



AAEON Technology INC.
ISO-9001/ISO-14001 Certified
Industrial Automation PCs

PCM-3708
Reliability Prediction Report
(MTBF)

Release Date: FEB. 04, 2002

Issue Stamp

QA Manager

QE Manager

Test Engineer

Reliability Prediction (MTBF)

I . Model Name: PCM-3708

II .Description: PC/104. PLUS VGA Card.(Rev:A1.0)

III . Prediction Date: FEB. 04. 2002

IV. Prediction Site: AAEON QE Dept.

V . Predicted by : Linda Sun

VI. Equipment: Relex Ver.7.2 Visual Reliability Software

VII. Simulation Environment:

- Temperature: 25 degrees C(No temperature rise condition)
- Standard: Telcordia (Bellcore) Standard

VIII. 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.

IX. Prediction Result:

- Failure Rate: 1.885064ppm
- MTBF: 530,486Hours

X. Prediction Table:

AAEON Reliability Prediction Report

Part Number 9697370802
Reference Des
Date 02. 4, 2002
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00



Description Top-level assembly
File Name PCM-3708A10.RPJ
Time 2:11 PM
Failure Rate 1.885064
MTBF 530,486

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
PCM-3708-A10	9697370802	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	1.885064	530,486

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Description Top-level assembly
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Time 2:11 PM
Failure Rate 1.885064
MTBF 530,486

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1059700001	Resistor	L13	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
105A510003	Resistor	R62,R65-66,R69,R71,R78-80,R82,-R95	Bellcore Issue 6	Level I		0.002268	10.00	1.2030	0.022677	440974090.03
105A500233	Resistor	R104,R110,R122	Bellcore Issue 6	Level I		0.002268	3.00	.3609	0.006803	440974090.03
105A536503	Resistor	R96	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
105A527463	Resistor	R29	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
105A501033	Resistor	R1,R46	Bellcore Issue 6	Level I		0.002268	2.00	.2406	0.004535	440974090.03
105A511503	Resistor	R2	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
105A518703	Resistor	R3	Bellcore Issue 6			0.000756	1.00	.0401	0.000756	1322922270.09
105A507503	Resistor	R73-75,R83,R85,R102	Bellcore Issue 6	Level I		0.002268	6.00	.7218	0.013606	440974090.03
105A535703	Resistor	R77	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
105A700003	Resistor	R7,R27,R34,R37,R48,R68,R76,R1-03,R105,R108,R112-117,R119	Bellcore Issue 6	Level I		0.002268	17.00	2.0451	0.038551	440974090.03
105A703303	Resistor	R6,R63,R106,R118,R120-121	Bellcore Issue 6	Level I		0.002268	6.00	.7218	0.013606	440974090.03
105A704723	Resistor	R5,R8,R24-26,R47,R64,R100-101	Bellcore Issue 6	Level I		0.002268	9.00	1.0827	0.020409	440974090.03
105A705133	Resistor	R21-23,R41-42	Bellcore Issue 6	Level I		0.002268	5.00	.6015	0.011339	440974090.03
105A710003	Resistor	R107,R109,R111,R123	Bellcore Issue 6	Level I		0.002268	4.00	.4812	0.009071	440974090.03
105A701053	Resistor	R97	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
1122701680	Capacitor	C5,C7-10,C12-24,C26-27,C30,C34-,C36,C39-40,C42,C50,C52-53,C55-,C59-60,C63,C66-67,C72	Bellcore Issue 6	Level I		0.001598	36.00	3.0509	0.057512	625953979.55
1124422080	Capacitor	C11,C64-65	Bellcore Issue 6	Level I		0.001060	3.00	.1687	0.003181	943198589.05
1124501780	Capacitor	C31,C38,C41,C51,C54	Bellcore Issue 6	Level I		0.001060	5.00	.2812	0.005301	943198589.05
1124510180	Capacitor	C35	Bellcore Issue 6	Level I		0.001060	1.00	.0562	0.001060	943198589.05
1124482080	Capacitor	C37,C44,C46-49	Bellcore Issue 6	Level I		0.001060	6.00	.3375	0.006361	943198589.05
1124410080	Capacitor	C57,C61,C68	Bellcore Issue 6	Level I		0.001060	3.00	.1687	0.003181	943198589.05
1124405080	Capacitor	C58,C62,C69	Bellcore Issue 6	Level I		0.001060	3.00	.1687	0.003181	943198589.05
1124533080	Capacitor	C70,C74-76	Bellcore Issue 6	Level I		0.001060	4.00	.2250	0.004241	943198589.05
1149622050	Capacitor	C4,C28-29,C43	Bellcore Issue 6	Level I		0.004535	4.00	.9624	0.018142	220487045.01
1141610050	Capacitor	C1-2,C6,C25,C32-33,C56,C73,C78	Bellcore Issue 6	Level I		0.002357	9.00	1.1253	0.021214	424256814.77
1212308056	Inductor	B1,L2-7,L11-12,L17	Bellcore Issue 6	Level I		0.002268	10.00	1.2030	0.022677	440974090.03
1212306039	Inductor	L15	Bellcore Issue 6	Level I		0.002268	1.00	.1203	0.002268	440974090.03
1212306031	Inductor	L1,L8-10,L14,L16,L18	Bellcore Issue 6	Level I		0.002268	7.00	.8421	0.015874	440974090.03

