

# PCM-5895 Reliability Prediction Report (MTBF)

Report NO : 07E070006

**3-3-2007**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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I . **Model Name:** PCM-5895

II . **Prediction Date:** Mar. 3, 2007

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: 22.9 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:**

- PCM-5895
  - Failure Rate: 11.584540 ppm
  - MTBF: 86,322 Hours

### AAEON Reliability Prediction Report

**Part Number** 9697589516  
**Reference Des**  
**Date** 03. 3, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
PCM-5895	9697589516	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	11.584540	86,322

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**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1231124550	Miscellaneous	Y4	Bellcore Issue 6	Level I		0.150000	1.00	1.2948	0.150000	6666666.67
1231125050	Miscellaneous	Y5,Y7	Bellcore Issue 6	Level I		0.150000	2.00	2.5897	0.300000	6666666.67
1651032220	Connection	U11	Bellcore Issue 6	Level I		0.016302	1.00	.1407	0.016302	61341617.77
1653002100	Connection	JP5	Bellcore Issue 6	Level I		0.001019	1.00	.0088	0.001019	981465884.26
1652508204	Connection	CN21	Bellcore Issue 6	Level I		0.004076	1.00	.0352	0.004076	245366471.06
1653003100	Connection	JP7	Bellcore Issue 6	Level I		0.001528	1.00	.0132	0.001528	654310589.50
1653003101	Connection	JP11,JP13,JP6,JP9	Bellcore Issue 6	Level I		0.001528	4.00	.0528	0.006113	654310589.50
1653005201	Connection	CN18,CN26,CN6,CN8	Bellcore Issue 6	Level I		0.005094	4.00	.1759	0.020378	196293176.85
1653006100	Connection	CN2	Bellcore Issue 6	Level I		0.020378	1.00	.1759	0.020378	49073294.21
1653002202	Connection	CN4	Bellcore Issue 6	Level I		0.002038	1.00	.0176	0.002038	490732942.13
1653120225	Connection	CN9	Bellcore Issue 6	Level I		0.020378	1.00	.1759	0.020378	49073294.21
1653132220	Connection	CN9	Bellcore Issue 6	Level I		0.032604	1.00	.2814	0.032604	30670808.88
1653207200	Connection	CN15	Bellcore Issue 6	Level I		0.007132	1.00	.0616	0.007132	140209412.04
1653208200	Connection	CN14	Bellcore Issue 6	Level I		0.008151	1.00	.0704	0.008151	122683235.53
1653213201	Connection	CN16	Bellcore Issue 6	Level I		0.013245	1.00	.1143	0.013245	75497375.71
1653217202	Connection	CN20	Bellcore Issue 6	Level I		0.017321	1.00	.1495	0.017321	57733287.31
1653220203	Connection	CN19	Bellcore Issue 6	Level I		0.020378	1.00	.1759	0.020378	49073294.21
1653300100	Connection	J3	Bellcore Issue 6	Level I		0.001019	1.00	.0088	0.001019	981465884.26
1653300101	Connection	J1	Bellcore Issue 6	Level I		0.001019	1.00	.0088	0.001019	981465884.26
1653300102	Connection	J10-J14,J4-J9	Bellcore Issue 6	Level I		0.001019	11.00	.0967	0.011208	981465884.26
1655420020	Connection	CN10	Bellcore Issue 6	Level I		0.010189	1.00	.0880	0.010189	98146588.43
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	7.7690	0.900000	11111111.11
1655003010	Connection	CN1	Bellcore Issue 6	Level I		0.001528	1.00	.0132	0.001528	654310589.50
1653220208	Connection	CN12	Bellcore Issue 6	Level I		0.020378	1.00	.1759	0.020378	49073294.21
1119610297	Capacitor	C233	Bellcore Issue 6	Level I		0.063680	1.00	.5497	0.063680	15703454.15
1653900034	Connection	CFD1	Bellcore Issue 6	Level I		0.001019	1.00	.0088	0.001019	981465884.26
1111610194	Capacitor	C323,C351,C87,C99	Bellcore Issue 6	Level I		0.038208	4.00	1.3193	0.152833	26172423.58
1759100008	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.2948	0.150000	6666666.67
1189656190	Capacitor	C102,C16,C17	Bellcore Issue 6	Level I		0.004351	3.00	.1127	0.013054	229816479.92
1653003205	Connection	CN13,CN25,JP10,JP12,JP4,JP8	Bellcore Issue 6	Level I		0.005094	6.00	.2639	0.030567	196293176.85
1653005206	Connection	CN7	Bellcore Issue 6	Level I		0.005094	1.00	.0440	0.005094	196293176.85

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**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
165300420F	Connection	CN17	Bellcore Issue 6	Level I		0.004076	1.00	.0352	0.004076	245366471.06
1651592492	Connection	DIMM1	Bellcore Issue 6	Level I		0.093737	1.00	.8092	0.093737	10668107.44
1654260207	Connection	PC11	Bellcore Issue 6	Level I		0.061133	1.00	.5277	0.061133	16357764.74
105A501033	Resistor	R315,R316,R319,R326,R327,R329-R330	Bellcore Issue 6	Level I		0.002176	7.00	.1315	0.015230	459632959.83
105A512113	Resistor	R402	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
105A700003	Resistor	FB10-FB14,FB16,FB4,FB5,R108,R-162,R164,R208,R212,R216,R218,R-221,R223,R227	Bellcore Issue 6	Level I		0.002176	18.00	.3381	0.039162	459632959.83
105A700003	Resistor	R234,R239,R243,R244,R247,R249-R251,R270,R286,R289,R320,R446-R448,R451	Bellcore Issue 6	Level I		0.002176	15.00	.2817	0.032635	459632959.83
105A700003	Resistor	R462,R471,R475,R486,R487,R505-R520,R524,R526,R549,R78,R99	Bellcore Issue 6	Level I		0.002176	12.00	.2254	0.026108	459632959.83
105A701003	Resistor	R117,R144,R68	Bellcore Issue 6	Level I		0.002176	3.00	.0563	0.006527	459632959.83
105A702203	Resistor	R147,R150-R154,R156,R158,R160-R167,R170,R171,R177,R179,R181-R182,R185	Bellcore Issue 6	Level I		0.002176	17.00	.3193	0.036986	459632959.83
105A702203	Resistor	R209,R374	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A703303	Resistor	R176,R195,R305,R306,R340,R341-R355-R358,R364,R377,R378,R380-R434,R445	Bellcore Issue 6	Level I		0.002176	16.00	.3005	0.034810	459632959.83
105A703303	Resistor	R449,R74,R95	Bellcore Issue 6	Level I		0.002176	3.00	.0563	0.006527	459632959.83
105A703323	Resistor	R118,R69	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A704723	Resistor	R102,R107,R110,R111,R145,R186-R188,R190,R194,R217,R228-R230-R245,R278	Bellcore Issue 6	Level I		0.002176	15.00	.2817	0.032635	459632959.83
105A704723	Resistor	R296,R454,R456,R458,R548,R70,-R72,R84,R86,R87,R90	Bellcore Issue 6	Level I		0.002176	11.00	.2066	0.023932	459632959.83
105A708223	Resistor	R250,R253,R258,R259,R271,R273-R282,R297,R299,R538-R542	Bellcore Issue 6	Level I		0.002176	14.00	.2629	0.030459	459632959.83
105A710003	Resistor	R202,R279,R98	Bellcore Issue 6	Level I		0.002176	3.00	.0563	0.006527	459632959.83
105A700133	Resistor	R157,R159,R168,R187,R205,R219-R220,R222,R235,R238,R240,R241-R254,R264	Bellcore Issue 6	Level I		0.002176	14.00	.2629	0.030459	459632959.83
105A700133	Resistor	R265,R275,R276,R287,R294,R322-R325,R338,R354,R368,R396,R397-R452,R503	Bellcore Issue 6	Level I		0.002176	14.00	.2629	0.030459	459632959.83

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**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A700133	Resistor	R73,R77	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A733003	Resistor	R198,R204,R324,R79,R80,R83	Bellcore Issue 6	Level I		0.002176	6.00	.1127	0.013054	459632959.83
105A701033	Resistor	R148,R206,R210,R215,R233,R237- R263,R266-R268,R280,R285,R288- R291,R292	Bellcore Issue 6	Level I		0.002176	15.00	.2817	0.032635	459632959.83
105A701033	Resistor	R298,R301,R314,R362,R365-R367- R369,R373,R375,R376,R430-R432- R500,R523	Bellcore Issue 6	Level I		0.002176	16.00	.3005	0.034810	459632959.83
105A701033	Resistor	R544,R89	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A701533	Resistor	R321,R522	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A702733	Resistor	R116,R401	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A747003	Resistor	R361	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
1059700001	Resistor	FB55,FB57,FB58,FB59	Bellcore Issue 6	Level I		0.002176	4.00	.0751	0.008703	459632959.83
1059704721	Resistor	R532	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
105A500133	Resistor	R1,R141,R2-R4,R546	Bellcore Issue 6	Level I		0.002176	6.00	.1127	0.013054	459632959.83
105A502223	Resistor	R197,R260,R277,R349,R370,R371	Bellcore Issue 6	Level I		0.002176	6.00	.1127	0.013054	459632959.83
105A503033	Resistor	R318	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
105A504763	Resistor	R502	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
105A505623	Resistor	R308,R507	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A507503	Resistor	R344,R348,R352,R353,R513-R516	Bellcore Issue 6	Level I		0.002176	8.00	.1502	0.017405	459632959.83
105A548713	Resistor	R400	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
105A549963	Resistor	R332-R335,R508,R510-R512	Bellcore Issue 6	Level I		0.002176	8.00	.1502	0.017405	459632959.83
105A705123	Resistor	R323,R504	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
105A705133	Resistor	R459,R460,R74	Bellcore Issue 6	Level I		0.002176	3.00	.0563	0.006527	459632959.83
105A710033	Resistor	R189,R196,R231,R331,R336,R337- R350,R351,R372,R441-R443	Bellcore Issue 6	Level I		0.002176	12.00	.2254	0.026108	459632959.83
105A751003	Resistor	R345-R347,R517-R519	Bellcore Issue 6	Level I		0.002176	6.00	.1127	0.013054	459632959.83
1212306030	Inductor	FB19,FB20,FB25,FB27,FB29,FB3,- FB30-FB34,FB40,FB43-FB46,FB51- -FB54,FB56,FB6	Bellcore Issue 6	Level I		0.002176	22.00	.4132	0.047864	459632959.83
1212306030	Inductor	FB60,FB61,FB63-FB69,FB9	Bellcore Issue 6	Level I		0.002176	10.00	.1878	0.021756	459632959.83
1212306032	Inductor	FB23,FB24,FB26,FB28,FB35-FB39- FB41,FB42,FB47-FB50,R123	Bellcore Issue 6	Level I		0.002176	16.00	.3005	0.034810	459632959.83
1231332721	Miscellaneous	Y3	Bellcore Issue 6	Level I		0.150000	1.00	1.2948	0.150000	6666666.67

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**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

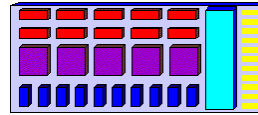
Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1122701680	Capacitor	C201,C387,C392,C393,C397,C398-,C401-C404,C410-C412,C414-C416-,C419-C422	Bellcore Issue 6	Level I		0.004351	20.00	.7512	0.087026	229816479.92
1122701680	Capacitor	C482,C553,C556	Bellcore Issue 6	Level I		0.004351	3.00	.1127	0.013054	229816479.92
1124422080	Capacitor	C241,C242,C279,C280,C283	Bellcore Issue 6	Level I		0.004351	5.00	.1878	0.021756	229816479.92
1124410080	Capacitor	C207,C360,C364,C80	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1124510180	Capacitor	C305,C330,C350,C354,C355	Bellcore Issue 6	Level I		0.004351	5.00	.1878	0.021756	229816479.92
1124510280	Capacitor	C325,C340	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
1124415080	Capacitor	C120,C124	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
1124522280	Capacitor	C117,C475	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
1124522880	Capacitor	C136	Bellcore Issue 6	Level I		0.004351	1.00	.0376	0.004351	229816479.92
1124427080	Capacitor	C310,C321,C543,C544	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1124533080	Capacitor	C118,C334-C336,C361-C363,C86	Bellcore Issue 6	Level I		0.004351	8.00	.3005	0.034810	229816479.92
1124547080	Capacitor	C196,C237,C258,C276,C306	Bellcore Issue 6	Level I		0.004351	5.00	.1878	0.021756	229816479.92
1124547180	Capacitor	C373-C376	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1540710080	Resistor	RP57,RP63	Bellcore Issue 6	Level I		0.005670	2.00	.0979	0.011341	176357688.34
1129747650	Capacitor	C247	Bellcore Issue 6	Level I		0.004351	1.00	.0376	0.004351	229816479.92
1540701380	Resistor	RP58	Bellcore Issue 6	Level I		0.005670	1.00	.0489	0.005670	176357688.34
1540710380	Resistor	RP31,RP46,RP87-RP89	Bellcore Issue 6	Level I		0.005670	5.00	.2447	0.028351	176357688.34
15407103A0	Resistor	RP35	Bellcore Issue 6	Level I		0.007088	1.00	.0612	0.007088	141086150.68
1301005440	Semiconductor	D11,D19,D28,D8	Bellcore Issue 6	Level I		0.022473	4.00	.7760	0.089891	44498466.71
1302001240	Semiconductor	D18,D27	Bellcore Issue 6	Level I		0.026108	2.00	.4507	0.052216	38302746.65
1540782280	Resistor	RP44,RP45,RP47-RP49,RP51,RP5-3,RP54,RP56,RP64,RP65	Bellcore Issue 6	Level I		0.005670	11.00	.5384	0.062373	176357688.34
1651203291	Connection	U3	Bellcore Issue 6	Level I		0.016302	1.00	.1407	0.016302	61341617.77
14S4911216	Integrated Circuit	U20	Bellcore Issue 6	Level I	12.10	0.069400	1.00	.5991	0.069400	14409189.92
14S6334610	Integrated Circuit	U43,U58	Bellcore Issue 6	Level I		0.026212	2.00	.4525	0.052424	38150427.44
14S4048501	Integrated Circuit	U35,U36	Bellcore Issue 6	Level I		0.050856	2.00	.8780	0.101713	19663236.03
1540733082	Resistor	RP59-RP62,RP74-RP80	Bellcore Issue 6	Level I		0.005670	11.00	.5384	0.062373	176357688.34
1301005442	Semiconductor	D15,D9	Bellcore Issue 6	Level I		0.022473	2.00	.3880	0.044945	44498466.71
14S4021310	Integrated Circuit	U45,U47,U48	Bellcore Issue 6	Level I		0.050856	3.00	1.3170	0.152569	19663236.03
14S8416853	Integrated Circuit	U12	Bellcore Issue 6	Level I	10.30	0.062819	1.00	.5423	0.062819	15918841.79





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**Temp. (°C)** 22.90

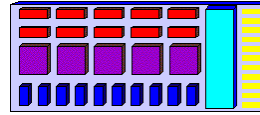


**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129701690	Capacitor	C232,C235,C24,C248-C251,C25,C-254,C256,C257,C26,C260-C262,C-266,C268,C269	Bellcore Issue 6	Level I		0.004351	18.00	.6761	0.078323	229816479.92
1129701690	Capacitor	C27,C272-C275,C277,C28,C282,C-285-C292,C29,C294-C296,C30,C3-02,C303,C307	Bellcore Issue 6	Level I		0.004351	24.00	.9015	0.104431	229816479.92
1129701690	Capacitor	C31,C315-C317,C319,C32,C320,C-324,C329,C33,C331,C338,C34,C34-3-C345,C349	Bellcore Issue 6	Level I		0.004351	17.00	.6385	0.073972	229816479.92
1129701690	Capacitor	C35,C353,C369,C37,C370-C372,C-38,C381,C382,C384,C388,C39,C39-5,C40,C400	Bellcore Issue 6	Level I		0.004351	16.00	.6010	0.069621	229816479.92
1129701690	Capacitor	C405-C407,C409,C41,C42,C425,C-427,C428,C43,C430,C432,C44-C46-C469,C47	Bellcore Issue 6	Level I		0.004351	17.00	.6385	0.073972	229816479.92
1129701690	Capacitor	C470-C474,C477,C48,C481,C49,C-490,C491,C493-C499,C5,C50,C500-C501,C503	Bellcore Issue 6	Level I		0.004351	24.00	.9015	0.104431	229816479.92
1129701690	Capacitor	C506,C507,C51,C510-C513,C517,-C52,C520,C522,C523,C525,C526,-C528-C539	Bellcore Issue 6	Level I		0.004351	27.00	1.0142	0.117485	229816479.92
1129701690	Capacitor	C53,C54,C540,C542,C545,C547,C-548,C55,C550,C551,C56-C74,C76--C79,C8,C9	Bellcore Issue 6	Level I		0.004351	34.00	1.2771	0.147944	229816479.92
1129701690	Capacitor	C92-C95	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1129701790	Capacitor	C450-460	Bellcore Issue 6	Level I		0.004351	11.00	.4132	0.047864	229816479.92
1124433680	Capacitor	C152,C153	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
1301053040	Semiconductor	D10,D12	Bellcore Issue 6	Level I		0.022473	2.00	.3880	0.044945	44498466.71
105A702263	Resistor	R100,R139,R140,R67,R81,R96	Bellcore Issue 6	Level I		0.002176	6.00	.1127	0.013054	459632959.83
1315970110	Semiconductor	U44,U49	Bellcore Issue 6	Level I		0.074909	2.00	1.2933	0.149818	13349540.01
1174522180	Capacitor	CP1-CP5	Bellcore Issue 6	Level I		0.005391	5.00	.2327	0.026953	185506681.24
121230805D	Inductor	FB62	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
14S5A12503	Integrated Circuit	U38	Bellcore Issue 6	Level I		0.034702	1.00	.2996	0.034702	28816976.60
106B501031	Resistor	RT1,RT2	Bellcore Issue 6	Level I		0.010189	2.00	.1759	0.020378	98146588.43
14S2303700	Integrated Circuit	U14	Bellcore Issue 6	Level I		0.050856	1.00	.4390	0.050856	19663236.03
14S2202600	Integrated Circuit	U22,U30	Bellcore Issue 6	Level I		0.050856	2.00	.8780	0.101713	19663236.03
15407822A0	Resistor	RP50,RP52,RP55	Bellcore Issue 6	Level I		0.007088	3.00	.1836	0.021264	141086150.68

**AAEON Reliability Prediction Report**

**Part Number** 9697589516  
**Reference Des**  
**Date** 03. 3, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1301000340	Semiconductor	D1,D3	Bellcore Issue 6	Level I		0.022473	2.00	.3880	0.044945	44498466.71
14S4813905	Integrated Circuit	U41	Bellcore Issue 6	Level I	7.40	0.053369	1.00	.4607	0.053369	18737330.02
14S4813905	Integrated Circuit	U59	Bellcore Issue 6	Level I	10.30	0.062819	1.00	.5423	0.062819	15918841.79
14S5801402	Integrated Circuit	U28,U65	Bellcore Issue 6	Level I		0.034702	2.00	.5991	0.069404	28816976.60
1189633181	Capacitor	C183,C486,C7	Bellcore Issue 6	Level I		0.004351	3.00	.1127	0.013054	229816479.92
1304001340	Semiconductor	D2	Bellcore Issue 6	Level I		0.004019	1.00	.0347	0.004019	248816273.91
105A505109	Resistor	R10-R46,R48,R50,R51,R6-R9	Bellcore Issue 6	Level I		0.002176	44.00	.8263	0.095729	459632959.83
105A507509	Resistor	R389,R390,R391	Bellcore Issue 6	Level I		0.002176	3.00	.0563	0.006527	459632959.83
14S5A00820	Integrated Circuit	U27,U63	Bellcore Issue 6	Level I		0.034702	2.00	.5991	0.069404	28816976.60
14S4105000	Integrated Circuit	U18	Bellcore Issue 6	Level I		0.050856	1.00	.4390	0.050856	19663236.03
14S4100001	Integrated Circuit	U10	Bellcore Issue 6	Level I	9.10	0.058743	1.00	.5071	0.058743	17023277.62
1302012041	Semiconductor	D6,D7	Bellcore Issue 6	Level I		0.026108	2.00	.4507	0.052216	38302746.65
1315992601	Semiconductor	U13	Bellcore Issue 6	Level I		0.149818	1.00	1.2933	0.149818	6674770.01
1121701080	Capacitor	C100,C149,C297,C299,C300,C304-C309,C312,C318,C327,C332,C333-C339,C341	Bellcore Issue 6	Level I		0.004351	14.00	.5259	0.060918	229816479.92
1121701080	Capacitor	C342,C346-C348,C352,C356-C358-C365-C368,C377-C379,C385,C386-C389,C391	Bellcore Issue 6	Level I		0.004351	19.00	.7137	0.082675	229816479.92
1121701080	Capacitor	C423,C466	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
14S3156500	Integrated Circuit	U29	Bellcore Issue 6	Level I	11.40	0.114833	1.00	.9913	0.114833	8708287.07
1124568280	Capacitor	C148	Bellcore Issue 6	Level I		0.004351	1.00	.0376	0.004351	229816479.92
1129722060	Capacitor	C245,C259,C413,C465	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1124522190	Capacitor	C515,C516	Bellcore Issue 6	Level I		0.004351	2.00	.0751	0.008703	229816479.92
14S8253604	Integrated Circuit	U7	Bellcore Issue 6	Level I	15.80	0.084867	1.00	.7326	0.084867	11783144.75
1231316052	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	1.2948	0.150000	6666666.67
1189615187	Capacitor	C476	Bellcore Issue 6	Level I	11.20	0.005392	1.00	.0465	0.005392	185453805.14
1189615187	Capacitor	1C92,C243,C478,C81	Bellcore Issue 6	Level I		0.004351	4.00	.1502	0.017405	229816479.92
1129610051	Capacitor	C14,C150,C159,C167,C172,C187,-C190,C195,C2,C223,C224,C267,C-278,C284,C293	Bellcore Issue 6	Level I		0.004351	15.00	.5634	0.065269	229816479.92
1129610051	Capacitor	C311,C314,C328,C36,C380,C383,-C390,C394,C4,C408,C418,C431,C-435,C436,C463	Bellcore Issue 6	Level I		0.004351	15.00	.5634	0.065269	229816479.92

### AAEON Reliability Prediction Report

**Part Number** 9697589516  
**Reference Des**  
**Date** 03. 3, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 22.90



**Description** Top-level assembly  
**File Name** PCM-5895.RPJ  
**Time** 2:06 下午  
**Failure Rate** 11.584540  
**MTBF** 86,322

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129610051	Capacitor	C464,C468,C479,C480,C483,C485-,C492,C502,C508,C509,C514,C521-,C524,C546	Bellcore Issue 6	Level I		0.004351	14.00	.5259	0.060918	229816479.92
1129610051	Capacitor	C549,C6,C83	Bellcore Issue 6	Level I		0.004351	3.00	.1127	0.013054	229816479.92
1121922090	Capacitor	C557	Bellcore Issue 6	Level I		0.004351	1.00	.0376	0.004351	229816479.92
14S5A12505	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.050856	1.00	.4390	0.050856	19663236.03
14S2533100	Integrated Circuit	U1	Bellcore Issue 6	Level I	21.50	0.225022	1.00	1.9424	0.225022	4444012.00
1050502204	Resistor	R169,R392,R393,R420,R429,R47,-R49,R491-R493,R53-R66	Bellcore Issue 6	Level I		0.002176	24.00	.4507	0.052216	459632959.83
14S4081110	Integrated Circuit	U31	Bellcore Issue 6	Level I		0.050856	1.00	.4390	0.050856	19663236.03
11E9610190	Capacitor	C3,C461,C504	Bellcore Issue 6	Level I		0.004351	3.00	.1127	0.013054	229816479.92
105A507533	Resistor	R101,R82	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
1315993311	Semiconductor	U60	Bellcore Issue 6	Level I		0.149818	1.00	1.2933	0.149818	6674770.01
11E9501090	Capacitor	C194,C424,C429,C439-C449	Bellcore Issue 6	Level I		0.004351	14.00	.5259	0.060918	229816479.92
1315446310	Semiconductor	U24,U25	Bellcore Issue 6	Level I		0.074909	2.00	1.2933	0.149818	13349540.01
14S5A03200	Integrated Circuit	U39	Bellcore Issue 6	Level I		0.034702	1.00	.2996	0.034702	28816976.60
105A501623	Resistor	R104	Bellcore Issue 6	Level I		0.002176	1.00	.0188	0.002176	459632959.83
14S4888801	Integrated Circuit	U53	Bellcore Issue 6	Level I	12.10	0.069400	1.00	.5991	0.069400	14409189.92
105A514713	Resistor	R105,R399	Bellcore Issue 6	Level I		0.002176	2.00	.0376	0.004351	459632959.83
14S5824501	Integrated Circuit	U17,U21	Bellcore Issue 6	Level I		0.034702	2.00	.5991	0.069404	28816976.60
14S6149103	Integrated Circuit	U19	Bellcore Issue 6	Level I	13.80	0.135275	1.00	1.1677	0.135275	7392359.48
14S2272700	Integrated Circuit	U2	Bellcore Issue 6	Level I		0.050856	1.00	.4390	0.050856	19663236.03
14S2272700	Integrated Circuit	U8	Bellcore Issue 6	Level I	11.40	0.114833	1.00	.9913	0.114833	8708287.07
1211104769	Inductor	L1,L3	Bellcore Issue 6	Level I		0.082675	2.00	1.4273	0.165349	12095604.21
121110010T	Inductor	L2	Bellcore Issue 6	Level I		0.082675	1.00	.7137	0.082675	12095604.21
14S4758300	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.034702	1.00	.2996	0.034702	28816976.60
14S4758300	Integrated Circuit	U62	Bellcore Issue 6	Level I	13.70	0.075753	1.00	.6539	0.075753	13200734.02
14S82032A2	Integrated Circuit	U16	Bellcore Issue 6	Level I	11.70	0.067887	1.00	.5860	0.067887	14730307.68
123131435B	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	1.2948	0.150000	6666666.67
14S3020300	Integrated Circuit	U42	Bellcore Issue 6	Level I	15.70	0.153733	1.00	1.3271	0.153733	6504795.71
1315313800	Semiconductor	U4,U5	Bellcore Issue 6	Level I		0.074909	2.00	1.2933	0.149818	13349540.01
1654040001	Connection	CN23	Bellcore Issue 6	Level I		0.020378	1.00	.1759	0.020378	49073294.21

