



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

PCM-8500 rev:A0.2

Reliability Prediction Report

(MTBF)

Release Date: Sep , 15 , 2003

09-15-2003

Issue Stamp

Wayne Chen

A.V.P

Rex Chang

Test Engineer

Reliability Prediction (MTBF)

- . Model Name: PCM-8500 (Rev.A0.2)
- . Description: Compact Board. (Intel 478pin Pentium 4 Mobile 2.4GHz CPU)
- . Prediction Date: Sep. 10, 2003
- . Prediction Site: AAEON DV Dept.
- . Predicted by : Rex Chang
- . Equipment: Relex Ver.7.2 Visual Reliability Software
- . Simulation Environment:
 - Temperature: 24.5 degrees C
 - Standard: Telcordia (Bellcore) Standard

. 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. |

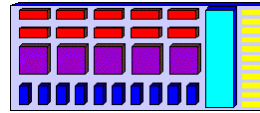
IX. Prediction Result:

- Failure Rate: 20.246142ppm
- MTBF: 49,392Hours (about 5.64 years)

X. Prediction Table:

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00

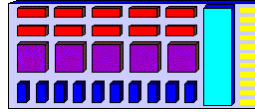


Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
PCM-8500	System	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	20.246142	49,392

AAEON Reliability Prediction Report

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Date 09. 9, 2003
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Temperature 25.00

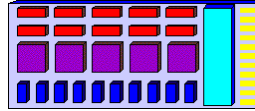


Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653208200	Connection	CN22	Bellcore Issue 6	Level I		0.009104	1.00	.0450	0.009104	109847533.84
1112633190	Capacitor	EC8	Bellcore Issue 6	Level I		0.020771	1.00	.1026	0.020771	48143876.61
1651592490	Connection	DIMM1	Bellcore Issue 6	Level I		0.104691	1.00	.5171	0.104691	9551959.46
1111610210	Capacitor	EC9-EC11	Bellcore Issue 6	Level I		0.045403	3.00	.6728	0.136210	22024783.71
1653003201	Connection	CN10,JP2-3,JP4*2,JP5	Bellcore Issue 6	Level I		0.003414	6.00	.1012	0.020483	292926756.90
1654260201	Connection	PCI1	Bellcore Issue 6	Level I		0.068276	1.00	.3372	0.068276	14646337.85
1655305020	Connection	CN12	Bellcore Issue 6	Level I		0.002845	1.00	.0141	0.002845	351512108.28
1653005201	Connection	CN3-5	Bellcore Issue 6	Level I		0.005690	3.00	.0843	0.017069	175756054.14
1652508204	Connection	CN11	Bellcore Issue 6	Level I		0.004552	1.00	.0225	0.004552	219695067.68
1653220205	Connection	CN16	Bellcore Issue 6	Level I		0.022759	1.00	.1124	0.022759	43939013.54
1653004201	Connection	CN19	Bellcore Issue 6	Level I		0.004552	1.00	.0225	0.004552	219695067.68
1654262300	Connection	CN23	Bellcore Issue 6	Level I		0.070552	1.00	.3485	0.070552	14173875.33
1655003000	Connection	CN24,CN8	Bellcore Issue 6	Level I		0.001707	2.00	.0169	0.003414	585853513.81
16540F0201	Connection	CN9	Bellcore Issue 6	Level I		0.085346	1.00	.4215	0.085346	11717070.28
1653005200	Connection	CN25	Bellcore Issue 6	Level I		0.005690	1.00	.0281	0.005690	175756054.14
1119622193	Capacitor	EC1-2,EC12,EC14-16	Bellcore Issue 6	Level I		0.045203	6.00	1.3396	0.271217	22122471.91
1653003100	Connection	JP1	Bellcore Issue 6	Level I		0.001707	1.00	.0084	0.001707	585853513.81
1211100660	Inductor	L88	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
1655404020	Connection	CN28	Bellcore Issue 6	Level I		0.002276	1.00	.0112	0.002276	439390135.35
1759100008	Miscellaneous	BUZZ1	Bellcore Issue 6	Level I		0.150000	1.00	.7409	0.150000	6666666.67
1653007201	Connection	CN6-7	Bellcore Issue 6	Level I		0.007966	2.00	.0787	0.015931	125540038.67
1653217202	Connection	CN13	Bellcore Issue 6	Level I		0.019345	1.00	.0955	0.019345	51692957.10
1653006100	Connection	CN15	Bellcore Issue 6	Level I		0.003414	1.00	.0169	0.003414	292926756.90
1653004205	Connection	CN17	Bellcore Issue 6	Level I		0.003983	1.00	.0197	0.003983	251080077.35
1655420020	Connection	CN27	Bellcore Issue 6	Level I		0.011379	1.00	.0562	0.011379	87878027.07
1750119011	Miscellaneous	BT1	Bellcore Issue 6	Level I		0.900000	1.00	4.4453	0.900000	1111111.11
1653220208	Connection	CN1	Bellcore Issue 6	Level I		0.022759	1.00	.1124	0.022759	43939013.54
1653925216	Connection	CN2	Bellcore Issue 6	Level I		0.028449	1.00	.1405	0.028449	35151210.83
1653209200	Connection	CN21	Bellcore Issue 6	Level I		0.010241	1.00	.0506	0.010241	97642252.30
1653213201	Connection	CN14	Bellcore Issue 6	Level I		0.014793	1.00	.0731	0.014793	67598482.36
1750220323	Connection	BT1	Bellcore Issue 6	Level I		0.001138	1.00	.0056	0.001138	878780270.71

AAEON Reliability Prediction Report

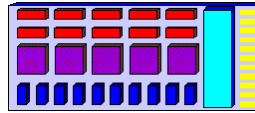
Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00



Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1189682191	Capacitor	EC5-7	Bellcore Issue 6	Level I		0.014146	3.00	.2096	0.042437	70692461.48
1653210203	Connection	CN20	Bellcore Issue 6	Level I		0.011379	1.00	.0562	0.011379	87878027.07
1653003101	Connection	JP7	Bellcore Issue 6	Level I		0.001707	1.00	.0084	0.001707	585853513.81
1653002101	Connection	JP6	Bellcore Issue 6	Level I		0.001138	1.00	.0056	0.001138	878780270.71
14S4284505	Integrated Circuit	U2	Bellcore Issue 6	Level I	16.10	0.096453	1.00	.4764	0.096453	10367741.07
105A511503	Resistor	R408,R412	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A514003	Resistor	R421	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A537463	Resistor	R438-440	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A506823	Resistor	R459,R463	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A523233	Resistor	R461	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A505633	Resistor	R469-470	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A704333	Resistor	R509-510,R518,R521-522	Bellcore Issue 6	Level I		0.002268	5.00	.0560	0.011339	440974090.03
1653005202	Connection	CN18,CN26	Bellcore Issue 6	Level I		0.005690	2.00	.0562	0.011379	175756054.14
14S3020101	Integrated Circuit	U7	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
1651608990	Connection	U1	Bellcore Issue 6	Level I	16.40	0.612745	1.00	3.0265	0.612745	1631999.92
14S5A00700	Integrated Circuit	U9	Bellcore Issue 6	Level I	14.90	0.087257	1.00	.4310	0.087257	11460367.08
14S6200400	Integrated Circuit	U10	Bellcore Issue 6	Level I		0.160483	1.00	.7927	0.160483	6231185.16
1651203291	Connection	U10	Bellcore Issue 6	Level I		0.018207	1.00	.0899	0.018207	54923766.92
14S3065001	Integrated Circuit	U11	Bellcore Issue 6	Level I	14.00	0.157897	1.00	.7799	0.157897	6333229.12
14S1488000	Integrated Circuit	U12	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
14S4256200	Inductor	U15	Bellcore Issue 6	Level I	12.60	0.172431	1.00	.8517	0.172431	5799414.64
14S3000201	Inductor	U17	Bellcore Issue 6	Level I		0.136062	1.00	.6720	0.136062	7349568.17
14S3128420	Integrated Circuit	U19	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
14S4021310	Integrated Circuit	U20-21	Bellcore Issue 6	Level I		0.059366	2.00	.5864	0.118732	16844654.92
14S5A01400	Integrated Circuit	U23,U40-41	Bellcore Issue 6	Level I		0.059366	3.00	.8797	0.178098	16844654.92
14S4280106	Integrated Circuit	U8	Bellcore Issue 6	Level I		0.039296	1.00	.1941	0.039296	25448028.36
14S9660100	Integrated Circuit	U30	Bellcore Issue 6	Level I		0.039296	1.00	.1941	0.039296	25448028.36
105A702423	Resistor	R423	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A504723	Resistor	R455	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A512033	Resistor	R462	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A704733	Resistor	R472-473,R477	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03

AAEON Reliability Prediction Report



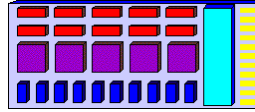
Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00

Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A703923	Resistor	R549	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
14S6334610	Integrated Circuit	U16	Bellcore Issue 6	Level I		0.030598	1.00	.1511	0.030598	32681842.61
14S4871201	Integrated Circuit	U18	Bellcore Issue 6	Level I		0.039296	1.00	.1941	0.039296	25448028.36
14S4048501	Integrated Circuit	U22,U24	Bellcore Issue 6			0.059366	2.00	.5864	0.118732	16844654.92
14S9660200	Integrated Circuit	U29	Bellcore Issue 6	Level I	25.10	0.153242	1.00	.7569	0.153242	6525645.06
105A708229	Resistor	R157,R160-166,R169-182,R185-1-86,R189-190,R192,R195,R199,R20-3,R214,R216-218,R224,R30,R34,R-425-428,R430-432,R504-507,R555	Bellcore Issue 6	Level I		0.002268	49.00	.5488	0.111118	440974090.03
105A513703	Resistor	R32	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A524963	Resistor	R39-40	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A530103	Resistor	R44	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A701009	Resistor	R104,R106,R113-114,R121-122,R-131-132,R135-136,R139-140,R333-,R365,R525-527,R529,R53,R530,R-533,R537,R54,R69,R90,R92,R95,R-98	Bellcore Issue 6	Level I		0.002268	28.00	.3136	0.063496	440974090.03
105A701523	Resistor	R390,R56	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A705609	Resistor	R1,R100,R103,R105,R107-112,R1-15-116,R123-130,R133-134,R137--138,R141-142,R89,R91,R93,R96,R-99	Bellcore Issue 6	Level I		0.002268	31.00	.3472	0.070299	440974090.03
105A706809	Resistor	R147-150,R152-156	Bellcore Issue 6	Level I		0.002268	9.00	.1008	0.020409	440974090.03
105A702239	Resistor	R535,R538,R546	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A710053	Resistor	R210-211,R363,R556	Bellcore Issue 6	Level I		0.013606	4.00	.2688	0.054425	73495681.67
105A747033	Resistor	R229,R231,R233	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A704703	Resistor	R236,R515-516	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A710039	Resistor	R241,R244,R414-415	Bellcore Issue 6	Level I		0.002268	4.00	.0448	0.009071	440974090.03
105A702223	Resistor	R339,R388	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
1189622185	Capacitor	C204-205	Bellcore Issue 6	Level I		0.253894	2.00	2.5081	0.507788	3938653.61
1121722650	Capacitor	C210,C488-490	Bellcore Issue 6	Level I		0.002539	4.00	.0502	0.010156	393852661.82
1122747880	Capacitor	C211,C287	Bellcore Issue 6	Level I		0.001598	2.00	.0158	0.003195	625953979.55
1124433090	Capacitor	C249,C515,C521,C526,C568-570	Bellcore Issue 6	Level I		0.001060	7.00	.0367	0.007422	943198589.05

AAEON Reliability Prediction Report

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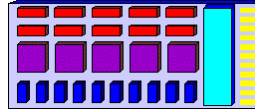


Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1129710390	Capacitor	C253,C257,C262,C272-277,C322,C-327	Bellcore Issue 6	Level I		0.001060	11.00	.0576	0.011662	943198589.05
1124547190	Capacitor	C258,C263,C292-293,C297-298,C-300-301,C303,C306-308,C315,C318-319,C323,C325,C328,C577	Bellcore Issue 6	Level I		0.001060	19.00	.0995	0.020144	943198589.05
1124527190	Capacitor	C282-283,C518,C524	Bellcore Issue 6	Level I		0.001060	4.00	.0209	0.004241	943198589.05
1124410190	Capacitor	C299,C390,C519,C525,C529-530,C-533	Bellcore Issue 6	Level I		0.001060	7.00	.0367	0.007422	943198589.05
1129722091	Capacitor	C374-375,C522-523,C555,C559	Bellcore Issue 6	Level I		0.001060	6.00	.0314	0.006361	943198589.05
1124547280	Capacitor	C461	Bellcore Issue 6	Level I		0.001060	1.00	.0052	0.001060	943198589.05
105A512103	Resistor	R342	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A580623	Resistor	R376	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
1059704761	Resistor	R377,R402	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A703363	Resistor	R381,R394,R403	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A512133	Resistor	R401	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A556003	Resistor	R407,R411	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
1301005441	Semiconductor	D16-18	Bellcore Issue 6	Level I		0.023881	3.00	.3539	0.071643	41874327.58
1301005442	Semiconductor	D19-20	Bellcore Issue 6	Level I		0.023881	2.00	.2359	0.047762	41874327.58
1211104760	Inductor	L1-2	Bellcore Issue 6	Level I		0.086173	2.00	.8513	0.172346	11604581.32
1211100109	Inductor	L4	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
1211108270	Inductor	L6	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
121230805L	Inductor	L11,L14,L18,L41-42,L7,L84	Bellcore Issue 6	Level I		0.002268	7.00	.0784	0.015874	440974090.03
1214309000	Inductor	L12-13,L15-16,L19-20	Bellcore Issue 6	Level I		0.002268	6.00	.0672	0.013606	440974090.03
1212306030	Inductor	L109-111,L24-30,L66	Bellcore Issue 6	Level I		0.002268	11.00	.1232	0.024945	440974090.03
1212306033	Inductor	L31-39	Bellcore Issue 6	Level I		0.086173	9.00	3.8306	0.775556	11604581.32
1212308052	Inductor	L44	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
121230805A	Inductor	L90-93,L95-96	Bellcore Issue 6	Level I		0.002268	6.00	.0672	0.013606	440974090.03
121230603D	Inductor	L104-108	Bellcore Issue 6	Level I		0.002268	5.00	.0560	0.011339	440974090.03
1315700212	Semiconductor	Q2,Q24-26,Q28,Q3,Q30	Bellcore Issue 6	Level I		0.079603	7.00	2.7522	0.557223	12562298.27
1314108312	Integrated Circuit	Q17	Bellcore Issue 6	Level I	41.20	0.838528	1.00	4.1417	0.838528	1192566.14
1310441110	Semiconductor	Q18	Bellcore Issue 6	Level I	24.10	0.045326	1.00	.2239	0.045326	22062263.03
1314101010	Integrated Circuit	Q20	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92

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Temperature 25.00

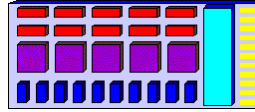


Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate Unit	Quantity	Failure Rate %	Failure Rate	MTBF Unit
1311390610	Semiconductor	Q22,Q27,Q29	Bellcore Issue 6	Level I		0.023881	3.00	.3539	0.071643	41874327.58
1540756081	Resistor	RN1-5,RN7,RN9-10,RN12,RN15,RN-17,RN19,RN21,RN23,RN25,RN27,RN29,RN32-33,RN36-37	Bellcore Issue 6	Level I		0.006246	21.00	.6479	0.131166	160102772.00
1540782282	Resistor	RN38-42	Bellcore Issue 6	Level I		0.006246	5.00	.1543	0.031230	160102772.00
1540722280	Resistor	RN43,RN48	Bellcore Issue 6	Level I		0.006246	2.00	.0617	0.012492	160102772.00
105A500139	Resistor	R208,R212,R262,R264,R267,R340-,R375,R410,R478,R492,R523-524,-R528,R531-532,R536,R544,R550,R-558-561,R563-564,R566,R75,R86--87	Bellcore Issue 6	Level I		0.002268	28.00	.3136	0.063496	440974090.03
1174510180	Capacitor	CP1-14	Bellcore Issue 6	Level I		0.001060	14.00	.0733	0.014843	943198589.05
1124522180	Capacitor	C37	Bellcore Issue 6	Level I		0.001060	1.00	.0052	0.001060	943198589.05
1129701690	Capacitor	C100,C103,C105-111,C119,C131,C-133-178,C182-199,C206,C218-234-,C237,C239-240,C242-243,C245,C-247-248,C251-252,C255-256,C260-261,C264,C266,C268,C270,C279,-C81,C285,C290,C313,C365-368,C-370-372,C377,C379-382,C384-387-,C39,C391-396,C405-408,C418-42-2,C42,C425-428	Bellcore Issue 6	Level I		0.002539	152.00	1.9062	0.385931	393852661.82
1189633080	Capacitor	C250,C254,C259,C40,C41,C59,EC-13	Bellcore Issue 6	Level I		0.004933	7.00	.1706	0.034530	202722669.92
1129747650	Capacitor	C130,C132,C179,C180,C181,C246-,C369,C45,C611,C613,C615,C617,-C623,C625	Bellcore Issue 6	Level I		0.005466	14.00	.3779	0.076519	182961702.19
1189610186	Capacitor	C49	Bellcore Issue 6	Level I		0.004933	1.00	.0244	0.004933	202722669.92
1124501780	Capacitor	C244,C269,C296,C576,C579,C63,C-68-69,C72-73	Bellcore Issue 6	Level I		0.001060	10.00	.0524	0.010602	943198589.05
1129710090	Capacitor	C118,C213-214,C554,C556,C560,C-562-563,C565-567,C575,C578	Bellcore Issue 6	Level I		0.001060	13.00	.0681	0.013783	943198589.05
1129610260	Capacitor	C378	Bellcore Issue 6	Level I		0.000712	1.00	.0035	0.000712	1403854412.74
1059713031	Resistor	R391	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
1122722780	Capacitor	C553,C558	Bellcore Issue 6	Level I		0.001598	2.00	.0158	0.003195	625953979.55

AAEON Reliability Prediction Report

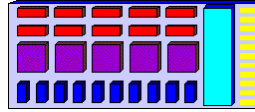
Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00



Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1301005443	Semiconductor	D1,D15,D22	Bellcore Issue 6	Level I		0.023881	3.00	.3539	0.071643	41874327.58
1315970110	Semiconductor	F1-5	Bellcore Issue 6	Level I		0.159207	5.00	3.9318	0.796033	6281149.14
1211106870	Inductor	L3	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
1211101005	Inductor	L5	Bellcore Issue 6	Level I		0.086173	1.00	.4256	0.086173	11604581.32
121230805N	Inductor	L10,L103,L22-23,L67,L8,L9	Bellcore Issue 6	Level I		0.002268	7.00	.0784	0.015874	440974090.03
121230805C	Inductor	L17,L21	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
1212306031	Inductor	L43,L53	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
1212308054	Inductor	L97-102,L89,L94	Bellcore Issue 6	Level I		0.086173	8.00	3.4050	0.689383	11604581.32
1310390410	Semiconductor	Q1,Q10,Q32,Q4-Q7	Bellcore Issue 6	Level I		0.023881	7.00	.8257	0.167167	41874327.58
105A554903	Resistor	R336	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
1315065100	Semiconductor	Q19	Bellcore Issue 6	Level I	21.60	0.142007	1.00	.7014	0.142007	7041890.68
1315035200	Semiconductor	Q21	Bellcore Issue 6	Level I	13.60	0.000000	1.00	.0000	0.000000	.00
1540710084	Resistor	RN11,RN13-14,RN18,RN20,RN22,- RN24,RN26,RN28,RN30-31,RN34-3- 5,RN44-47,RN6,RN8	Bellcore Issue 6	Level I		0.006246	20.00	.6170	0.124920	160102772.00
106B501031	Resistor	RT1-3	Bellcore Issue 6	Level I		0.011379	3.00	.1686	0.034138	87878027.07
1129701080	Capacitor	C209,C238,C278,C280,C284,C286- ,C288-289,C294-295,C302,C304-3- 05,C309,C311,C314,C316-317,C32- 0-321,C326,C38,C417,C457-460,C- 463,C470-471,C484-486,C497,C49- 9,C501,C505,C513	Bellcore Issue 6	Level I		0.005466	38.00	1.0258	0.207694	182961702.19
1189622181	Capacitor	C512,C514	Bellcore Issue 6	Level I		0.079991	2.00	.7902	0.159982	12501378.78
1121547661	Capacitor	C494	Bellcore Issue 6	Level I		0.002539	1.00	.0125	0.002539	393852661.82
1124405080	Capacitor	C116-117	Bellcore Issue 6	Level I		0.001060	2.00	.0105	0.002120	943198589.05
14S3020100	Integrated Circuit	U36	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
14S2221600	Integrated Circuit	U38	Bellcore Issue 6	Level I	14.00	0.157897	1.00	.7799	0.157897	6333229.12
14S5812500	Integrated Circuit	U43	Bellcore Issue 6	Level I		0.037813	1.00	.1868	0.037813	26445709.42
1231332721	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	.7409	0.150000	6666666.67
105A700009	Resistor	R207,R23,R266,R29,R3,R347,R354- ,R358,R362,R371,R395,R399,R444- -445,R447-448,R466,R499,R501-5- 03,R512,R514,R519-520,R562	Bellcore Issue 6	Level I		0.002268	26.00	.2912	0.058960	440974090.03

AAEON Reliability Prediction Report



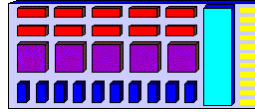
Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00

Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A701039	Resistor	R145,R167-168,R188,R196-197,R-200,R205,R219,R256,R331-332,R3-37,R357,R378,R383,R397,R406,R4-13,R419-420,R429,R456-458,R467-468,R471,R485,R494-495,R497,R-547,R55,R552,R76	Bellcore Issue 6	Level I		0.002268	36.00	.4032	0.081637	440974090.03
105A527469	Resistor	R63-68	Bellcore Issue 6	Level I		0.002268	6.00	.0672	0.013606	440974090.03
105A547503	Resistor	R85	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A704729	Resistor	R146,R193-194,R215,R225-228,R-238-239,R242-243,R246-247,R251-252,R258-261,R265,R268,R349-3-53,R356,R359,R361,R366-3370,R3-73,R379,R434,R450-451,R474-475-,R480,R484,R488,R490,R496,R540-,R542,R551,RR67,R574-577	Bellcore Issue 6	Level I		0.002268	55.00	.6160	0.124724	440974090.03
105A702729	Resistor	R183,R187,R198,R201,R249,R253	Bellcore Issue 6	Level I		0.002268	6.00	.0672	0.013606	440974090.03
105A522663	Resistor	R202	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A702203	Resistor	R206,R409,R454	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A747009	Resistor	R220,R222-223,R452-453,R481	Bellcore Issue 6	Level I		0.002268	6.00	.0672	0.013606	440974090.03
105A756033	Resistor	R230,R232,R234	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A501003	Resistor	R235	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A500233	Resistor	R240,R245,R400	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A503033	Resistor	R248,R257,R460	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
105A701533	Resistor	R254,R255	Bellcore Issue 6	Level I		0.002268	2.00	.0224	0.004535	440974090.03
105A561903	Resistor	R335	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
1213103008	Inductor	NL1-NL9	Bellcore Issue 6	Level I		0.002268	9.00	.1008	0.020409	440974090.03
1300581741	Semiconductor	D2	Bellcore Issue 6	Level I		0.023881	1.00	.1180	0.023881	41874327.58
105A506829	Resistor	R386-387,R389	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03
1315700310	Semiconductor	Q12	Bellcore Issue 6	Level I	34.80	0.194925	1.00	.9628	0.194925	5130172.80
1315600311	Semiconductor	Q11	Bellcore Issue 6	Level I	33.00	0.186963	1.00	.9235	0.186963	5348644.79
1211100860	Inductor	L85-87	Bellcore Issue 6	Level I		0.086173	3.00	1.2769	0.258519	11604581.32
14S2621500	Integrated Circuit	U28	Bellcore Issue 6	Level I	19.80	0.230894	1.00	1.1404	0.230894	4330988.02
105A700003	Resistor	R569,R570,R572	Bellcore Issue 6	Level I		0.002268	3.00	.0336	0.006803	440974090.03

AAEON Reliability Prediction Report

Part Number System
Reference Des
Date 09. 9, 2003
Environment GF, GU - Ground Fixed, Uncontrolled
Temperature 25.00



Description Top-level assembly
File Name PCM-8500 Mobile.RPJ
Time 2:59 PM
Failure Rate 20.246142
MTBF 49,392

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate. Unit	Quantity	Failure Rate. %	Failure Rate	MTBF. Unit
1314856000	Integrated Circuit	U34	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
1315993310	Semiconductor	Q31	Bellcore Issue 6	Level I		0.159207	1.00	.7864	0.159207	6281149.14
105A501123	Resistor	R392	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
105A571513	Resistor	R396	Bellcore Issue 6	Level I		0.002268	1.00	.0112	0.002268	440974090.03
14S1007200	Integrated Circuit	U45	Bellcore Issue 6	Level I		0.059366	1.00	.2932	0.059366	16844654.92
1129610051	Capacitor	C1-36,C101-102,C104,C200-203,C-241,C265,C267,C310,C312,C364,C-383,C472-476,C479-483,C496,C50-2-503,C507-509,C516,C527,C531,-C536,C539-540,C542,C545,C550--551,C81-82,C91-92,EC4	Bellcore Issue 6	Level I		0.005466	81.00	2.1867	0.442716	182961702.19
1129701690	Capacitor	C437-440,C449-456,C46-48,C478,-C491-493,C506,C510-511,C517,C-52,C520,C528,C532,C534-535,C53-7-538,C54,C541,C543-544,C546-5-49,C55,C552,C557,C56,C561,C564-,C57,C571-572,C58,C580-598,C60-,C600-602,C605-610,C61-62,C612-,C614,C616,C618-620,C622,C624,-C626-627	Bellcore Issue 6	Level I		0.002539	91.00	1.1412	0.231051	393852661.82
1129701690	Capacitor	C64-67,C70-71,C74-80,C83-90,C9-3-99	Bellcore Issue 6	Level I		0.002539	28.00	.3511	0.071093	393852661.82
14S4021310	Integrated Circuit	U26	Bellcore Issue 6	Level I	14.50	0.163246	1.00	.8063	0.163246	6125710.50
14S4021310	Integrated Circuit	U27	Bellcore Issue 6	Level I	14.80	0.166534	1.00	.8225	0.166534	6004784.89
14S4871201	Integrated Circuit	U25	Bellcore Issue 6	Level I	17.40	0.103292	1.00	.5102	0.103292	9681283.88
1315700310	Semiconductor	Q14	Bellcore Issue 6	Level I	34.90	0.195375	1.00	.9650	0.195375	5118367.96
1315700310	Semiconductor	Q16	Bellcore Issue 6	Level I	32.10	0.183074	1.00	.9042	0.183074	5462277.11
1315600311	Semiconductor	Q13	Bellcore Issue 6	Level I	35.50	0.198088	1.00	.9784	0.198088	5048255.40
1315600311	Semiconductor	Q15	Bellcore Issue 6	Level I	33.50	0.189150	1.00	.9343	0.189150	5286801.20
1189622181	Capacitor	C495	Bellcore Issue 6	Level I	16.00	0.107712	1.00	.5320	0.107712	9283979.09
1189622181	Capacitor	C498	Bellcore Issue 6	Level I	16.50	0.108666	1.00	.5367	0.108666	9202541.28
1189622181	Capacitor	C500	Bellcore Issue 6	Level I	17.40	0.110395	1.00	.5453	0.110395	9058386.61
1189622181	Capacitor	C504	Bellcore Issue 6	Level I	17.50	0.110588	1.00	.5462	0.110588	9042560.01
1189622181	Capacitor	C44	Bellcore Issue 6	Level I	15.00	0.105822	1.00	.5227	0.105822	9449821.10

