

GENE-BT07

Reliability Prediction Report

(MTBF)

Summary	Failure Rate: 4891.125089 ppm MTBF: 204,452 Hours
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Issue date

2015/12/24

Approval

KJ Wang

Test Engineer

Anderson Lin

Reliability Prediction (MTBF)

I . Model Name: GENE-BT07

II . Prediction Date: Dec. 24, 2015

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

IV . Predicted by: Anderson Lin

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 in 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 in specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000,000.
- MTBF : MTBF is always specified in hours.

VIII. Prediction Result:

GENE-BT07 (GENE-BT07-A10-0001):

- Failure Rate: 4891.125089 ppm
- MTBF: 204,452 Hours

**AAEON Reliability Prediction
Summary**

File Name: GENE-BT07.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 1
Method: Method I Case 3

Failure Rate: 4891.125089
MTBF (hrs): 204,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
GENE-BT07	System		1	4891.125089	204,452

**Reliability Prediction
Summary**

File Name: GENE-BT07.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 4891.125089
MTBF (hrs): 204,452
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF_Unit
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
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	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Capacitor			5.644030	1	177178372.261125
	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
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	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Semiconductor			27.506155	1	36355499.331785
	Integrated Circuit			85.069153	1	11755142.304947
	Integrated Circuit			85.069153	1	11755142.304947
	Integrated Circuit			85.069153	1	11755142.304947
	Integrated Circuit			85.069153	1	11755142.304947
	Integrated Circuit			85.069153	1	11755142.304947
	Resistor			19.551836	1	51146091.408551
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
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	Connection			36.783715	1	27185943.669857
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Description:

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MTBF (hrs): 204,452
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Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Connection			36.783715	1	27185943.669857
	Miscellaneous			3.000000	1	333333333.333333
	Miscellaneous			3.000000	1	333333333.333333
	Resistor			2.497097	1	400465049.330154
	Resistor			2.497097	1	400465049.330154
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	Resistor			2.497097	1	400465049.330154
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	Inductor			2.497097	1	400465049.330154
	Inductor			2.497097	1	400465049.330154
	Miscellaneous			150.000000	1	6666666.666667
	Miscellaneous			150.000000	1	6666666.666667
	Miscellaneous			150.000000	1	6666666.666667
	Miscellaneous			150.000000	1	6666666.666667
	Semiconductor			27.506155	1	36355499.331785
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