2	Telcordia Issue 1	Level I		1.00	0.004877	.0298	205063180.81
121110226N	Inductor	L1,L2	Telcordia Issue 1	Level I		2.00	0.086173	1.0536	11604581.32
121110106G	Inductor	L3,L4,L8,L9	Telcordia Issue 1	Level I		4.00	0.086173	2.1072	11604581.32
121110106G	Inductor	L5	Telcordia Issue 1	Level I	26.10	1.00	0.137911	.8431	7251073.68
1315700216	Semiconductor	Q1,Q12,Q13,Q16,Q17, Q18,Q19,Q2,Q20,Q21, Q3,Q30,Q31,Q32,Q40, Q41,Q42,Q43,Q46,Q6, Q9	Telcordia Issue 1	Level I		21.00	0.079603	10.2195	12562298.27
1315230511	Semiconductor	Q24,Q4,Q44,Q5	Telcordia Issue 1	Level I		4.00	0.079603	1.9466	12562298.27
1314111720	Integrated Circuit	Q7	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
1310390413	Semiconductor	Q14,Q15,Q22,Q47,Q8	Telcordia Issue 1	Level I		5.00	0.023881	.7300	41874327.58
1311390612	Semiconductor	Q10,Q11,Q45	Telcordia Issue 1	Level I		3.00	0.023881	.4380	41874327.58
1315422410	Semiconductor	Q25,Q26,Q27,Q28	Telcordia Issue 1	Level I		5.00	0.079603	2.4332	12562298.27
1315422410	Semiconductor	Q29	Telcordia Issue 1	Level I	30.10	5.00	0.174646	5.3383	5725874.83

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1315R30310	Integrated Circuit	Q33	Telcordia Issue 1	Level I	28.60	1.00	0.400518	2.4485	2496766.43
1315R30310	Integrated Circuit	Q34	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
1315050311	Integrated Circuit	Q35,Q37	Telcordia Issue 1	Level I		2.00	0.059366	.7258	16844654.92
1315443510	Semiconductor	Q23,Q36	Telcordia Issue 1	Level I		2.00	0.079603	.9733	12562298.27
1315441012	Semiconductor	Q38,Q39	Telcordia Issue 1	Level I		2.00	0.079603	.9733	12562298.27
1540775082	Resistor	RN1,RN2,RN3,RN4, RN5,RN6,RN7	Telcordia Issue 1	Level I		7.00	0.006246	.2673	160102772.00
1540782282	Resistor	RN12,RN17	Telcordia Issue 1	Level I		2.00	0.012492	.1527	80051386.00
1540733085	Resistor	RN13,RN14,RN15, RN16	Telcordia Issue 1	Level I		4.00	0.006246	.1527	160102772.00
106B501032	Resistor	RT1,RT2,RT3,RT4	Telcordia Issue 1	Level I		4.00	0.011379	.2783	87878027.07
105A747009	Resistor	R1,R524,R528,R531	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
105A503309	Resistor	R10,R11,R2,R256, R270,R3,R310,R317, R320,R322,R330, R331,R332,R334, R336,R337,R340, R343,R347,R348, R349,R351,R352, R353,R354,R355, R356,R357,R358, R361,R370,R375, R377,R396,R397,R4, R401,R402,R408, R411,R415,R420,	Telcordia Issue 1	Level I		68.00	0.002268	.9427	440974090.03
105A733009	Resistor	R13,R15,R18,R21, R328,R329,R372, R662,R663	Telcordia Issue 1	Level I		9.00	0.002268	.1248	440974090.03
105A501039	Resistor	R105,R115,R125, R142,R159,R175, R186,R193,R194, R206,R208,R211, R212,R217,R218,R22, R220,R224,R229,R23, R230,R231,R236, R241,R25,R254,R255, R266,R27,R272,R277, R278,R279,R28,R281, R284,R296,R335, R371,R399,R40,R400, R43,R44,R447,R4	Telcordia Issue 1	Level I		104.00	0.002268	1.4418	440974090.03

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00

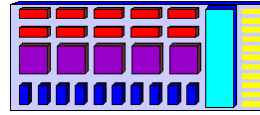


Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A708229	Resistor	R29,R339,R34,R350, R359,R360,R37,R373, R430,R442,R474, R475,R55,R696	Telcordia Issue 1	Level I		14.00	0.002268	.1941	440974090.03
105A500139	Resistor	R101,R109,R114, R117,R119,R120, R122,R130,R137, R139,R141,R143, R146,R147,R148, R167,R187,R188, R190,R191,R205, R237,R269,R30,R341, R346,R376,R378, R380,R41,R433,R445, R45,R453,R454,R456, R457,R462,R485, R486,R487,R492,	Telcordia Issue 1	Level I		50.00	0.002268	.6932	440974090.03
105A507509	Resistor	R301,R305,R31,R319, R321,R323,R325,R38, R53	Telcordia Issue 1	Level I		9.00	0.002268	.1248	440974090.03
105A702209	Resistor	R154,R170,R172, R262,R264,R32,R33, R39,R525,R54, R597, R598,R599,R606	Telcordia Issue 1	Level I		14.00	0.002268	.1941	440974090.03
105A700009	Resistor	R100,R102,R121, R126,R128,R131, R134,R155,R162, R163,R164,R165, R169,R171,R182, R183,R197,R204, R209,R210,R216, R219,R226,R234, R253,R271,R274, R295,R297,R309, R313,R314,R316,R35, R36,R394,R395,R398, R403,R405,R406,	Telcordia Issue 1	Level I		105.00	0.002268	1.4556	440974090.03
105A702229	Resistor	R149,R153,R173, R195,R196,R238, R239,R324,R333,R42, R517,R520,R532, R534,R63,R675	Telcordia Issue 1	Level I		16.00	0.002268	.2218	440974090.03
105A710039	Resistor	R180,R342,R344, R427,R46,R516,R521, R544,R57,R577,R635, R677	Telcordia Issue 1	Level I		12.00	0.002268	.1664	440974090.03
105A524913	Resistor	R413,R48	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00

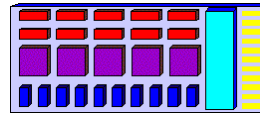


Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A515009	Resistor	R515,R52,R545,R546, R547,R56,R58	Telcordia Issue 1	Level I		7.00	0.002268	.0970	440974090.03
105A505133	Resistor	R552,R75	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A700003	Resistor	R199,R242,R243, R244,R247,R248, R257,R273,R276, R311,R318,R550,R71, R76	Telcordia Issue 1	Level I		14.00	0.002268	.1941	440974090.03
105A704729	Resistor	R374,R393,R479, R548,R549,R557, R562,R564,R565, R566,R567,R569, R570,R571,R572, R573,R578,R608, R610,R618,R633, R647,R680,R82,R94	Telcordia Issue 1	Level I		25.00	0.002268	.3466	440974090.03
105A502039	Resistor	R282,R299,R483, R551,R554,R555, R576,R624,R95	Telcordia Issue 1	Level I		9.00	0.002268	.1248	440974090.03
105A506803	Resistor	R97	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A531603	Resistor	R98	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A512713	Resistor	R99	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A500233	Resistor	R112,R502,R560	Telcordia Issue 1	Level I		3.00	0.002268	.0416	440974090.03
105A503933	Resistor	R123	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A551003	Resistor	R124,R145,R268	Telcordia Issue 1	Level I		3.00	0.002268	.0416	440974090.03
105A501233	Resistor	R129	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A501533	Resistor	R135,R138,R443, R455	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
105A702239	Resistor	R136,R140,R177, R189	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
105A505103	Resistor	R144,R160	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A539263	Resistor	R151	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A720053	Resistor	R156	Telcordia Issue 1	Level I		1.00	0.013606	.0832	73495681.67
1050549904	Resistor	R161,R362,R363, R364,R365,R366, R367,R368,R369	Telcordia Issue 1	Level I		9.00	0.002268	.1248	440974090.03
105A710009	Resistor	R168,R178,R184, R185,R382,R383, R384,R385,R387, R388,R389,R390, R391,R392,R622	Telcordia Issue 1	Level I		15.00	0.002268	.2079	440974090.03
105A501053	Resistor	R200,R379,R381, R563,R581,R667	Telcordia Issue 1	Level I		6.00	0.002268	.0832	440974090.03
105A511823	Resistor	R201	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00

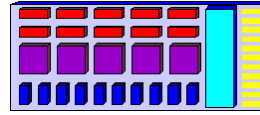


Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A593103	Resistor	R203	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A702269	Resistor	R207,R227,R228, R233,R240,R249, R250,R251,R260, R312,R607,R621, R653,R656,R657	Telcordia Issue 1	Level I		15.00	0.002268	.2079	440974090.03
105A539213	Resistor	R213,R214	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A556213	Resistor	R215,R223,R70	Telcordia Issue 1	Level I		3.00	0.002268	.0416	440974090.03
105A510053	Resistor	R232,R275	Telcordia Issue 1	Level I		2.00	0.013606	.1664	73495681.67
105A520033	Resistor	R246	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A505123	Resistor	R280	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A513033	Resistor	R283,R291	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A525523	Resistor	R286	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A549923	Resistor	R287,R654	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A504333	Resistor	R288	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A506823	Resistor	R289,R292	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A525513	Resistor	R290	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A549963	Resistor	R293,R298,R300, R303	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
105A502733	Resistor	R294,R304	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A503033	Resistor	R302	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A501333	Resistor	R306	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A501633	Resistor	R307	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A561933	Resistor	R308	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A530003	Resistor	R499,R501,R505	Telcordia Issue 1	Level I		3.00	0.002268	.0416	440974090.03
105A559003	Resistor	R504	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A548723	Resistor	R556	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
1059710001	Resistor	R584,R585	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
1059722001	Resistor	R586	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A566503	Resistor	R604,R611,R639, R644	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
105A534823	Resistor	R627	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A527423	Resistor	R628	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A528723	Resistor	R632	Telcordia Issue 1	Level I		1.00	0.002268	.0139	440974090.03
105A507533	Resistor	R637,R645	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
14S5812502	Integrated Circuit	U1	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
1315686110	Semiconductor	U2,U3,U50,U51	Telcordia Issue 1	Level I		4.00	0.079603	1.9466	12562298.27
14S4048503	Integrated Circuit	U4,U5	Telcordia Issue 1	Level I		2.00	0.059366	.7258	16844654.92
14S2200900	Integrated Circuit	U6	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92

AAEON Reliability Prediction Report

Part Number 9697HD0709-D
Reference Des
Date 07. 12, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description
File Name TKS-E21-HD07-MS-T40N-A10.R-
Time 16:05
Failure Rate 16.357706
MTBF 61,133

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
14S5A12506	Integrated Circuit	U29,U7	Telcordia Issue 1	Level I		2.00	0.026183	.3201	38193355.79
14S4021301	Integrated Circuit	U10,U11,U34	Telcordia Issue 1	Level I		3.00	0.059366	1.0888	16844654.92
14S5A00821	Integrated Circuit	U14,U15	Telcordia Issue 1	Level I		2.00	0.026183	.3201	38193355.79
14S3524700	Integrated Circuit	U16	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
14S3973100	Integrated Circuit	U19	Telcordia Issue 1	Level I	34.60	1.00	0.573405	3.5054	1743967.10
14S3973100	Integrated Circuit	U20	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
14S5A00704	Integrated Circuit	U21	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
14S5A00703	Integrated Circuit	U23	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
1315155510	Semiconductor	U24,U25,U26	Telcordia Issue 1	Level I		3.00	0.159207	2.9198	6281149.14
14S3052400	Integrated Circuit	U27,U28	Telcordia Issue 1	Level I		2.00	0.059366	.7258	16844654.92
14S5A00401	Integrated Circuit	U30	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
14S4811102	Integrated Circuit	U32	Telcordia Issue 1	Level I	25.00	1.00	0.101595	.6211	9843046.68
14S4811102	Integrated Circuit	U33	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
14S3524701	Integrated Circuit	U39	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
14S4T40N00	Integrated Circuit	U40	Telcordia Issue 1	Level I	22.60	1.00	0.090017	.5503	11109000.48
14S4186600	Integrated Circuit	U41	Telcordia Issue 1	Level I	25.00	1.00	0.101595	.6211	9843046.68
14S4A55E00	Integrated Circuit	U43	Telcordia Issue 1	Level I	22.20	1.00	0.088205	.5392	11337285.51
14S3121600	Integrated Circuit	U44	Telcordia Issue 1	Level I		1.00	0.032000	.1956	31250122.20
14S3066200	Integrated Circuit	U45	Telcordia Issue 1	Level I	30.70	1.00	0.454792	2.7803	2198805.57
14S3112400	Integrated Circuit	U47	Telcordia Issue 1	Level I	27.80	1.00	0.381426	2.3318	2621743.49
14S3838000	Integrated Circuit	U48	Telcordia Issue 1	Level II		1.00	0.008728	.0534	114580067.38
14S3112300	Integrated Circuit	U49	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
123132505D	Miscellaneous	Y1,Y2,Y4,Y5	Telcordia Issue 1	Level I		4.00	0.150000	3.6680	6666666.67
1231332721	Miscellaneous	Y3	Telcordia Issue 1	Level I		1.00	0.150000	.9170	6666666.67
1305099140	Semiconductor	D52,D53	Telcordia Issue 1	Level I		2.00	0.079603	.9733	12562298.27
1231327053	Miscellaneous	Y6	Telcordia Issue 1	Level I		1.00	0.150000	.9170	6666666.67
14S4081102	Integrated Circuit	U53	Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
105A551119	Resistor	R684,R685	Telcordia Issue 1	Level I		2.00	0.002268	.0277	440974090.03
105A701529	Resistor	R16,R17,R49,R50	Telcordia Issue 1	Level I		4.00	0.002268	.0555	440974090.03
121110336L	Inductor	L6,L7	Telcordia Issue 1	Level I		2.00	0.086173	1.0536	11604581.32
14S3128422	Integrated Circuit	U42	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
16515A2994	Connection	SO-DIMM1	Telcordia Issue 1	Level I		1.00	0.001138	.0070	878780270.71
14S4195710	Integrated Circuit	U54	Telcordia Issue 1	Level I		1.00	0.059366	.3629	16844654.92
14S6203204	Integrated Circuit		Telcordia Issue 1	Level I		1.00	0.026183	.1601	38193355.79
175011901C	Miscellaneous	BATTERY1	Telcordia Issue 1	Level I		1.00	0.900000	5.5020	1111111.11
1655902030	Connection	BT1	Telcordia Issue 1	Level I		1.00	0.001138	.0070	878780270.71

