

AEC-6876

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 19.877907 ppm MTBF: 50,307 Hours
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Issue date	Approval	Test Engineer
2012/03/22	Wayne Chen	Jessica Chou

Reliability Prediction (MTBF)

I . Model Name: TF-AEC-6876-A1-1010

II . Prediction Date: Mar. 22, 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: 25.3 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-AEC-6876-A1-1010 (not include Riser card and DDR3):

- Failure Rate: 19.877907ppm
- MTBF: 50,307 Hours

Below component MTBF value were provided by the suppliers:

- (TF)PCI-E Riser Card.jinmaon.LKF321+321S

MTBF: 1 Year

- (TF).DDR3-1333 2GB SO-DIMM.204PIN.(256Mx8).H5TQ2G83BFR-H9C.

DSL.D3SH56081XH15AA

MTBF: 9.36E+6 Hours

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30



Description Top-level assembly
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 19.877907
MTBF 50,307

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-AEC-6876-A1M-1010	System	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled	100.00	1.00	19.88	50307.11
ASS'Y POWER Board PER-T17D	9697P17D01-DIP	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	1.18	849404.74
ASS'Y EMB-QM67-A10	9697QM6717-D	Telcordia Issue 1	Method I Case 3	GF, GU - Ground Fixed, Uncontrolled		1.00	18.67	53553.81

AAEON Reliability Prediction Report

Part Number 9697P17D01-DIP
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30

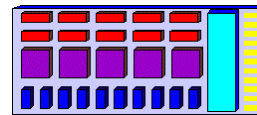


Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 1.177295
MTBF 849,405

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1053500279	Resistor	CR1,CR2	Telcordia Issue 1	Level I		2.00	0.002281	.3875	438391989.82
1121610060	Capacitor	C1,C2,C3	Telcordia Issue 1	Level I		3.00	0.004562	1.1625	219195994.91
11C4501060	Capacitor	C4	Telcordia Issue 1	Level I		1.00	0.004562	.3875	219195994.91
1121547661	Capacitor	C10,C5	Telcordia Issue 1	Level I		2.00	0.004562	.7750	219195994.91
11C1522480	Capacitor	C13,C6	Telcordia Issue 1	Level I		2.00	0.004562	.7750	219195994.91
1122501780	Capacitor	C12,C7	Telcordia Issue 1	Level I		2.00	0.004562	.7750	219195994.91
1124522280	Capacitor	C11	Telcordia Issue 1	Level I		1.00	0.004562	.3875	219195994.91
1124522880	Capacitor	C14	Telcordia Issue 1	Level I		1.00	0.004562	.3875	219195994.91
1189610180	Capacitor	C17	Telcordia Issue 1	Level I		1.00	0.004562	.3875	219195994.91
1124701680	Capacitor	C18,C19,C22,C23,C8	Telcordia Issue 1	Level I		5.00	0.004562	1.9375	219195994.91
1301005442	Semiconductor	D1	Telcordia Issue 1	Level I		1.00	0.024088	2.0460	41515203.19
1301003240	Semiconductor	D2	Telcordia Issue 1	Level I		1.00	0.024088	2.0460	41515203.19
1301003440	Semiconductor	D3	Telcordia Issue 1	Level I		1.00	0.024088	2.0460	41515203.19
1301003640	Semiconductor	D4	Telcordia Issue 1	Level I		1.00	0.024088	2.0460	41515203.19
121110336H	Inductor	L1	Telcordia Issue 1	Level I	46.20	1.00	0.189530	16.0988	5276215.03
1212308054	Resistor	L2,L3,L4	Telcordia Issue 1	Level I		3.00	0.011559	2.9455	86512540.36
105A701003	Resistor	R1	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A534823	Resistor	R4	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A704723	Resistor	R5	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A524913	Resistor	R6	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A502033	Resistor	R7	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A700003	Resistor	R10,R11,R12,R13, R15,R9	Telcordia Issue 1	Level I		6.00	0.002281	1.1625	438391989.82
105A512413	Resistor	R14,R16	Telcordia Issue 1	Level I		2.00	0.002281	.3875	438391989.82
1059710003	Resistor	R17	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A700333	Resistor	R18	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
105A700133	Resistor	R19	Telcordia Issue 1	Level I		1.00	0.002281	.1938	438391989.82
14S3378000	Integrated Circuit	U1	Telcordia Issue 1	Level I		1.00	0.060682	5.1544	16479361.92
1314257610	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.060682	5.1544	16479361.92
1315567011	Semiconductor	Q1,Q3	Telcordia Issue 1	Level I		2.00	0.080292	13.6401	12454560.96
1315889612	Semiconductor	Q2,Q4	Telcordia Issue 1	Level I		2.00	0.080292	13.6401	12454560.96
1211103301	Inductor	L5	Telcordia Issue 1	Level I		1.00	0.086680	7.3627	11536631.31
1652003101	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.001734	.1473	576750269.05
1655104005	Connection	CN2	Telcordia Issue 1	Level I		1.00	0.002312	.1964	432562701.78
1655004011	Connection	CN3	Telcordia Issue 1	Level I		1.00	0.023118	1.9637	43256270.18
1189618090	Capacitor	EC1,EC2	Telcordia Issue 1	Level I		2.00	0.004562	.7750	219195994.91
1181647110	Capacitor	EC3,EC4	Telcordia Issue 1	Level I		2.00	0.004562	.7750	219195994.91

AAEON Reliability Prediction Report

Part Number 9697QM6717-D
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30



Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1121501691	Capacitor	BC1,BC10,BC100, BC102,BC105,BC106, BC107,BC108,BC109, BC11,BC111,BC112, BC113,BC114,BC115, BC116,BC118,BC119, BC12,BC120,BC123, BC125,BC126,BC127, BC128,BC129,BC13, BC131,BC132,BC133, BC134,BC135,BC138, BC139,BC14,BC140, BC141,BC142,BC1	Telcordia Issue 1	Level I		218.00	0.004562	5.3262	219195994.91
11C2510480	Capacitor	BC103,BC104,BC110, BC122,BC124,BC136, BC137,BC143,BC173, BC174,BC42,BC45, BC51,BC52	Telcordia Issue 1	Level I		14.00	0.004562	.3420	219195994.91
1129522790	Capacitor	C127,C139,C144, C168,C169,C170, C172,C448,C473	Telcordia Issue 1	Level I		9.00	0.004562	.2199	219195994.91
11E9501091	Capacitor	C111,C112,C116, C133,C137,C140, C146,C165,C167, C173,C199,C204, C247,C248,C281, C282,C285,C286, C298,C299,C300, C309,C312,C331, C332,C333,C339, C343,C349,C350, C351,C352,C353, C354,C355,C362, C363,C364,C365,	Telcordia Issue 1	Level I		87.00	0.004562	2.1256	219195994.91
11C1501080	Capacitor	BC130,BC67,C171, C200,C211,C220, C263,C81	Telcordia Issue 1	Level I		8.00	0.004562	.1955	219195994.91
11C2501050	Capacitor	C287,C497,C498, C499	Telcordia Issue 1	Level I		4.00	0.004562	.0977	219195994.91
11E9522680	Capacitor	C245,C246,C262, C264,C277,C297, C307,C502,C503, C504,C505,C506, C507,C508,C509, C510,C511,C512, C513	Telcordia Issue 1	Level I		19.00	0.004562	.4642	219195994.91

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Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11C2522650	Capacitor	TC30,TC56	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
11E9610080	Capacitor	C150,C178,C179, C209,C210,C249, C250,C251,C252, C253,C254,C276, C284,C288,C292, C293,C294,C295, C296,C301,C302, C386,C464,C474, TC23,TC26,TC29, TC31,TC36,TC37, TC38,TC41,TC48, TC49,TC52,TC54, TC55,TC57,TC58,	Telcordia Issue 1	Level I		46.00	0.004562	1.1239	219195994.91
11E9510050	Capacitor	TC1,TC121,TC122, TC123,TC13,TC14, TC15,TC16,TC17, TC18,TC32,TC33, TC35,TC44,TC45, TC46,TC47,TC5,TC51, TC53,TC62,TC63, TC64	Telcordia Issue 1	Level I		23.00	0.004562	.5619	219195994.91
11E9622050	Capacitor	C100,C101,C102, C103,C104,C105, C106,C107,C114, C115,C118,C119, C120,C147,C151, C152,C153,C154, C155,C156,C157, C158,C159,C160, C161,C166,C308, C313,C317,C366, C367,C371,C372, C373,C374,C375, C376,C377,C392,	Telcordia Issue 1	Level I		57.00	0.004562	1.3926	219195994.91
1189610151	Capacitor	C122,C256,C257, EC11	Telcordia Issue 1	Level I		4.00	0.004562	.0977	219195994.91
1214309008	Inductor	CM1,CM2,CM3,CM4, L19,L20,L21,L22	Telcordia Issue 1	Level I		8.00	0.002281	.0977	438391989.82
165300420L	Connection	CN5	Telcordia Issue 1	Level I		1.00	0.004624	.0248	216281350.89
1653005209	Connection	CN4	Telcordia Issue 1	Level I		1.00	0.005780	.0310	173025080.71
1654030003	Connection	CN10	Telcordia Issue 1	Level I		1.00	0.017339	.0929	57675026.90
1654226303	Connection	CN15	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1654926900	Connection	CN15_1	Telcordia Issue 1	Level I		1.00	0.030053	.1609	33274053.98

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Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30



Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1653924110	Connection	CN14	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1305100541	Semiconductor	D13,D14,D15,D16, D17,D18,D19,D20, D41,D42,D43,D44, D45,D46,D47,D48, D53,D54,D55,D56,D7, D8	Telcordia Issue 1	Level I		22.00	0.024088	2.8380	41515203.19
1301005442	Semiconductor	D1,D21,D6	Telcordia Issue 1	Level I		3.00	0.024088	.3870	41515203.19
1301005440	Semiconductor	D10,D11,D12,D28,D5, Q89	Telcordia Issue 1	Level I		6.00	0.024088	.7740	41515203.19
1301005450	Semiconductor	D24,D25	Telcordia Issue 1	Level I		2.00	0.024088	.2580	41515203.19
1301053040	Semiconductor	D2,D3,D4	Telcordia Issue 1	Level I		3.00	0.024088	.3870	41515203.19
1304001340	Semiconductor	D9,LED1,LED2	Telcordia Issue 1	Level I		3.00	0.005012	.0805	199519584.34
1752001601	Miscellaneous	FS1,FS4,FS5,FS6	Telcordia Issue 1	Level I		4.00	0.003000	.0643	333333333.33
1211100160	Inductor	L24	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1211103671	Inductor	L12,L15,L16,L7	Telcordia Issue 1	Level I		4.00	0.086680	1.8568	11536631.31
121110100F	Inductor	L10,L23	Telcordia Issue 1	Level I		2.00	0.086680	.9284	11536631.31
1315700216	Semiconductor	Q10,Q11,Q20,Q26, Q27,Q4,Q40,Q41,Q42, Q44,Q45,Q46,Q47, Q48,Q5,Q51,Q52,Q53, Q55,Q56,Q57,Q58, Q59,Q65,Q70,Q72, Q74,Q78,Q84,Q85, Q86	Telcordia Issue 1	Level I		31.00	0.080292	13.3298	12454560.96
14S3524700	Integrated Circuit	Q82	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
1315050311	Integrated Circuit	Q16,Q18,Q22,Q24,Q3, Q34,Q37,Q38,Q6	Telcordia Issue 1	Level I		9.00	0.060682	2.9248	16479361.92
1315050311	Integrated Circuit	Q35	Telcordia Issue 1	Level I	38.30	1.00	0.723216	3.8731	1382712.05
1315230511	Semiconductor	Q79	Telcordia Issue 1	Level I		1.00	0.080292	.4300	12454560.96
1315R30310	Integrated Circuit	Q17,Q19,Q2,Q23,Q25, Q31,Q32,Q33,Q36, Q49,Q73,Q76,Q77,Q8, Q80,Q87,Q88	Telcordia Issue 1	Level I		17.00	0.060682	5.5246	16479361.92
1310390410	Semiconductor	Q21,Q39,Q43,Q81	Telcordia Issue 1	Level I		4.00	0.024088	.5160	41515203.19
1540733082	Resistor	RP5	Telcordia Issue 1	Level I		1.00	0.006332	.0339	157923867.87
1540710280	Resistor	RP1,RP3,RP4	Telcordia Issue 1	Level I		3.00	0.006332	.1017	157923867.87
1540722280	Resistor	RP2	Telcordia Issue 1	Level I		1.00	0.006332	.0339	157923867.87
106B701031	Resistor	RT1,RT2,RT3,RT4	Telcordia Issue 1	Level I		4.00	0.011559	.2476	86512540.36
106B747030	Resistor	RT5,RT6	Telcordia Issue 1	Level I		2.00	0.011559	.1238	86512540.36

AAEON Reliability Prediction Report

Part Number 9697QM6717-D
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30

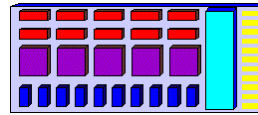


Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A700009	Resistor	R101,R117,R12,R125, R13,R133,R157,R161, R164,R165,R166, R169,R184,R186, R207,R208,R214, R216,R218,R227, R229,R24,R245,R249, R251,R257,R259,R26, R264,R267,R269, R271,R272,R273, R274,R282,R284, R296,R298,R305, R310,R315,R317,	Telcordia Issue 1	Level I		136.00	0.002281	1.6614	438391989.82
105A700003	Resistor	R105,R182,R183, R323,R334,R391, R392,R393,R396, R397,R398,R45,R450, R476,R49,R587,R588, R596,R626,R654, R665,R708,R770, R841,R886,R888, R931	Telcordia Issue 1	Level I		27.00	0.002281	.3298	438391989.82
1059700001	Resistor	L25,L26,L27,L28, R179,R321,R322, R345,R561,R599,R68, R853	Telcordia Issue 1	Level I		12.00	0.002281	.1466	438391989.82
105A700109	Resistor	R311	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1059702261	Resistor	R717,R852,R874, R878	Telcordia Issue 1	Level I		4.00	0.002281	.0489	438391989.82
105A701009	Resistor	R116,R250,R254, R268,R291,R292, R406,R730,R744, R792,R832,R857, R872,R873	Telcordia Issue 1	Level I		14.00	0.002281	.1710	438391989.82
105A701003	Resistor	R23,R30	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050502204	Resistor	R459,R460,R465, R466,R467,R468	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
105A522663	Resistor	R213	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050524904	Resistor	R189,R198	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A503309	Resistor	R153,R225,R275, R278,R289,R687, R749,R753,R795	Telcordia Issue 1	Level I		9.00	0.002281	.1099	438391989.82
1050704304	Resistor	R777,R787	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A549969	Resistor	R177	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A505109	Resistor	R771,R775,R780, R781,R782	Telcordia Issue 1	Level I		5.00	0.002281	.0611	438391989.82

AAEON Reliability Prediction Report

Part Number 9697QM6717-D
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30



Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
1050505604	Resistor	R304,R789	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A507509	Resistor	R309,R793,R904, R907,R908	Telcordia Issue 1	Level I		5.00	0.002281	.0611	438391989.82
105A507503	Resistor	R479,R913,R914, R915,R916,R917	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
105A590963	Resistor	R294	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A510009	Resistor	R100,R203,R266, R279,R5,R507	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
105A513009	Resistor	R314,R774,R93	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A515009	Resistor	R285,R286,R287, R469,R470,R471	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
1050520004	Resistor	R576,R661,R92	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A733009	Resistor	R147	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A733003	Resistor	R4,R6,R923,R927	Telcordia Issue 1	Level I		4.00	0.002281	.0489	438391989.82
105A539003	Resistor	R149,R901	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050549904	Resistor	R320	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A575009	Resistor	R143,R167	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A500139	Resistor	R104,R110,R118, R142,R158,R170, R171,R173,R197, R205,R223,R261,R32, R341,R35,R369,R39, R40,R44,R481,R518, R519,R533,R536,R54, R608,R629,R64,R65, R675,R693,R772, R808,R81,R83,R84, R859,R910,R99	Telcordia Issue 1	Level I		39.00	0.002281	.4764	438391989.82
105A500133	Resistor	R112,R589,R623, R713,R921	Telcordia Issue 1	Level I		5.00	0.002281	.0611	438391989.82
105A501529	Resistor	R230	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A702229	Resistor	R131,R156,R191, R194,R195,R199, R201,R25,R288,R290, R441,R447,R451, R452,R484,R485, R505,R506,R554, R584,R591,R592, R707,R720,R735,R78, R814,R815,R816, R817,R818,R819, R820,R821,R837, R905,R911	Telcordia Issue 1	Level I		37.00	0.002281	.4520	438391989.82
105A523713	Resistor	R742	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82

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Part Number 9697QM6717-D
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Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A524913	Resistor	R371	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A526114	Resistor	R263,R850	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A534813	Resistor	R866	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A703329	Resistor	R217,R527	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050536514	Resistor	R399,R761,R833, R851	Telcordia Issue 1	Level I		4.00	0.002281	.0489	438391989.82
1050504724	Resistor	R15,R318,R319,R325, R335,R34,R385,R402, R403,R434,R435, R436,R438,R440, R444,R455,R457, R464,R483,R555, R558,R609,R610, R863,R864,R876, R903,R906,R920	Telcordia Issue 1	Level I		29.00	0.002281	.3543	438391989.82
105A549919	Resistor	R73	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A549913	Resistor	R48,R50,R593,R594	Telcordia Issue 1	Level I		4.00	0.002281	.0489	438391989.82
105A705129	Resistor	R192,R200,R28,R504, R517	Telcordia Issue 1	Level I		5.00	0.002281	.0611	438391989.82
105A505123	Resistor	R924	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050506224	Resistor	R535,R746	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A708229	Resistor	R130,R132,R176, R180,R2,R252,R276, R277,R674,R702, R716,R719,R734, R760,R767,R768, R786	Telcordia Issue 1	Level I		17.00	0.002281	.2077	438391989.82
105A501039	Resistor	R114,R144,R145, R146,R148,R154, R160,R163,R172, R178,R181,R185, R190,R221,R226, R233,R241,R246, R260,R281,R29,R293, R297,R303,R307, R313,R324,R326, R336,R338,R357, R363,R373,R445, R446,R453,R477, R512,R513,R516,	Telcordia Issue 1	Level I		89.00	0.002281	1.0872	438391989.82

AAEON Reliability Prediction Report

Part Number 9697QM6717-D
Reference Des
Date 02. 21, 2012
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.30

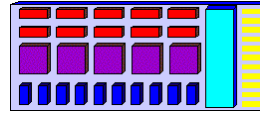


Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A501033	Resistor	R17,R187,R38,R480, R486,R493,R494, R577,R635,R636,R69, R70,R86,R87,R88, R89,R932,R933	Telcordia Issue 1	Level I		18.00	0.002281	.2199	438391989.82
105A501139	Resistor	R150,R364,R801	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A501539	Resistor	R212,R306,R529, R652,R758,R98	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
105A518223	Resistor	R582	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A502033	Resistor	R244,R482,R930	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
1050502234	Resistor	R128,R136	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A502233	Resistor	R462,R463	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A503033	Resistor	R640	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050504734	Resistor	R155,R690	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050510034	Resistor	R103,R108,R109, R113,R119,R124,R18, R219,R220,R232, R248,R375,R52,R53, R57,R61,R613,R637, R658,R666,R738, R824,R825,R828	Telcordia Issue 1	Level I		24.00	0.002281	.2932	438391989.82
1050533034	Resistor	R196,R736	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A547033	Resistor	R515	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A701053	Resistor	R202,R283	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A701069	Resistor	R210	Telcordia Issue 1	Level I		1.00	0.013686	.0733	73065331.64
14S5A00401	Integrated Circuit	U52	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S5A00702	Integrated Circuit	U19,U56,U66	Telcordia Issue 1	Level I		3.00	0.060682	.9749	16479361.92
14S5A00821	Integrated Circuit	U21,U24,U30,U40	Telcordia Issue 1	Level I		4.00	0.026648	.5708	37526359.19
14S5912300	Integrated Circuit	U55	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S5A12509	Integrated Circuit	U74	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
14S5A12506	Integrated Circuit	U73	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S4048502	Integrated Circuit	U45,U72	Telcordia Issue 1	Level I		2.00	0.060682	.6500	16479361.92
14S3089200	Integrated Circuit	U51	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S6334607	Integrated Circuit	U67	Telcordia Issue 1	Level I		1.00	0.023452	.1256	42641143.29
14S2200900	Integrated Circuit	U41	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
14S4QM6700	Integrated Circuit	U27	Telcordia Issue 1	Level I	27.80	1.00	0.118467	.6344	8441179.60
14S4121601	Integrated Circuit	U10	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S9620800	Integrated Circuit	U42	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S4872800	Semiconductor	U11	Telcordia Issue 1	Level I		1.00	0.160584	.8600	6227280.48

AAEON Reliability Prediction Report

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Description
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Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
14S4195710	Integrated Circuit	U54	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
14S9144200	Integrated Circuit	U43,U44	Telcordia Issue 1	Level I		2.00	0.026648	.2854	37526359.19
14S3052400	Integrated Circuit	U47,U48,U49,U50	Telcordia Issue 1	Level I		4.00	0.060682	1.2999	16479361.92
14S4811102	Integrated Circuit	U38	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
14S3111600	Integrated Circuit	U8	Telcordia Issue 1	Level I		1.00	0.032709	.1752	30572432.40
14S4257900	Integrated Circuit	U39	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
1231332722	Miscellaneous	Y1	Telcordia Issue 1	Level I		1.00	0.150000	.8033	6666666.67
123132505D	Miscellaneous	Y2,Y3,Y4	Telcordia Issue 1	Level I		3.00	0.150000	2.4099	6666666.67
1651609883	Connection	U26	Telcordia Issue 1	Level I	32.20	1.00	0.005262	.0282	190048049.56
14S4622800	Integrated Circuit	U9	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
1211103370	Inductor	L2,L4	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1301003440	Semiconductor	D22,D23	Telcordia Issue 1	Level I		2.00	0.024088	.2580	41515203.19
14S3587000	Integrated Circuit	U20,U32	Telcordia Issue 1	Level I		2.00	0.060682	.6500	16479361.92
1211000180	Inductor	L3	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1189633184	Capacitor	C338,C358, C449,EC18,EC19, EC20	Telcordia Issue 1	Level I		6.00	0.004562	.1466	219195994.91
1189633184	Capacitor	C357	Telcordia Issue 1	Level I	36.00	1.00	0.008550	.0458	116952494.84
1211106872	Inductor	L13	Telcordia Issue 1	Level I	37.80	1.00	0.004396	.0235	227474389.79
1211106872	Inductor	L6	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1211105673	Inductor	L1	Telcordia Issue 1	Level I		1.00	0.086680	.4642	11536631.31
14S3121800	Integrated Circuit	U17	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
1189647180	Capacitor	EC21,EC22,EC23, EC24,EC25	Telcordia Issue 1	Level I		5.00	0.004562	.1222	219195994.91
1315482110	Semiconductor	U12,U15,U16	Telcordia Issue 1	Level I		3.00	0.080292	1.2900	12454560.96
1314895510	Integrated Circuit	U28	Telcordia Issue 1	Level I	46.10	1.00	1.119711	5.9965	893087.84
1315441012	Semiconductor	Q14	Telcordia Issue 1	Level I		1.00	0.080292	.4300	12454560.96
1122522890	Capacitor	C126,C201,C315, C356,C390,C84	Telcordia Issue 1	Level I		6.00	0.004562	.1466	219195994.91
1124468090	Capacitor	C430	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
11E9547680	Capacitor	C265,C266,C267, C268,C269,C360	Telcordia Issue 1	Level I		6.00	0.004562	.1466	219195994.91
11E1547090	Capacitor	C239,C240	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
1124582880	Capacitor	C135,C44,C54	Telcordia Issue 1	Level I		3.00	0.004562	.0733	219195994.91
1124522290	Capacitor	C125	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
11E1510050	Capacitor	C176,C177,C86,C87, TC11,TC12,TC21, TC22,TC24,TC25, TC27,TC28,TC3,TC34, TC4,TC43	Telcordia Issue 1	Level I		16.00	0.004562	.3909	219195994.91
11E1647650	Capacitor	C164,C183,C188, C235,C236,C237, C238,C459	Telcordia Issue 1	Level I		8.00	0.004562	.1955	219195994.91

AAEON Reliability Prediction Report

Part Number 9697QM6717-D
Reference Des
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Environment GF, GU - Ground Fixed, Uncontrolled
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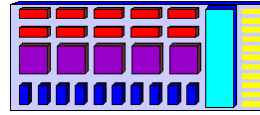


Description
File Name AEC-6876.RPJ
Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
11E9622080	Capacitor	C395,C410	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
11C4501790	Capacitor	C195	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
14S2083600	Integrated Circuit	U36	Telcordia Issue 1	Level I		1.00	0.026648	.1427	37526359.19
1181610180	Capacitor	EC7	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
1212306030	Resistor	FB1,FB11,FB2,FB22,FB24,FB25,FB26,FB7,FB9	Telcordia Issue 1	Level I		9.00	0.011559	.5571	86512540.36
105A566513	Resistor	R11,R20	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A702263	Resistor	R14,R36,R574,R575, R624,R653	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
1050507530	Resistor	R16,R19,R71	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A575003	Resistor	R21	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050505164	Resistor	R27	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050548714	Resistor	R85	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A535713	Resistor	R766,R798	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A503333	Resistor	R42,R572	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A504723	Resistor	R503	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050520034	Resistor	R673,R97	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A503039	Resistor	R106,R646,R838	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
1050700002	Resistor	R111	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050514324	Resistor	R126	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050584514	Resistor	R137,R138	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1059501001	Resistor	R204	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050501234	Resistor	R234,R238,R692	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A510213	Resistor	R235,R811	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050532414	Resistor	R387	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A580623	Resistor	R237	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A566519	Resistor	R239,R240	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A502039	Resistor	R243,R649,R839	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A700239	Resistor	R280	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050538314	Resistor	R299,R339	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050527424	Resistor	R300,R340	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050540224	Resistor	R302,R844	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1050505633	Resistor	R308	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A715003	Resistor	R389,R394	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A501533	Resistor	R491,R492,R849	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
105A705139	Resistor	R524,R525,R537,R538,R918,R919	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
1054700289	Resistor	R534	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82

AAEON Reliability Prediction Report

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Description
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Time 10:30
Failure Rate 18.672808
MTBF 53,554

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate, %	MTBF, Unit
105A544213	Resistor	R566	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A522123	Resistor	R573	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A571513	Resistor	R598	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A506823	Resistor	R641	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A525563	Resistor	R667	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1050524934	Resistor	R695	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A549963	Resistor	R709	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A537463	Resistor	R711	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A511823	Resistor	R754	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A706209	Resistor	R788	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A727033	Resistor	R812,R881	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
14S4021301	Integrated Circuit	U1,U4,U46,U5,U6,U7	Telcordia Issue 1	Level I		6.00	0.060682	1.9499	16479361.92
1314780511	Integrated Circuit	U2	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
14S5A00704	Integrated Circuit	U13,U60,U61	Telcordia Issue 1	Level I		3.00	0.026648	.4281	37526359.19
14S9108500	Integrated Circuit	U14,U29,U34,U35, U59	Telcordia Issue 1	Level I		5.00	0.060682	1.6249	16479361.92
14S5A00802	Integrated Circuit	U57,U58,U63,U64	Telcordia Issue 1	Level I		4.00	0.026648	.5708	37526359.19
1121647480	Capacitor	C465	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
1189633162	Capacitor	EC15,EC16	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
121230603S	Inductor	FB10,FB23,FB3,FB4, FB6	Telcordia Issue 1	Level I		5.00	0.002281	.0611	438391989.82
1212306035	Inductor	FB12,FB13,FB14, FB15,FB16,FB8	Telcordia Issue 1	Level I		6.00	0.002281	.0733	438391989.82
12123D0001	Inductor	FB17,FB18,FB19	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
1212308054	Resistor	FB20,FB21	Telcordia Issue 1	Level I		2.00	0.011559	.1238	86512540.36
1752310000	Miscellaneous	FS2,FS3	Telcordia Issue 1	Level I		2.00	0.003000	.0321	33333333.33
1311390610	Semiconductor	Q83	Telcordia Issue 1	Level I		1.00	0.024088	.1290	41515203.19
11C1522480	Capacitor	C136,C311,C37	Telcordia Issue 1	Level I		3.00	0.004562	.0733	219195994.91
1050533214	Resistor	R301	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A747003	Resistor	R405,R892	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
121110226U	Inductor	L17	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
14S3102000	Integrated Circuit	U75	Telcordia Issue 1	Level I		1.00	0.060682	.3250	16479361.92
1211100114	Inductor	FB5,L11,L9	Telcordia Issue 1	Level I		3.00	0.002281	.0366	438391989.82
12123C0010	Inductor	FB28,FB29	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
1315970211	Semiconductor	U68,U69,U70,U71	Telcordia Issue 1	Level I		4.00	0.160584	3.4399	6227280.48
105A503423	Resistor	R454,R900	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
11E9547650	Capacitor	C291	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
1315230111	Semiconductor	Q90	Telcordia Issue 1	Level I		1.00	0.000000	.0000	.00
105A590923	Resistor	R236	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82

AAEON Reliability Prediction Report

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Failure Rate 18.672808
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Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Quantity	Failure Rate, Unit	Failure Rate,%	MTBF, Unit
1050702734	Resistor	R902	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
1124510180	Capacitor	C108	Telcordia Issue 1	Level I		1.00	0.004562	.0244	219195994.91
165320520C	Connection	COM1,COM3,COM4, COM5,COM6,DIO1, USB3,USB4	Telcordia Issue 1	Level I		8.00	0.005780	.2476	173025080.71
1211104760	Inductor	L18	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A547513	Resistor	R37,R41	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
105A538303	Resistor	R253	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A527413	Resistor	R823	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A549903	Resistor	R810,R860	Telcordia Issue 1	Level I		2.00	0.002281	.0244	438391989.82
11A4447190	Capacitor	C141,C469	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
11C4515190	Capacitor	C130,C175	Telcordia Issue 1	Level I		2.00	0.004562	.0489	219195994.91
105A551103	Resistor	R348	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
105A537413	Resistor	R846	Telcordia Issue 1	Level I		1.00	0.002281	.0122	438391989.82
16515A2994	Connection	DIMM1	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
16515A2992	Connection	DIMM2	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
175011901C	Miscellaneous	BAT1	Telcordia Issue 1	Level I		1.00	0.900000	4.8198	1111111.11
1655902030	Connection	BAT1	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
175910000B	Miscellaneous	BZ1	Telcordia Issue 1	Level I		1.00	0.150000	.8033	6666666.67
1654439501	Connection	CN1	Telcordia Issue 1	Level I		1.00	0.022540	.1207	44365405.31
1655305020	Connection	CN12	Telcordia Issue 1	Level I		1.00	0.002890	.0155	346050161.43
1654434300	Connection	CN13	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1655404020	Connection	CN3	Telcordia Issue 1	Level I		1.00	0.002312	.0124	432562701.78
1169656191	Capacitor	C132,C145	Telcordia Issue 1	Level I		2.00	0.005476	.0587	182603895.42
1655004014	Connection	FAN1,FAN2	Telcordia Issue 1	Level I		2.00	0.001156	.0124	865125403.57
1653003101	Connection	JP1,JP2,JP3,JP4, JP5,JP7	Telcordia Issue 1	Level I		6.00	0.001734	.0557	576750269.05
1653003201	Connection	JP6	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1654612307	Connection	KM1	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1652522208	Connection	USB LAN1,USB LAN2	Telcordia Issue 1	Level I		2.00	0.023118	.2476	43256270.18
165490700C	Connection	SATA1,SATA2	Telcordia Issue 1	Level I		2.00	0.001156	.0124	865125403.57
1189656194	Capacitor	EC2,EC4,EC5,EC6, EC8	Telcordia Issue 1	Level I		5.00	0.004562	.1222	219195994.91
1181610192	Capacitor	EC1,EC10,EC13,EC14, EC26,EC3	Telcordia Issue 1	Level I		6.00	0.004562	.1466	219195994.91
1652517205	Connection	AUDIO1	Telcordia Issue 1	Level I		1.00	0.001156	.0062	865125403.57
1654232200	Connection	CN9	Telcordia Issue 1	Level I		1.00	0.036989	.1981	27035168.86
1655004011	Connection	PWR1,PWR2	Telcordia Issue 1	Level I		2.00	0.023118	.2476	43256270.18
1119622196	Capacitor	C196,C197,C222, C223	Telcordia Issue 1	Level I		4.00	0.072244	1.5476	13842006.46
1654907002	Connection	SATA3,SATA4	Telcordia Issue 1	Level I		2.00	0.004046	.0433	247178686.73