

# GENE-A55E-A11

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 8500.213760 MTBF: 117,644 Hours
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Issue date

QE Manager

Test Engineer

2016-11-28

KJ Wang

Louie Lee

# Reliability Prediction (MTBF)

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**I . Model Name:** GENE-A55E-A11

**II . Prediction Date:** November. 28th, 2016

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

**IV . Predicted by:** Louie Lee

**V . Equipment:** Windchill Quality Solutions 10.1

## **VI. Simulation Environment:**

- Temperature: 30 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 Failure rate multiplier is 1000000000.
- MTBF : MTBF is always specified in hours.

**VIII. Prediction Result:**

GENE-A55E-A11 (M/B: 9697A55E04-D):

- Failure Rate: 8500.213760

- MTBF: 117,644 Hours

**AAEON Reliability Prediction  
Summary**

**File Name:** GENE-A55E-A11.rfp  
**Duty Cycle:** 100  
**Calculation Model:** Telcordia Issue 2  
**Method:** Method I Case 3

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
GENE-A55E-A11	9697A55E04-D		1	8500.213760	117,644

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500104	Resistor	R339,R585		2.547039	2	154078778.388085
1050501004	Resistor	R230,R245,R581,R587,R85		2.547039	5	67008142.102588
1050501234	Resistor	R429		2.547039	1	282340674.079668
1050501634	Resistor	R266		2.547039	1	282340674.079668
1050501834	Resistor	R392		2.547039	1	282340674.079668
1050502204	Resistor	R151,R213,R483,R484,R58,R59,R60,R61,R63,R64,R65,R66,R67,R68		2.547039	14	25477245.255648
1050503934	Resistor	R366		2.547039	1	282340674.079668
1050505124	Resistor	R32		2.547039	1	282340674.079668
1050507530	Resistor	R203,R206		2.547039	2	154078778.388085
1050508224	Resistor	R105		2.547039	1	282340674.079668
1050510034	Resistor	R20,R25,R254,R306,R307,R329,R34,R364,R370,R372,R374,R381,R508,R509,R8,R81,R9		2.547039	17	21160422.299251
1050511824	Resistor	R166		2.547039	1	282340674.079668
1050512714	Resistor	R198		2.547039	1	282340674.079668
1050520004	Resistor	R24		2.547039	1	282340674.079668
1050524934	Resistor	R23		2.547039	1	282340674.079668
1050527424	Resistor	R328,R594		2.547039	2	154078778.388085
1050528714	Resistor	R578,R583		2.547039	2	154078778.388085
1050530004	Resistor	R148,R175,R184		2.547039	3	107020754.986850
1050533004	Resistor	R115,R326,R332,R334,R335		2.547039	5	67008142.102588
1050538314	Resistor	R592,R593		2.547039	2	154078778.388085
1050539264	Resistor	R147		2.547039	1	282340674.079668
1050547004	Resistor	R344,R345,R346,R347		2.547039	4	82309758.689546
1050549904	Resistor	R80		2.547039	1	282340674.079668
1050551004	Resistor	R1,R141,R142		2.547039	3	107020754.986850
1050559004	Resistor	R204		2.547039	1	282340674.079668
1050580614	Resistor	R238,R292		2.547039	2	154078778.388085
1050588704	Resistor	R336		2.547039	1	282340674.079668
1050700002	Resistor	R466		2.547039	1	282340674.079668

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1051747002	Resistor	R573		2.547039	1	282340674.079668
1059700001	Resistor	R289		2.547039	1	282340674.079668
105A500139	Resistor	R11,R154,R156,R183,R197,R2,R41,R455		2.547039	8	43225424.698300
105A500239	Resistor	R199,R205,R353		2.547039	3	107020754.986850
105A501039	Resistor	R12,R19,R28,R349,R350,R42		2.547039	6	56573956.677649
105A501139	Resistor	R586,R590		2.547039	2	154078778.388085
105A501233	Resistor	R457,R72		2.547039	2	154078778.388085
105A501533	Resistor	R425,R454,R475,R501,R73		2.547039	5	67008142.102588
105A501539	Resistor	R275,R305,R380		2.547039	3	107020754.986850
105A502039	Resistor	R10,R26,R270,R360,R361		2.547039	5	67008142.102588
105A502263	Resistor	R223,R295		2.547039	2	154078778.388085
105A502839	Resistor	R572		2.547039	1	282340674.079668
105A503033	Resistor	R37		2.547039	1	282340674.079668
105A503933	Resistor	R472		2.547039	1	282340674.079668
105A505109	Resistor	R309,R451,R453		2.547039	3	107020754.986850
105A505629	Resistor	R29		2.547039	1	282340674.079668
105A506829	Resistor	R489,R490,R491,R494,R496		2.547039	5	67008142.102588
105A510009	Resistor	R310,R330,R407,R422,R575		2.547039	5	67008142.102588
105A511833	Resistor	R4		2.547039	1	282340674.079668
105A515009	Resistor	R128,R546,R547,R548,R77,R78,R79		2.547039	7	48991237.965885
105A516923	Resistor	R506		2.547039	1	282340674.079668
105A518214	Resistor	R579,R588		2.547039	2	154078778.388085
105A524919	Resistor	R240,R249		2.547039	2	154078778.388085
105A526114	Resistor	R311,R589		2.547039	2	154078778.388085
105A528723	Resistor	R235		2.547039	1	282340674.079668
105A530139	Resistor	R580,R582		2.547039	2	154078778.388085
105A534823	Resistor	R236		2.547039	1	282340674.079668
105A546403	Resistor	R591		2.547039	1	282340674.079668
105A547513	Resistor	R427		2.547039	1	282340674.079668

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**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

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**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A552323	Resistor	R379		2.547039	1	282340674.079668
105A566519	Resistor	R402,R584		2.547039	2	154078778.388085
105A590903	Resistor	R449,R458		2.547039	2	154078778.388085
105A700003	Resistor	R202,R255,R258, R271,R272,R314, R337,R338,R343,R38, R424,R450,R476, R543		2.547039	14	25477245.255648
105A700009	Resistor	R133,R137,R16,R176, R185,R207,R208, R209,R210,R211, R212,R214,R215, R219,R227,R246, R247,R251,R261,R27, R287,R316,R319, R322,R340,R354, R356,R373,R418, R421,R432,R433, R441,R448,R461, R463,R469,R473, R478,R48,R480,R487, R488,R497,R499,R50, R500,R502,R503,		2.547039	59	6343183.296372

**Reliability Prediction  
Summary**

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**Assembly:** 9697A55E04-D  
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**Description:**

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**MTBF (hrs):** 117,644  
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700139	Resistor	R106,R116,R117, R129,R13,R132,R134, R149,R153,R157, R158,R161,R163, R164,R165,R167, R169,R170,R172, R174,R192,R21,R229, R239,R250,R263, R264,R274,R276, R297,R298,R30,R300, R302,R303,R358, R362,R383,R394, R400,R411,R412, R419,R420,R43,R437, R438,R474,R511, R566		2.547039	50	7454870.155519
105A701009	Resistor	R566		2.547039	1	282340674.079668



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**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A701039	Resistor	R111,R112,R113, R118,R119,R130, R131,R138,R139, R143,R144,R15, R150,R152,R162,R18, R190,R200,R201,R220, R224,R242,R243, R244,R248,R252, R253,R256,R257, R262,R269,R286, R290,R293,R294, R296,R299,R301, R304,R31,R315, R321,R323,R324,R36, R365,R367,R377,R387,		2.547039	85	4437551.553296
105A701059	Resistor	R145,R233,R333, R363,R415,R44		2.547039	6	56573956.677649
105A701069	Resistor	R74		2.547039	1	282340674.079668
105A701539	Resistor	R570		2.547039	1	282340674.079668
105A702229	Resistor	R171,R173,R221, R222,R351,R396, R471,R549,R556, R577,R70,R71		2.547039	12	29507083.749401
105A703309	Resistor	R136,R33,R375, R378,R40,R423,R492, R498,R504,R510,R52, R82		2.547039	12	29507083.749401
105A703363	Resistor	R267		2.547039	1	282340674.079668
105A703909	Resistor	R553,R557		2.547039	2	154078778.388085

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**Ref Des:**  
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**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A704729	Resistor	R114,R216,R218, R225,R260,R325, R342,R35,R352,R355, R357,R359,R368, R369,R371,R376, R382,R384,R391, R393,R399,R401, R409,R410,R426, R430,R447,R53,R554, R555,R569,R6		2.547039	32	11502702.879433
105A704739	Resistor	R395,R397		2.547039	2	154078778.388085
105A705133	Resistor	R122,R443		2.547039	2	154078778.388085
105A705139	Resistor	R17,R22,R278,R279, R280,R281,R282, R283,R284,R285, R444,R446		2.547039	12	29507083.749401
105A705629	Resistor	R428		2.547039	1	282340674.079668
105A710039	Resistor	R226,R398,R434, R477,R507,R529, R532,R535,R538, R539,R540,R541, R542,R544,R545		2.547039	15	23852782.943395
105A722009	Resistor	R312,R317,R318, R320		2.547039	4	82309758.689546
105A733009	Resistor	R331,R86,R91,R95		2.547039	4	82309758.689546
106B500144	Resistor	RT6		7.724580	1	66247589.526685
106B501032	Resistor	RT1,RT2		7.724580	2	38596617.434771
106B701032	Resistor	RT5		7.724580	1	66247589.526685
106BA47034	Resistor	RT7,RT8		7.724580	2	38596617.434771
1121501690	Capacitor	C502		1.128806	1	704977644.692287

**Reliability Prediction  
Summary**

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1121501691	Capacitor	C102,C104,C106, C107,C108,C109,C11, C110,C111,C112, C113,C114,C115, C116,C117,C12,C120, C121,C122,C123, C124,C125,C126, C127,C129,C136, C141,C142,C143, C144,C145,C15,C150, C151,C152,C153, C155,C156,C157, C158,C159,C160, C161,C162,C163, C164,C166,C167, C17		1.128806	212	4108224.190304
1121647780	Capacitor	C540		1.128806	1	704977644.692287
1124410191	Capacitor	C242,C252,C255, C261,C263,C264		1.128806	6	133979725.056342
1124418090	Capacitor	C179,C188,C42,C43		1.128806	4	196873384.410843
1124418190	Capacitor	C286,C287,C289, C291,C299,C309, C322,C349,C367, C368,C387,C391,C4, C429,C430,C431		1.128806	16	52112480.802928

**File Name:** GENE-A55E-A11.rfp  
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**Ref Des:**  
**Description:**

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1124427091	Capacitor	C137,C138,C146, C147,C148,C149, C496,C497,C498, C499,C73,C79		1.128806	12	68856937.301178
1124433190	Capacitor	C521,C536,C539, C546		1.128806	4	196873384.410843
1124468090	Capacitor	C465		1.128806	1	704977644.692287
1124533190	Capacitor	C527		1.128806	1	704977644.692287
1129522790	Capacitor	C467,C468,C477		1.128806	3	257514172.353070
1129622690	Capacitor	C101,C325,C392, C393,C9		1.128806	5	159367490.199266
1129701690	Capacitor	C534,C537		1.128806	2	375289731.076049
1129710091	Capacitor	C458,C492,C494, C495		1.128806	4	196873384.410843
1129710391	Capacitor	C217,C27		1.128806	2	375289731.076049
1129722091	Capacitor	C271,C272		1.128806	2	375289731.076049
1129747091	Capacitor	C181,C203,C543,C92		1.128806	4	196873384.410843
1174522180	Capacitor	CP3		4.744484	1	159663026.715137
1189610153	Capacitor	C285,C382,C427, C439,C51		4.744484	5	36944177.000623
1189615154	Capacitor	C24,C253,C41,TC1, TC2,TC3		4.744484	6	31179134.677521
1189633151	Capacitor	C17,C171,C178,C66		4.744484	4	45505862.704531
1189922181	Capacitor	C257		4.744484	1	159663026.715137
118C6331B0	Capacitor	C215,C530,C533		4.744484	3	59399119.141203
118C6331B0	Capacitor	C542	26.8	7.566037	1	100120926.641933
11A4410240	Capacitor	C535		1.128806	1	704977644.692287
11A4447190	Capacitor	C518		1.128806	1	704977644.692287
11C1533890	Capacitor	C233		1.128806	1	704977644.692287
11C1547890	Capacitor	C524		1.128806	1	704977644.692287
11C1568890	Capacitor	C547		1.128806	1	704977644.692287

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11C2501790	Capacitor	C139,C140,C204, C210,C226,C228, C240,C315,C32, C326,C336,C346,C58, C59,C65,C72,C75,C76, C77,C82		1.128806	20	41950408.034165
11C2522780	Capacitor	C519,C525,C529		1.128806	3	257514172.353070
11C4401880	Capacitor	C88		1.128806	1	704977644.692287
11C4510240	Capacitor	C133,C522,C541		1.128806	3	257514172.353070
11C4515190	Capacitor	C40,C54		1.128806	2	375289731.076049
11C4515230	Capacitor	C528		1.128806	1	704977644.692287
11C4522290	Capacitor	C513		1.128806	1	704977644.692287
11C4533240	Capacitor	C526		1.128806	1	704977644.692287
11C4547190	Capacitor	C199,C201,C206, C208,C209,C211, C237,C245,C501		1.128806	9	90863428.080946
11C4547290	Capacitor	C131,C132		1.128806	2	375289731.076049
11C9501050	Capacitor	C14,C22		1.128806	2	375289731.076049
11C9510050	Capacitor	C202,C218,C229, C234,C238,C461,C474		1.128806	7	115633865.771428
11C9522060	Capacitor	C503,C504		1.128806	2	375289731.076049
11E1501030	Capacitor	C538,C544		1.128806	2	375289731.076049
11E1510050	Capacitor	C128,C130,C134, C135,C258,C259,C46, C512		1.128806	8	101746760.035398
11E2501690	Capacitor	C1,C251,C515,C517,C55		1.128806	5	159367490.199266
11E2510010	Capacitor	C470		1.128806	1	704977644.692287
11E2510060	Capacitor	C516		1.128806	1	704977644.692287
11E4433090	Capacitor	C284,C358,C408, C447,C49		1.128806	5	159367490.199266
11E9501090	Capacitor	C514		1.128806	1	704977644.692287

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9501091	Capacitor	C10,C13,C16,C18,C182,C19,C198,C200,C207,C21,C2167,C273,C276,C280,C29,C293,C3,C310,C313,C323,C327,C328,C329,C334,C337,C339,C340,C341,C350,C355,C361,C362,C369,C370,C372,C373,C376,C377,C378,C380,C389,C390,C403,C405,C406,C407,C414,C418,C434,C440,		1.128806	54	15865848.114680
11E9510050	Capacitor	C225,C235,C239,C278,C279,C383,C432,C469,C472		1.128806	9	90863428.080946
11E9522790	Capacitor	C31		1.128806	1	704977644.692287
11E9547630	Capacitor	C185		1.128806	1	704977644.692287

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**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E9610080	Capacitor	C105,C172,C174, C193,C194,C214, C216,C232,C265, C321,C330,C335, C354,C397,C420, C423,C424,C433, C441,C442,C450, C457,C52,C63,C81, C85,C86,C91,C94		1.128806	29	29193260.380640
11E9622050	Capacitor	C169,C184,C386, C411,C416,C426		1.128806	6	133979725.056342
11E9622052	Capacitor	C520,C523,C531, C532		1.128806	4	196873384.410843
11E9647680	Capacitor	C154,C168		1.128806	2	375289731.076049
11E9722090	Capacitor	C484,C485,C486		1.128806	3	257514172.353070
11EB610050	Capacitor	C25,C295,C36		1.128806	3	257514172.353070
121110106Z	Inductor	L10		4.944252	1	154760964.143460
121110106Z	Inductor	L9	27.7	7.998644	1	95663362.958653
121110226T	Inductor	L5,L6		4.944252	2	83201062.149749
1211115077	Inductor	L1,L2,L7,L8		4.944252	4	43912872.424775
1212306030	Inductor	FB10,FB11,FB13, FB14,FB15,FB27, FB28,FB29,FB33,FB9		4.944252	10	18485101.557872
1212306035	Inductor	FB1,FB16,FB17,FB2, FB3,FB30,FB31,FB32, FB4,FB5,FB6,FB7		4.944252	12	15520616.516984
1212306036	Inductor	FB18,FB19,FB20, FB21,FB22,FB26,FB8		4.944252	7	25970990.056682
12123C0010	Inductor	FB23,FB24,FB25		4.944252	3	57363284.375370

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1214309008	Inductor	CH1,CH2,CH3,CH4		4.944252	4	43912872.424775
12310025A3	Miscellaneous	Y2,Y3,Y4,Y5,Y7		19.200000	5	3616053.141544
12310027A2	Miscellaneous	Y6		19.200000	1	23844262.770939
1231332726	Miscellaneous	Y1		19.200000	1	23844262.770939
1301005442	Semiconductor	D5,D9		7.793411	2	50578095.223398
1301005444	Semiconductor	D1,D11,D13,D15,D2		7.793411	5	21965031.404253
1301013041	Semiconductor	D14,D4		7.793411	2	50578095.223398
1301075140	Semiconductor	D6,D7,D8		7.793411	3	35106858.962001
1304001340	Optical Device	LED2		79.003355	1	6497172.749112
1304101340	Optical Device	LED3		79.003355	1	6497172.749112
1304300140	Optical Device	LED1		79.003355	1	6497172.749112
1305040241	Semiconductor	U36,U38,U39,U41		7.793411	4	26989084.126235
1310390410	Semiconductor	Q42,Q43		22.463360	2	17315095.066101
1310390413	Semiconductor	Q26,Q27,Q38		22.463360	3	12043329.789539
1315036640	Semiconductor	Q37	27.5	45.274772	1	15699673.442674
1315036640	Semiconductor	Q46		22.463360	1	31642600.748419
1315081180	Semiconductor	Q1,Q29,Q4,Q9		22.463360	4	9270607.712006
1315200312	Semiconductor	Q12,Q13,Q14,Q15,Q7,Q8		22.463360	6	6378891.324740
1315230511	Semiconductor	Q22,Q44		22.463360	2	17315095.066101
1315700216	Semiconductor	Q16,Q17,Q18,Q19,Q21,Q23,Q24,Q25,Q28,Q3,Q30,Q31,Q32,Q33,Q34,Q35,Q36,Q45,Q5,Q6		22.463360	20	2046335.090970
1315762010	Semiconductor	Q2		22.463360	1	31642600.748419
1315971500	Semiconductor	U49,U50		22.463360	2	17315095.066101
1430062670	Integrated Circuit	U17		43.803003	1	11739202.588727
143ALC8920	Integrated Circuit	U3		43.803003	1	11739202.588727
1440002130	Integrated Circuit	U42,U47		43.803003	2	6834791.244197
1440003301	Integrated Circuit	U12	29.1	286.696221	1	1793579.025081
1447511B00	Integrated Circuit	U25		43.803003	1	11739202.588727
1462246408	Integrated Circuit	U37		11.063278	1	58231413.220643
1462GA5EA2	Integrated Circuit	U4		11.063278	1	58231413.220643
14S1035803	Integrated Circuit	U51		43.803003	1	11739202.588727
14S2200900	Integrated Circuit	U48		43.803003	1	11739202.588727
14S3104500	Integrated Circuit	U28,U29		43.803003	2	6834791.244197



**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S3111701	Integrated Circuit	U7		43.803003	1	11739202.588727
14S3112400	Integrated Circuit	U20		43.803003	1	11739202.588727
14S3121600	Integrated Circuit	U5		43.803003	1	11739202.588727
14S3128422	Integrated Circuit	U27		43.803003	1	11739202.588727
14S3524701	Integrated Circuit	U43		43.803003	1	11739202.588727
14S3902500	Integrated Circuit	U10	28.7	280.012229	1	1836392.401281
14S3902500	Integrated Circuit	U33,U35, U40		43.803003	3	4923240.069161
14S3902500	Integrated Circuit	U34	31.9	337.638158	1	1522968.650107
14S3E00100	Integrated Circuit	U1,U2		43.803003	2	6834791.244197
14S4186600	Integrated Circuit	U6		43.803003	1	11739202.588727
14S4811103	Integrated Circuit	U22		43.803003	1	11739202.588727
14S4811103	Integrated Circuit	U23	25.3	228.605561	1	2249343.048747
14S4814380	Integrated Circuit	U45,U46		43.803003	2	6834791.244197
14S4888801	Integrated Circuit	U16	25.9	237.008795	1	2169591.762619
14S4A55E00	Integrated Circuit	U13	29.8	298.738646	1	1721278.235515
14S4T56N00	Integrated Circuit	U14	27.3	65.706418	1	7825907.193955
14S5920400	Integrated Circuit	U21,U26		26.018600	2	14194252.866846
14S5A00702	Integrated Circuit	U8		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U11,U32		26.018600	2	14194252.866846
14S6203205	Integrated Circuit			11.063278	1	58231413.220643
14S6324640	Integrated Circuit			11.063278	1	58231413.220643
14S6366B00	Integrated Circuit	U19,U24		11.063278	2	32567094.099626
1540710280	Resistor	RP15,RP16		9.971436	2	30043399.401299
1540710382	Resistor	RP1,RP10,RP 11,RP13, RP14,RP2,RP 3,RP4, RP5,RP6,RP7 ,RP8, RP9		9.971436	13	6133850.826447
1540733085	Resistor	RP17		9.971436	1	51606907.671214
1540782282	Resistor	RP12		9.971436	1	51606907.671214
16515A2990	Connection	DIMM1		16.184835	1	35685591.360212
165251420B	Connection	CN28,CN29		16.184835	2	20390152.380746
165300310G	Connection	CN10,CN11,C N24, CN25,CN26		16.184835	5	9343344.843761
165300320L	Connection	CN16,CN17		16.184835	2	20390152.380746
1653005201	Connection	CN13,CN27		16.184835	2	20390152.380746
1653120225	Connection	CN15		16.184835	1	35685591.360212
1653132220	Connection	CN14		16.184835	1	35685591.360212
165320520W	Connection	CN18,CN19,C N20,CN5, CN6		16.184835	5	9343344.843761
165320720G	Connection	CN3		16.184835	1	35685591.360212
165321320R	Connection	CN4		16.184835	1	35685591.360212
1653300102	Connection	CN10(1-2), CN25(1-2)		16.184835	2	20390152.380746

**File Name:** GENE-A55E-A11.rfp  
**Assembly:** 9697A55E04-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8500.213760  
**MTBF (hrs):** 117,644  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1653300107	Connection	CN16(3-4), CN17(3-4), CN24(1-2), CN26(1-2)		16.184835	4	11344857.509064
1653300108	Connection	CN11(1-2)		16.184835	1	35685591.360212
1653900039	Connection	CN35		16.184835	1	35685591.360212
165392521J	Connection	CN35		16.184835	1	35685591.360212
1654030006	Connection	CN21		16.184835	1	35685591.360212
1654226303	Connection	CN36		16.184835	1	35685591.360212
1654409103	Connection	CN31		16.184835	1	35685591.360212
1654515308	Connection	CN32		16.184835	1	35685591.360212
1654606306	Connection	CN30		16.184835	1	35685591.360212
1654903902	Connection	CN37		16.184835	1	35685591.360212
1654907009	Connection	CN2		16.184835	1	35685591.360212
1655003010	Connection	CN23		16.184835	1	35685591.360212
1655302025	Connection	CN1		16.184835	1	35685591.360212
1655305025	Connection	CN22		16.184835	1	35685591.360212
1655306026	Connection	CN9		16.184835	1	35685591.360212
1655902034	Connection	CN12		16.184835	1	35685591.360212
1655907131	Connection	CN34		16.184835	1	35685591.360212
1655912032	Connection	CN33		16.184835	1	35685591.360212
1656304022	Connection	CN7		16.184835	1	35685591.360212
175011301C	Miscellaneous	CN12		306.000000	1	1681683.006787
1752000501	Miscellaneous	FS2,FS3		2.400000	2	143944727.196625
1752001603	Miscellaneous	FS1,FS4,FS5		2.400000	3	101854599.204190