

# AHP-1081

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 7355.772680 MTBF: 135,948 Hours
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Issue date	QE Manager	Test Engineer
2018-03-30	KJ Wang	Louie Lee

# Reliability Prediction (MTBF)

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**I . Model Name:** AHP-1081

**II . Prediction Date:** March. 30th, 2018

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

**IV . Predicted by:** Louie Lee

**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 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 Failure rate multiplier is 1000000000.
- MTBF : MTBF is always specified in hours.

**VIII. Prediction Result:**

AHP-1081 (M/B: 96979455B6-D ; Power Board: 9697P21D00-D ):

- Failure Rate: 7355.772680

- MTBF: 135,948 Hours

**AAEON Reliability Prediction  
Summary**

**File Name:** AHP-1081.rfp  
**Duty Cycle:** 100  
**Calculation Model:** Telcordia Issue 2  
**Method:** Method I Case 3

**Failure Rate:** 7355.772680  
**MTBF (hrs):** 135,948  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
AHP-1081			1	7355.772680	135,948
M/B	96979455B6-D		1	6827.927054	146,457
Power Board	9697P21D00-D		1	597.889584	1,672,550

**File Name:** AHP-1081.rfp  
**Assembly:** 96979455B6-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 6827.927054  
**MTBF (hrs):** 146,457  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050524904	Resistor	R255,R332,R348, R388,R44,R52		2.547039	6	56573956.677649
1050547004	Resistor	R222,R235,R347		2.547039	3	107020754.986850
1059700001	Resistor	R160,R162,R247, R473		2.547039	4	82309758.689546
105A500139	Resistor	R346,R368,R389, R420,R430,R464, R465,R466,R469, R470,R472		2.547039	11	32049696.385471
105A500239	Resistor	R424,R471,R479		2.547039	3	107020754.986850
105A501039	Resistor	R271,R283,R285, R291,R293,R296, R297,R298,R321		2.547039	9	38754445.632391
105A501233	Resistor	R231		2.547039	1	282340674.079668
105A501333	Resistor	R135		2.547039	1	282340674.079668
105A501523	Resistor	R281		2.547039	1	282340674.079668
105A501633	Resistor	R182		2.547039	1	282340674.079668
105A502033	Resistor	R492		2.547039	1	282340674.079668
105A502423	Resistor	R26		2.547039	1	282340674.079668
105A503033	Resistor	R274		2.547039	1	282340674.079668
105A506823	Resistor	R125,R126,R275, R309		2.547039	4	82309758.689546
105A507509	Resistor	R214,R216,R218		2.547039	3	107020754.986850
105A510009	Resistor	R161,R173,R180, R282,R317,R350, R356,R405,R421, R467,R468		2.547039	11	32049696.385471
105A513033	Resistor	R138,R439		2.547039	2	154078778.388085
105A514014	Resistor	R427		2.547039	1	282340674.079668

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105A515009	Resistor	R213,R215,R217, R226,R227,R228, R287,R288,R289, R305,R306,R307, R515,R516,R519, R520,R521,R522		2.547039	18	20032117.836120
105A518223	Resistor	R130		2.547039	1	282340674.079668
105A519123	Resistor	R502		2.547039	1	282340674.079668
105A520003	Resistor	R357		2.547039	1	282340674.079668
105A522103	Resistor	R322,R355,R475		2.547039	3	107020754.986850
105A522663	Resistor	R444		2.547039	1	282340674.079668
105A523713	Resistor	R5		2.547039	1	282340674.079668
105A525503	Resistor	R292		2.547039	1	282340674.079668
105A527463	Resistor	R409,R435		2.547039	2	154078778.388085
105A530123	Resistor	R134		2.547039	1	282340674.079668
105A533223	Resistor	R497		2.547039	1	282340674.079668
105A549903	Resistor	R185,R46		2.547039	2	154078778.388085
105A549919	Resistor	R190,R200,R290, R495,R496,R499, R500		2.547039	7	48991237.965885
105A554969	Resistor	R351,R413,R438,R58		2.547039	4	82309758.689546
105A556213	Resistor	R246		2.547039	1	282340674.079668
105A560423	Resistor	R501		2.547039	1	282340674.079668
105A580663	Resistor	R36,R43		2.547039	2	154078778.388085
105A700003	Resistor	R154,R166,R209, R234,R236,R239, R458,R54,R7,R9		2.547039	10	35079934.879747

**Reliability Prediction  
Summary**

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**Assembly:** 96979455B6-D  
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**Failure Rate:** 6827.927054  
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700009	Resistor	R105,R122,R136, R141,R148,R152, R178,R179,R2, R20,R207,R21,R24, R277,R278,R311,R314, R330,R331,R334, R336,R339,R358, R363,R365,R366, R381,R383,R40,R445, R447,R448,R451, R490,R514,R517, R527,R532,R533,R90, R97		2.547039	41	9043562.562696
105A700103	Resistor	R33		2.547039	1	282340674.079668
105A700109	Resistor	R27,R32,R37,R47		2.547039	4	82309758.689546

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105A700139	Resistor	R109,R120,R133, R140,R142,R145, R147,R157,R163, R167,R168,R169, R172,R174,R177, R189,R19,R204,R238, R241,R245,R248, R250,R267,R268,R3, R326,R367,R382, R404,R452,R454, R460,R477,R478, R483,R485,R487, R491,R493,R494, R498,R503,R504, R509,R511,R513,R65, R77		2.547039	49	7603103.900483
105A701009	Resistor	R1,R115,R117,R143, R149,R22,R229,R352, R39,R4,R416,R463, R55,R93,R96		2.547039	15	23852782.943395



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105A701039	Resistor	R100,R104,R119, R123,R124,R127, R128,R129,R137,R14, R144,R146,R153, R155,R159,R16,R183, R191,R219,R223, R240,R256,R257, R261,R266,R279,R28, R284,R302,R31,R325, R338,R341,R364, R369,R370,R377,R38, R384,R414,R419,R42, R422,R423,R425, R426,R436,R440, R442,R4		2.547039	64	5858544.498073
105A701053	Resistor	R151,R233,R402, R486		2.547039	4	82309758.689546
105A701539	Resistor	R481		2.547039	1	282340674.079668
105A702033	Resistor	R150,R186,R225, R262		2.547039	4	82309758.689546
105A702209	Resistor	R199,R201,R456, R529		2.547039	4	82309758.689546
105A702229	Resistor	R286,R295,R304, R308,R313,R429,R49, R50,R523,R75,R76, R89		2.547039	12	29507083.749401
105A702433	Resistor	R198		2.547039	1	282340674.079668
105A703309	Resistor	R108,R11,R112,R114, R116,R156,R269, R270,R312,R349, R392,R415,R441, R476,R507		2.547039	15	23852782.943395

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105A703903	Resistor	R208,R506		2.547039	2	154078778.388085
105A703909	Resistor	R272,R280,R393, R394,R395,R396, R397,R398,R446		2.547039	9	38754445.632391
105A704723	Resistor	R170		2.547039	1	282340674.079668
105A704729	Resistor	R12,R15,R164,R17, R176,R181,R203, R212,R224,R232, R237,R243,R244, R254,R260,R263, R264,R265,R299, R300,R344,R345, R353,R354,R359, R360,R361,R362, R372,R386,R387, R474,R510,R512		2.547039	34	10846303.620910
105A704733	Resistor	R175,R184,R202, R205,R206		2.547039	5	67008142.102588
105A704739	Resistor	R8		2.547039	1	282340674.079668
105A704763	Resistor	R158,R192,R457		2.547039	3	107020754.986850
105A705133	Resistor	R508		2.547039	1	282340674.079668
105A705139	Resistor	R319,R320,R328, R329		2.547039	4	82309758.689546

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105A705609	Resistor	R102,R103,R106, R107,R110,R111, R337,R431,R433, R434,R437,R449, R459,R48,R56,R59, R62,R63,R67,R68, R71,R72,R78,R79, R83,R84,R85,R87, R88,R91,R92,R94, R95,R98,R99		2.547039	35	10545622.718268
105A706809	Resistor	R455		2.547039	1	282340674.079668
105A708229	Resistor	R324,R371,R373, R375,R378,R379, R385,R401,R407, R411,R443,R474,R81		2.547039	13	27342571.921361
105A710039	Resistor	R193,R194,R195, R196,R197,R210, R211,R252,R253, R258,R301,R335,R380, R461,R462,R4518, R524,R525		2.547039	18	20032117.836120
105A710053	Resistor	R118,R318,R428		2.547039	3	107020754.986850
105A722033	Resistor	R187		2.547039	1	282340674.079668
105A733009	Resistor	R165,R220,R221, R390		2.547039	4	82309758.689546
105A733033	Resistor	R403		2.547039	1	282340674.079668
105A747039	Resistor	R327		2.547039	1	282340674.079668
106B501032	Resistor	RT1,RT3,RT4		7.724580	3	27814800.254496
106B503331	Resistor	RT2		7.724580	1	66247589.526685

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1121501691	Capacitor	C10,C100,C105,C106,C107,C109,C11,C110,C118,C12,C121,C123,C124,C127,C128,C129,C134,C138,C14,C141,C144,C149,C154,C155,C156,C160,C161,C163,C164,C17,C173,C175,C176,C18,C183,C185,C188,C19,C197,C20,C209,C211,C22,C224,C225,C23,C231,C238,C242,C244,C2		1.128806	268	3255865.122703
1122522890	Capacitor	C253,C36,C37,C43,C44,C66,C80		1.128806	7	115633865.771428
1124405090	Capacitor	C232,C233,C234,C235,C236,C237		1.128806	6	133979725.056342
1124410190	Capacitor	C169,C181,C201,C205,C240,C549,C550,C555		1.128806	8	101746760.035398
1124427091	Capacitor	C102,C103,C146,C151,C174,C180,C321,C322,C482,C485,C529,C533,C539,C540		1.128806	14	59316298.011235
1124547190	Capacitor	C135,C551,C552,C553,C554,C557,C559		1.128806	7	115633865.771428

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1124547290	Capacitor	C213,C216,C424, C430		1.128806	4	196873384.410843
1129522790	Capacitor	C527,C528,C544		1.128806	3	257514172.353070
1129701791	Capacitor	C114,C116,C117, C119,C120,C122, C125,C132,C133, C147,C172,C178, C187,C223,C31,C425, C49,C511,C513,C515, C518,C521,C523, C536,C537		1.128806	25	33748887.792763
1129710090	Capacitor	C217,C218,C219, C418,C428,C505, C535		1.128806	7	115633865.771428
1129710390	Capacitor	C126,C131,C142, C189,C190,C192, C200,C203,C509, C526		1.128806	10	82101057.548118
1129715090	Capacitor	C136		1.128806	1	704977644.692287
1129722091	Capacitor	C195,C220,C221, C222		1.128806	4	196873384.410843
1129747090	Capacitor	C152,C502,C503, C504		1.128806	4	196873384.410843
1174522180	Capacitor	CP1,CP2,CP3,CP4, CP5,CP6,CP7,CP8, CP9		4.744484	9	21223953.983763
1181627191	Capacitor	EC1		4.744484	1	159663026.715137
1189615151	Capacitor	TC19,TC28,TC31, TC32,TC4,TC6,TC7		4.744484	7	26949727.707925
1189622850	Capacitor	TC12,TC15,TC18,TC2, TC21,TC22,TC3,TC5		4.744484	8	23741959.646199
1189633184	Capacitor	TC23,TC25		4.744484	2	86049450.747498
1189633193	Capacitor	TC1,TC10,TC13,TC29, TC30,TC9		4.744484	6	31179134.677521

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1189647180	Capacitor	TC14,TC17,T C26, TC27		4.744484	4	45505862.704531
118C6331C1	Capacitor	TC11,TC16,T C20		4.744484	3	59399119.141203
11E1501080	Capacitor	C243		1.128806	1	704977644.692287
11E1533780	Capacitor	C458		1.128806	1	704977644.692287
11E2510060	Capacitor	C157,C210,C 525, C534		1.128806	4	196873384.410843
11E4522880	Capacitor	C111		1.128806	1	704977644.692287
11E9510050	Capacitor	C1,C108,C11 2,C130, C15,C150,C1 58,C177, C179,C182,C 194,C2, C208,C21,C2 12,C24, C241,C250,C 256, C257,C262,C 263, C274,C284,C 290, C294,C298,C 3,C302, C309,C310,C 32,C320, C325,C347,C 363, C369,C370,C 377, C386,C393,C 40,C41, C426,C439,C 45,C460, C462,C467,C 470, C475		1.128806	73	11790641.859792
11E9522680	Capacitor	C13,C137,C3 29,C350, C364,C93,C9 5		1.128806	7	115633865.771428
11E9547490	Capacitor	C331,C338,C 77,C83		1.128806	4	196873384.410843
11E9622050	Capacitor	C159,C341,C 342, C461,C478,C 480, C483		1.128806	7	115633865.771428

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11E9647680	Capacitor	C104,C143,C16,C186,C191,C230,C277,C311,C335,C336,C35,C380,C472,C473,C506,C69		1.128806	16	52112480.802928
11EB510640	Capacitor	C113,C139,C140,C145,C148,C153,C162,C165,C166,C167,C168,C170,C171,C184,C196,C226,C227,C239,C245,C254,C259,C273,C285,C291,C312,C327,C332,C355,C356,C367,C390,C404,C411,C412,C414,C416,C417,C419,C422,C423,C427,C429,C432,C433,C434,C435,C437,C440		1.128806	57	15044000.029504
11EB522640	Capacitor	C308		1.128806	1	704977644.692287
1211100102	Inductor	L11,L3		4.944252	2	83201062.149749
121110100P	Inductor	L10,L2		4.944252	2	83201062.149749
121110156A	Inductor	L1,L6		4.944252	2	83201062.149749
121110226C	Inductor	L4,L5,L7		4.944252	3	57363284.375370
121110226E	Inductor	L8		4.944252	1	154760964.143460

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1212306030	Inductor	FB1,FB10,FB19,FB23,FB24,FB25,FB26,FB27,FB3,FB31,FB32,FB33,FB34,FB35,FB36,FB37,FB39,FB4,FB40,FB41,FB42,FB6,FB7,FB9		4.944252	24	7944471.616128
1212306033	Inductor	FB38		4.944252	1	154760964.143460
1212306035	Inductor	FB11,FB12,FB13,FB14,FB15,FB16,FB17,FB18,FB43,FB44,FB45		4.944252	11	16872203.304846
121230603Z	Inductor	FB20,FB21,FB22		4.944252	3	57363284.375370
1212308054	Inductor	L9		4.944252	1	154760964.143460
12123B0006	Inductor	FB30		4.944252	1	154760964.143460
12123C0006	Inductor	FB28,FB29		4.944252	2	83201062.149749
12123C0007	Inductor	FB2,FB5		4.944252	2	83201062.149749
1214309006	Inductor	CH1,CH2,CH3,CH4,CH5,CH6		4.944252	6	30055900.223009
123131435B	Miscellaneous	Y1		19.200000	1	23844262.770939
1231325058	Miscellaneous	Y4,Y5		19.200000	2	8854051.752197
1231332721	Miscellaneous	Y2		19.200000	1	23844262.770939
1300560040	Semiconductor	D38		7.793411	1	92807310.010983
1300581940	Semiconductor	D37		7.793411	1	92807310.010983
1301002240	Semiconductor	D16,D17		7.793411	2	50578095.223398
1301003440	Semiconductor	D40,D9		7.793411	2	50578095.223398
1301005441	Semiconductor	D13,D14,D15		7.793411	3	35106858.962001
1301005442	Semiconductor	D19,D28,D30,D31,D32		7.793411	5	21965031.404253
1301005443	Semiconductor	D1,D21,D22,D23,D26,D39		7.793411	6	18540453.699406
1301005444	Semiconductor	D2,D3		7.793411	2	50578095.223398
1301053040	Semiconductor	D10,D4,D5,D6,D7,D8		7.793411	6	18540453.699406
1304001340	Semiconductor	D11		7.793411	1	92807310.010983
1304101340	Semiconductor	D12		7.793411	1	92807310.010983



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**Assembly:** 96979455B6-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 6827.927054  
**MTBF (hrs):** 146,457  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1305080040	Semiconductor	D18,D20,D24 ,D25, D27,D29,D35 ,D36, D41,D42,D43 ,D44		7.793411	12	9662455.000384
1305099140	Semiconductor	D33,D34		7.793411	2	50578095.223398
1310390410	Semiconductor	Q10,Q23,Q2 4,Q25, Q35		22.463360	5	7551839.591592
1311138610	Semiconductor	Q31,Q32,Q3 3,Q34		22.463360	4	9270607.712006
1311390610	Semiconductor	Q12,Q28		22.463360	2	17315095.066101
1315030110	Semiconductor	Q2,Q3		22.463360	2	17315095.066101
1315230114	Semiconductor	Q27		22.463360	1	31642600.748419
1315230300	Semiconductor	Q9		22.463360	1	31642600.748419
1315420200	Semiconductor	U50,U51		22.463360	2	17315095.066101
1315446310	Semiconductor	U26,U27		22.463360	2	17315095.066101
1315662210	Semiconductor	U4		22.463360	1	31642600.748419
1315662810	Semiconductor	U31		22.463360	1	31642600.748419
1315667910	Semiconductor	U28,U34		22.463360	2	17315095.066101
1315668012	Semiconductor	U54		22.463360	1	31642600.748419
1315669000	Semiconductor	U56,U57,U58 ,U59		22.463360	4	9270607.712006
1315700212	Semiconductor	Q11,Q13,Q1 4,Q15, Q16,Q17,Q1 8,Q19, Q20,Q21,Q2 2,Q29, Q30,Q36,Q3 7,Q38, Q39,Q4,Q40, Q41,Q5, Q6,Q7,Q8		22.463360	24	1717346.784324
1315700310	Semiconductor	Q1		22.463360	1	31642600.748419
1315889611	Semiconductor	U5,U52		22.463360	2	17315095.066101
1315970211	Semiconductor	U13,U17,U25		22.463360	3	12043329.789539
14S1564201	Integrated Circuit	U22		43.803003	1	11739202.588727
14S2041500	Integrated Circuit	U16		43.803003	1	11739202.588727
14S2045400	Integrated Circuit	U20		43.803003	1	11739202.588727
14S2048800	Integrated Circuit	U2		43.803003	1	11739202.588727
14S2200900	Integrated Circuit	U29		43.803003	1	11739202.588727
14S2591200	Integrated Circuit	U47		43.803003	1	11739202.588727
14S3050100	Integrated Circuit	U12		43.803003	1	11739202.588727
14S3065500	Integrated Circuit	U55		43.803003	1	11739202.588727
14S3128422	Integrated Circuit	U37		43.803003	1	11739202.588727
14S4021301	Integrated Circuit	U36,U41,U42 ,U46		43.803003	4	3879156.910661
14S4048503	Integrated Circuit	U32,U35		43.803003	2	6834791.244197

**File Name:** AHP-1081.rfp  
**Assembly:** 96979455B6-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 6827.927054  
**MTBF (hrs):** 146,457  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S4160020	Integrated Circuit	U15		21.706765	1	23689035.791249
14S428010D	Integrated Circuit	U14		43.803003	1	11739202.588727
14S4294503	Integrated Circuit	U10		43.803003	1	11739202.588727
14S4519500	Integrated Circuit	U49		43.803003	1	11739202.588727
14S4650601	Integrated Circuit	U33		43.803003	1	11739202.588727
14S4825740	Integrated Circuit	U23,U24		43.803003	2	6834791.244197
14S4878100	Integrated Circuit	U6		43.803003	1	11739202.588727
14S5912300	Integrated Circuit	U45		26.018600	1	25551442.237972
14S5A00601	Integrated Circuit	U39		26.018600	1	25551442.237972
14S5A00700	Integrated Circuit	U38		26.018600	1	25551442.237972
14S5A00821	Integrated Circuit	U11,U60		26.018600	2	14194252.866846
14S5A12503	Integrated Circuit	U1,U40		26.018600	2	14194252.866846
14S5A12506	Integrated Circuit	U30		26.018600	1	25551442.237972
14S5A73200	Integrated Circuit	U3		26.018600	1	25551442.237972
14S6201602	Integrated Circuit	U8		11.063278	1	58231413.220643
14S6308002	Integrated Circuit	U18,U19		11.063278	2	32567094.099626
14S634022E	Integrated Circuit	U9		11.063278	1	58231413.220643
14S9811500	Integrated Circuit	U44		43.803003	1	11739202.588727
1540710280	Resistor	RP3,RP4		9.971436	2	30043399.401299
1540733085	Resistor	RP10,RP8,RP9		9.971436	3	21639329.074793
1540782282	Resistor	RP1,RP2,RP5,RP6,RP7		9.971436	5	14126297.426094
1651520000	Connection	DIMM1		16.184835	1	35685591.360212
165251420B	Connection	CN22,CN23		16.184835	2	20390152.380746
1652602105	Connection	CN21		16.184835	1	35685591.360212
1653003201	Connection	JP1,JP2(JP3)		16.184835	2	20390152.380746
1653006101	Connection	JP4(JP5)		16.184835	1	35685591.360212
1653204208	Connection	CN4		16.184835	1	35685591.360212
165320520G	Connection	CN2		16.184835	1	35685591.360212
165320520L	Connection	CN17		16.184835	1	35685591.360212
1653207209	Connection	CN26		16.184835	1	35685591.360212
165321320R	Connection	CN3		16.184835	1	35685591.360212
1653300102	Connection	JP2(1-2),JP3(1-2)		16.184835	2	20390152.380746
1653300107	Connection	JP1(5-6),JP4(2-3),JP5(2-3)		16.184835	3	14515880.849373
1653900039	Connection	CFD1		16.184835	1	35685591.360212
165392521J	Connection	CFD1		16.184835	1	35685591.360212
1654030003	Connection	CN12		16.184835	1	35685591.360212
1654262300	Connection	MPC11		16.184835	1	35685591.360212
1654409103	Connection	CN31		16.184835	1	35685591.360212
1654415305	Connection	CN30		16.184835	1	35685591.360212
1654808309	Connection	CN24		16.184835	1	35685591.360212
1654907006	Connection	CN20		16.184835	1	35685591.360212
1655003010	Connection	CN28		16.184835	1	35685591.360212

**Reliability Prediction  
Summary**

**File Name:** AHP-1081.rfp  
**Assembly:** 96979455B6-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 6827.927054  
**MTBF (hrs):** 146,457  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1655003022	Connection	CN1		16.184835	1	35685591.360212
1655302020	Connection	CN27		16.184835	1	35685591.360212
1655305020	Connection	CN18		16.184835	1	35685591.360212
1655306020	Connection	CN25		16.184835	1	35685591.360212
1655306023	Connection	CN19		16.184835	1	35685591.360212
1655902030	Connection	BAT1		16.184835	1	35685591.360212
1655905032	Connection	CN11,CN13,CN14, CN15		16.184835	4	11344857.509064
1655906033	Connection	CN10		16.184835	1	35685591.360212
1655909031	Connection	CN5,CN6,CN9		16.184835	3	14515880.849373
175011901C	Miscellaneous	BAT1		306.000000	1	1681683.006787
1752001603	Miscellaneous	FS1,FS2		2.400000	2	143944727.196625

**File Name:** AHP-1081.rfp  
**Assembly:** 9697P21D00-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 597.889584  
**MTBF (hrs):** 1,672,550  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050510034	Resistor	R10,R19,R21 ,R26, R27,R5,R7		2.547039	7	48991237.965885
1053500489	Resistor	R15		2.547039	1	282340674.079668
1059700201	Resistor	R14		2.547039	1	282340674.079668
105A501053	Resistor	R3,R6		2.547039	2	154078778.388085
105A501139	Resistor	R29		2.547039	1	282340674.079668
105A501539	Resistor	R1		2.547039	1	282340674.079668
105A502039	Resistor	R12		2.547039	1	282340674.079668
105A509123	Resistor	R18		2.547039	1	282340674.079668
105A512039	Resistor	R13,R9		2.547039	2	154078778.388085
105A515433	Resistor	R24		2.547039	1	282340674.079668
105A523713	Resistor	R20		2.547039	1	282340674.079668
105A549919	Resistor	R8		2.547039	1	282340674.079668
105A700009	Resistor	R23,R25		2.547039	2	154078778.388085
105A701009	Resistor	R2,R22,R28, R4		2.547039	4	82309758.689546
105B503589	Resistor	R16,R17		2.547039	2	154078778.388085
1114633130	Capacitor	C2		4.744484	1	159663026.715137
1124410190	Capacitor	C25,C27		1.128806	2	375289731.076049
1129701790	Capacitor	C20,C28		1.128806	2	375289731.076049
1129747090	Capacitor	C29		1.128806	1	704977644.692287
1181633112	Capacitor	C1		4.744484	1	159663026.715137
11C1522480	Capacitor	C16,C17		1.128806	2	375289731.076049
11C1547890	Capacitor	C24		1.128806	1	704977644.692287
11C4501650	Capacitor	C10,C11,C14 ,C15, C18,C19,C26 ,C5,C9		1.128806	9	90863428.080946
11C4547690	Capacitor	C21,C22,C3, C4		1.128806	4	196873384.410843
11E1522680	Capacitor	C6		1.128806	1	704977644.692287
11E2510060	Capacitor	C12,C13,C23 ,C7,C8		1.128806	5	159367490.199266
1211100111	Inductor	L1		4.944252	1	154760964.143460
12143E0008	Inductor	L2		4.944252	1	154760964.143460
1300414841	Semiconductor	D1,D2		7.793411	2	50578095.223398
1301003440	Semiconductor	D3,D4,D6,D8		7.793411	4	26989084.126235
1302005641	Semiconductor	D7		7.793411	1	92807310.010983
130533CA40	Semiconductor	D5		7.793411	1	92807310.010983
1310390410	Semiconductor	Q1		22.463360	1	31642600.748419
1315442410	Semiconductor	Q3,Q7		22.463360	2	17315095.066101
1315844710	Semiconductor	Q2,Q4,Q5,Q6		22.463360	4	9270607.712006
14S3378000	Integrated Circuit	U2		43.803003	1	11739202.588727
14S3435600	Integrated Circuit	U1		43.803003	1	11739202.588727
14S3520900	Integrated Circuit	U3		43.803003	1	11739202.588727
1655102010	Connection	CN1		16.184835	1	35685591.360212

**Reliability Prediction  
Summary**

**File Name:** AHP-1081.rfp  
**Assembly:** 9697P21D00-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 597.889584  
**MTBF (hrs):** 1,672,550  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1655103010	Connection	CN2		16.184835	1	35685591.360212
1752001900	Connection	F1		16.184835	1	35685591.360212