

PER-C20L Reliability Prediction Report (MTBF)

Report NO : 08E070010

3-27-2008

Issue Date

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Manager

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Test Engineer

Reliability Prediction (MTBF)

I . **Model Name:** TF-PER-C20L-A10

II . **Prediction Date:** Mar. 27,2008

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 degree C
- Standard: Telcordia (Bellcore) Standard

VII. **Term and Definition:**

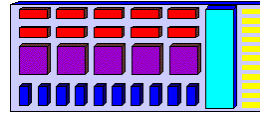
- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure 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-PER-C20L-A10
 - Failure Rate: 1.668153 ppm
 - MTBF: 599,465 Hours

AAEON Reliability Prediction Report

Part Number 9697C20L01-DIP
Reference Des
Date 03. 27, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description Top-level assembly
File Name PER-C20L.RPJ
Time 11:17 上午
Failure Rate 1.668153
MTBF 599,465

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
PER-C20L-A10	9697C20L01-DIP	Belcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	1.668153	599,465

AAEON Reliability Prediction Report

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Date 03. 27, 2008
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (°C) 25.00



Description Top-level assembly
File Name PER-C20L.RPJ
Time 11:17 上午
Failure Rate 1.668153
MTBF 599,465

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653002211	Connection	CN2,CN4	Bellcore Issue 6	Level I		0.002276	2.00	.2729	0.004552	439390135.35
1653005212	Connection	CN1,CN3	Bellcore Issue 6	Level I		0.005690	2.00	.6822	0.011379	175756054.14
1212306030	Inductor	L1-L3	Bellcore Issue 6	Level I		0.002268	3.00	.4078	0.006803	440974090.03
1129747650	Capacitor	C27,C30,C39,C42	Bellcore Issue 6	Level I		0.004535	4.00	1.0875	0.018142	220487045.01
14S3000300	Inductor	TF1,TF2	Bellcore Issue 6	Level I		0.136062	2.00	16.3129	0.272125	7349568.17
14S6334610	Integrated Circuit	U3,U5	Bellcore Issue 6	Level I		0.030598	2.00	3.6685	0.061196	32681842.61
1129610260	Capacitor	HC1,HC2	Bellcore Issue 6	Level I		0.004535	2.00	.5438	0.009071	220487045.01
105A700009	Resistor	R14,R17,R24,R32,R35,R40,R44,R-76,R84,R85	Bellcore Issue 6	Level I		0.002268	10.00	1.3594	0.022677	440974090.03
105A701039	Resistor	R27,R86,R9	Bellcore Issue 6	Level I		0.002268	3.00	.4078	0.006803	440974090.03
105A703309	Resistor	R77,R82	Bellcore Issue 6	Level I		0.002268	2.00	.2719	0.004535	440974090.03
105A733009	Resistor	R56,R68-R70	Bellcore Issue 6	Level I		0.002268	4.00	.5438	0.009071	440974090.03
1129701690	Capacitor	C10-C13,C15,C17,C24,C25,C28,C-31,C33,C37,C4,C40,C43,C44,C5,C-50,C53,C55,C58,C59,C6,C66,C7-C9	Bellcore Issue 6	Level I		0.004535	27.00	7.3408	0.122456	220487045.01
1129722091	Capacitor	C34,C45	Bellcore Issue 6	Level I		0.004535	2.00	.5438	0.009071	220487045.01
1301053040	Semiconductor	D1,D3	Bellcore Issue 6	Level I		0.023881	2.00	2.8632	0.047762	41874327.58
1231325050	Miscellaneous	Y1,Y2	Bellcore Issue 6	Level I		0.150000	2.00	17.9840	0.300000	6666666.67
1653008202	Connection	JP1	Bellcore Issue 6	Level I		0.009104	1.00	.5457	0.009104	109847533.84
1129710050	Capacitor	C1,C14,C16,C19,C2,C20,C21,C3	Bellcore Issue 6	Level I		0.004535	8.00	2.1751	0.036283	220487045.01
14S5A73200	Integrated Circuit	U6,U7	Bellcore Issue 6	Level I		0.039296	2.00	4.7113	0.078592	25448028.36
14S4820900	Integrated Circuit	U1	Bellcore Issue 6	Level I		0.039296	1.00	2.3556	0.039296	25448028.36
105A710039	Resistor	R3,R80	Bellcore Issue 6	Level I		0.002268	2.00	.2719	0.004535	440974090.03
105A505109	Resistor	R48-R51,R60-R63	Bellcore Issue 6	Level I		0.002268	8.00	1.0875	0.018142	440974090.03
105A701539	Resistor	R23,R43	Bellcore Issue 6	Level I		0.002268	2.00	.2719	0.004535	440974090.03
105A507509	Resistor	R52-R55,R64-R67	Bellcore Issue 6	Level I		0.002268	8.00	1.0875	0.018142	440974090.03
105A702209	Resistor	R26,R7,R71,R8	Bellcore Issue 6	Level I		0.002268	4.00	.5438	0.009071	440974090.03
1124427090	Capacitor	C35,C36,C47,C48	Bellcore Issue 6	Level I		0.004535	4.00	1.0875	0.018142	220487045.01
105A500139	Resistor	R1,R12,R22,R30,R42	Bellcore Issue 6	Level I		0.002268	5.00	.6797	0.011339	440974090.03
105A561909	Resistor	R18,R36	Bellcore Issue 6	Level I		0.002268	2.00	.2719	0.004535	440974090.03
105A510009	Resistor	R5	Bellcore Issue 6	Level I		0.002268	1.00	.1359	0.002268	440974090.03
105A703329	Resistor	R13,R19-R21,R31,R37-R39	Bellcore Issue 6	Level I		0.002268	8.00	1.0875	0.018142	440974090.03

