

# FWS-7810

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 8637.739340 ppm MTBF: 115,771 Hours
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Issue date	Approval	Test Engineer
2013/12/6	Tom Lin	Max Chang

# Reliability Prediction (MTBF)

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**I . Model Name:** FWS-7810

**II . Prediction Date:** December, 6, 2013

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

**IV . Predicted by:** Max Chang

**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:**

FWS-7810 (9697781003-D):

- Failure Rate: 8637.739340 ppm

- MTBF: 115,771 Hours

**AAEON Reliability Prediction  
Summary**

**File Name:** FWS-7810.rfp  
**Duty Cycle:** 100  
**Calculation Model:** Telcordia Issue 2  
**Method:** Method I Case 3

**Failure Rate:** 8637.739340  
**MTBF (hrs):** 115,771  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
FWS-7810	9697781003-D		1	8637.739340	115,771

**File Name:** FWS-7810.rfp  
**Assembly:** 9697781003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8637.739340  
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500334.0000 00000000000	Resistor	R442		2.547039	1	282340674.079668
1050501004.0000 00000000000	Resistor	R234,R301,R344,R55, R74,R812,R813,R814, R820		2.547039	9	38754445.632391
1050501054.0000 00000000000	Resistor	R254,R500		2.547039	2	154078778.388085
1050502204.0000 00000000000	Resistor	R1230,R144, R266, R270,R276,R277, R400,R466,R468, R470,R472,R597, R599,R601,R603, R870,R964,R985		2.547039	18	20032117.836120
1050502224.0000 00000000000	Resistor	R13,R14,R15, R215, R242,R243,R257, R265,R354,R397, R436,R65,R83,R880, R901,R908,R912, R913,R926,R974, R975,R998		2.547039	22	16518584.576317
1050502724.0000 00000000000	Resistor	R438,R995		2.547039	2	154078778.388085
1050503324.0000 00000000000	Resistor	R161,R166,R2,R4, R407,R6,R886,R935		2.547039	8	43225424.698300

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1050504724.0000 00000000000	Resistor	R121,R141,R 142, R146,R148,R 149, R150,R151,R 153, R154,R155,R 157, R159,R160,R 24,R359, R369,R372,R 832, R875,R888,R 894, R898,R902,R 909, R933		2.547039	26	14061076.827148
1050505164.0000 00000000000	Resistor	R416		2.547039	1	282340674.079668
1050506224.0000 00000000000	Resistor	R10,R12,R8		2.547039	3	107020754.986850
1050507524.0000 00000000000	Resistor	R235,R261,R 890, R907,R938		2.547039	5	67008142.102588
1050508224.0000 00000000000	Resistor	R280,R303,R 309, R310,R314,R 324, R330,R331,R 337, R367,R368		2.547039	11	32049696.385471
1050510034.0000 00000000000	Resistor	R201,R216,R 221, R240,R262,R 441, R856,R88		2.547039	8	43225424.698300
1050511009.0000 00000000000	Resistor	R183,R785		2.547039	2	154078778.388085
1050519114.0000 00000000000	Resistor	R35		2.547039	1	282340674.079668
1050521024.0000 00000000000	Resistor	R22		2.547039	1	282340674.079668
1050524004.0000 00000000000	Resistor	R66		2.547039	1	282340674.079668
1050524904.0000 00000000000	Resistor	R113,R114,R 129, R130,R311		2.547039	5	67008142.102588
1050524909.0000 00000000000	Resistor	R202,R348,R 452		2.547039	3	107020754.986850
1050527424.0000 00000000000	Resistor	R249,R788		2.547039	2	154078778.388085

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1050530004.0000 00000000000	Resistor	R147,R156,R 158		2.547039	3	107020754.986850
1050532414.0000 00000000000	Resistor	R798		2.547039	1	282340674.079668
1050533004.0000 00000000000	Resistor	R757,R759		2.547039	2	154078778.388085
1050536514.0000 00000000000	Resistor	R817,R818,R 819		2.547039	3	107020754.986850
1050538314.0000 00000000000	Resistor	R48		2.547039	1	282340674.079668
1050544264.0000 00000000000	Resistor	R179,R46		2.547039	2	154078778.388085
1050547004.0000 00000000000	Resistor	R252,R279		2.547039	2	154078778.388085
1050549904.0000 00000000000	Resistor	R784,R965,R 987		2.547039	3	107020754.986850
1050563420.0000 00000000000	Resistor	R308		2.547039	1	282340674.079668
1050564904.0000 00000000000	Resistor	R244		2.547039	1	282340674.079668
1050582504.0000 00000000000	Resistor	R193		2.547039	1	282340674.079668
1050703334.0000 00000000000	Resistor	R120,R126		2.547039	2	154078778.388085
1050708234.0000 00000000000	Resistor	R91		2.547039	1	282340674.079668
1053510009.0000 00000000000	Resistor	R251	8.1	2.957844	1	243127277.282985
1059700001.0000 00000000000	Resistor	R219,R220,R 577, R578,R579,R 799		2.547039	6	56573956.677649
	Resistor	R59		2.547039	1	282340674.079668

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	Resistor	R1000,R1002 ,R1004, R1006,R1050 ,R1051, R1052,R1053 ,R1095, R1096,R1097 ,R1098, R1117,R1119 ,R1121, R1123,R1159 ,R1160, R1161,R1162 ,R1228, R1229,R1236 ,R124, R125,R132,R 133, R136,R152,R 195, R218,R222,R 229, R255,R263,R 271, R291,R296,R 300,		2.547039	106	3573082.374688
	Resistor	R796		2.547039	1	282340674.079668
	Resistor	R322		2.547039	1	282340674.079668



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	Resistor	R1061,R1062, R1063, R1064,R1076, R1077, R1078,R1079, R1081, R1082,R1083, R1084, R1167,R1168, R1169, R117,R1170, R1180, R1181,R1182, R1183, R1184,R1185, R1186, R1187,R197, R225, R226,R228,R 233, R282,R292,R 321, R342,R343,R 347, R350,R351,R 352,		2.547039	206	1857116.236310
	Resistor	R398		2.547039	1	282340674.079668
	Resistor	R53		2.547039	1	282340674.079668
	Resistor	R258		2.547039	1	282340674.079668
	Resistor	R170		2.547039	1	282340674.079668
	Resistor	R11,R145,R7, R9		2.547039	4	82309758.689546
	Resistor	R382		2.547039	1	282340674.079668
	Resistor	R223,R224,R 238, R326,R385,R 450		2.547039	6	56573956.677649
	Resistor	R501		2.547039	1	282340674.079668
	Resistor	R925		2.547039	1	282340674.079668
	Resistor	R236,R245,R 246, R878,R884		2.547039	5	67008142.102588
	Resistor	R185,R186,R 194, R839		2.547039	4	82309758.689546
	Resistor	R931		2.547039	1	282340674.079668
	Resistor	R67		2.547039	1	282340674.079668
	Resistor	R105,R782		2.547039	2	154078778.388085

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	Resistor	R104,R107,R17,R19,R21,R58,R73,R837,R84,R844		2.547039	10	35079934.879747
	Resistor	R381		2.547039	1	282340674.079668
	Resistor	R305		2.547039	1	282340674.079668
	Resistor	R40		2.547039	1	282340674.079668
	Resistor	R181,R267,R268,R269,R302,R306,R349,R715,R716,R717,R718,R745,R746,R747,R748,R755,R756,R815,R822,R823		2.547039	20	18104712.511396
	Resistor	R315		2.547039	1	282340674.079668
	Resistor	R284		2.547039	1	282340674.079668
	Resistor	R51		2.547039	1	282340674.079668
	Resistor	R797		2.547039	1	282340674.079668
	Resistor	R213		2.547039	1	282340674.079668
	Resistor	R200,R795		2.547039	2	154078778.388085
	Resistor	R821		2.547039	1	282340674.079668
	Resistor	R1011,R1012,R1013,R1014,R1015,R1016,R1017,R1018,R1124,R1125,R1126,R1127,R1128,R1129,R1130,R1131,R564,R565,R566,R567,R711,R712,R713,R714		2.547039	24	15190138.820515
	Resistor	R109,R110,R211,R451		2.547039	4	82309758.689546
	Resistor	R64		2.547039	1	282340674.079668
	Resistor	R776		2.547039	1	282340674.079668
	Resistor	R777		2.547039	1	282340674.079668

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	Resistor	R103,R1232, R1233, R1234,R1235 ,R28, R33,R34,R36 ,R37, R47,R50,R52 ,R57, R778,R824		2.547039	16	22425139.809646
	Resistor	C487,C488,C 489, C490,C491,C 492, C493,C494,C 495, C496,C497,C 500, C503,C505,C 510, C513,C594,C 595, C598,C599,C 610, C629,C645,C 647, C677,C684,C 712, C733,C743,C 745, C747,C752,R 102, R1027,R1028 ,R1029, R1030,R1031 ,R10		2.547039	260	1475556.571700
	Resistor	R298,R317		2.547039	2	154078778.388085
	Resistor	R23,R49,R56 ,R76, R77,R78		2.547039	6	56573956.677649
	Resistor	R137,R138,R 139		2.547039	3	107020754.986850

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	Resistor	R1001,R1003 ,R1005, R1023,R1024 ,R1025, R1026,R1039 ,R1040, R1041,R1042 ,R1116, R1118,R1120 ,R1122, R1139,R1140 ,R1141, R1142,R1151 ,R1152, R1153,R1154 ,R999		2.547039	24	15190138.820515
	Resistor	R25,R26,R27 ,R29, R30,R31		2.547039	6	56573956.677649
	Resistor	R184,R783		2.547039	2	154078778.388085
	Resistor	R829		2.547039	1	282340674.079668
	Resistor	R89		2.547039	1	282340674.079668
	Resistor	R360,R377		2.547039	2	154078778.388085
	Resistor	RT2		7.724580	1	66247589.526685
	Resistor	R140,R903,R T1		7.724580	3	27814800.254496
1119647191.0000 00000000000	Capacitor	C265		1.128806	1	704977644.692287
1121415090.0000 00000000000	Capacitor	C525		1.128806	1	704977644.692287

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1121501691.0000 00000000000	Capacitor	C103,C107,C 108, C109,C110,C 113, C121,C127,C 128, C129,C130,C 131, C132,C133,C 134, C153,C154,C 155, C156,C157,C 158,C16, C162,C164,C 165,C17, C173,C175,C 178,C18, C186,C188,C 189,C19, C195,C2,C20 1,C203, C204,C205,C 206, C209,C210,C 213,		1.128806	388	2254622.323667
1121533480.0000 00000000000	Capacitor	C458,C459		1.128806	2	375289731.076049
1124410191.0000 00000000000	Capacitor	C451		1.128806	1	704977644.692287
1124418090.0000 00000000000	Capacitor	C281,C282		1.128806	2	375289731.076049
1124418190.0000 00000000000	Capacitor	C28,C29,C30 ,C31, C356,C361,C 362, C363,C365,C 366, C367,C368,C 465, C466,C467,C 468, C469,C470,C 471, C472		1.128806	20	41950408.034165

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1124427090.0000 00000000000	Capacitor	C207,C208,C310, C311,C312,C313, C327,C328,C329, C330,C379,C380, C381,C382,C400, C401,C402,C403		1.128806	18	46478509.590073
1124468090.0000 00000000000	Capacitor	C224,C262		1.128806	2	375289731.076049
1124533191.0000 00000000000	Capacitor	C447,C457,C62,C63		1.128806	4	196873384.410843
1124533280.0000 00000000000	Capacitor	C10,C11,C12		1.128806	3	257514172.353070
1124547190.0000 00000000000	Capacitor	C383,C384,C385, C386,C387,C388, C389,C390,C391, C392,C393,C394, C421,C423,C425, C427		1.128806	16	52112480.802928
1129522790.0000 00000000000	Capacitor	C754,C755,C773, C826		1.128806	4	196873384.410843
1129610260.0000 00000000000	Capacitor	C343,C345,C346, C347		1.128806	4	196873384.410843
1129710091.0000 00000000000	Capacitor	C43,C454,C456,C460, C52,C66		1.128806	6	133979725.056342
1129710391.0000 00000000000	Capacitor	C42,C438		1.128806	2	375289731.076049
1129722091.0000 00000000000	Capacitor	C45,C58,C71		1.128806	3	257514172.353070
1174518180.0000 00000000000	Capacitor	CP1,CP2,CP3,CP4		1.128806	4	196873384.410843
1181627194.0000 00000000000	Capacitor	C27,C3,C4,C46,C5, C6		1.128806	6	133979725.056342

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1189656196.0000 00000000000	Capacitor	C123,C124,C125, C142,C143,C163, C176,C177,C193, C268,C275,C409,C72, C73,C77,C78,C80, C81,C84,C867		1.128806	20	41950408.034165
1189682199.0000 00000000000	Capacitor	C104,C105,C146,C15, C179,C220,C221		1.128806	7	115633865.771428
	Capacitor	C184,C187,C190, C191,C215,C253, C314,C315,C316, C317,C322,C323, C324,C325,C335, C336,C337,C338, C339,C340,C341, C342,C39,C428,C429, C430,C431,C695, C696,C697,C698, C699,C700,C701, C702,C703,C704, C705,C706,C707,		1.128806	43	19845816.558772
	Capacitor	C144,C145,C243, C250		1.128806	4	196873384.410843
	Capacitor	C280		1.128806	1	704977644.692287
	Capacitor	C38		1.128806	1	704977644.692287
	Capacitor	C174,C34,C35,C36		1.128806	4	196873384.410843

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	Capacitor	C1,C100,C101,C13,C20,C200,C202,C21,C212,C218,C22,C23,C260,C264,C266,C273,C399,C440,C441,C462,C463,C481,C509,C511,C555,C562,C566		1.128806	27	31305223.485317
	Capacitor	C228,C461		1.128806	2	375289731.076049
	Capacitor	C14,C25,C26,C446		1.128806	4	196873384.410843
	Capacitor	C32		1.128806	1	704977644.692287
	Capacitor	C106,C111,C112,C114,C122,C126,C141,C211,C214,C226,C24,C251,C267,C279,C292,C295,C296,C298,C370,C416,C417,C418,C419,C452,C483,C506,C507,C508,C519,C520,C521,C523,C527,C537,C539,C541,C544,C549,C552,C554		1.128806	52	16465757.036261
	Capacitor	C283,C437,C442,C450,C48,C49,C50, C54		1.128806	8	101746760.035398



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	Capacitor	C219,C229,C434, C435,C455,C55,C56, C83		1.128806	8	101746760.035398
	Capacitor	C621,C623,C625, C627,C635,C637, C639,C641,C668, C669,C670,C671, C739,C740,C741, C742,C748,C749, C750,C751,C775, C777,C779,C781, C787,C789,C791, C793,C814,C815, C816,C817,C859,C86, C860,C861,C862, C863,C864,C865,		1.128806	44	19402916.060511

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	Capacitor	C115,C116,C117, C118,C119,C120, C135,C136,C137, C138,C139,C140, C147,C148,C149, C150,C151,C152, C159,C160,C161, C167,C168,C169, C170,C171,C172, C180,C181,C182, C183,C222,C223, C230,C233,C245, C246,C256,C512		1.128806	39	21841170.168719
	Capacitor	C622,C624,C626, C628,C634,C636, C638,C640,C776, C778,C780,C782, C786,C788,C790, C792		1.128806	16	52112480.802928
1211103372.0000 00000000000	Inductor	L13		4.944252	1	154760964.143460
1211103671.0000 00000000000	Inductor	L3,L4,L5		4.944252	3	57363284.375370
1212306030.0000 00000000000	Inductor	L1,L12		4.944252	2	83201062.149749
	Inductor	FB2,FB21,FB22,FB23, FB24		4.944252	5	35631881.582999
	Inductor	FB1		4.944252	1	154760964.143460
	Inductor	L10,L11,L6,L7,L8, L9		4.944252	6	30055900.223009

File Name: FWS-7810.rfp  
 Assembly: 9697781003-D  
 Ref Des:  
 Description:

Failure Rate: 8637.739340  
 MTBF (hrs): 115,771  
 Temperature: 30  
 Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Inductor	FB10,FB11,F B12, FB13,FB14,F B15, FB16,FB17,F B18, FB19,FB20,F B27, FB28,FB29,F B3,FB30, FB31,FB32,F B33, FB34,FB35,F B36, FB37,FB38,F B6,FB7, FB9		4.944252	27	7084967.359362
	Miscellaneous	Y1,Y10,Y3,Y4 ,Y5,Y6, Y7,Y8,Y9		19.200000	9	2257921.256962
1231332721.0000 00000000000	Miscellaneous	Y2		19.200000	1	23844262.770939
	Connection	SATA2,SATA 3,SATA4, SATA5,SATA 6		16.184835	5	9343344.843761
1300414848.0000 00000000000	Semiconductor	D3		7.793411	1	92807310.010983
1300581940.0000 00000000000	Semiconductor	D25		7.793411	1	92807310.010983
1301005450.0000 00000000000	Semiconductor	Q81		7.793411	1	92807310.010983
1301053040.0000 00000000000	Semiconductor	D7,D8,D9		7.793411	3	35106858.962001
1301400642.0000 00000000000	Semiconductor	D10,D4		7.793411	2	50578095.223398
1304400500.0000 00000000000	Optical Device	LED1		79.003355	1	6497172.749112
1305040241.0000 00000000000	Semiconductor	D15,D16,D17 ,D18, D19,D20,D21 ,D22, D31,D32,D33 ,D34, D35,D36,D37 ,D38		7.793411	16	7341618.295818
1305099140.0000 00000000000	Semiconductor	D1,D2,D23,D 24,D26, D5,D6		7.793411	7	16052497.121446

**File Name:** FWS-7810.rfp  
**Assembly:** 9697781003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8637.739340  
**MTBF (hrs):** 115,771  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1305100541.0000 00000000000	Semiconductor	D11,D12,D13 ,D14, D27,D28,D29 ,D30		7.793411	8	14161142.003130
1310222211.0000 00000000000	Semiconductor	Q27,Q83		22.463360	2	17315095.066101
1310390413.0000 00000000000	Semiconductor	Q30,Q31,Q3 2,Q33, Q34,Q35,Q4 0,Q46, Q47,Q48,Q6 1		22.463360	11	3618924.681337
1311138610.0000 00000000000	Semiconductor	Q100,Q84,Q 85,Q86, Q87,Q88,Q8 9,Q90, Q91,Q93,Q9 4,Q95, Q96,Q97,Q9 8,Q99		22.463360	16	2533798.883137
1311390612.0000 00000000000	Semiconductor	Q56		22.463360	1	31642600.748419
1314043113.0000 00000000000	Semiconductor	VR1	18.8	36.744024	1	19344618.628717
1314108412.0000 00000000000	Semiconductor	U15		22.463360	1	31642600.748419
1314895510.0000 00000000000	Semiconductor	U6	17	11.713609	2	33205413.319712
1314895510.0000 00000000000	Semiconductor	U14		7.487787	1	94927802.245258
1315034430.0000 00000000000	Semiconductor	Q29,Q43,Q4 4,Q45		22.463360	4	9270607.712006
1315190100.0000 00000000000	Semiconductor	U26,U36		22.463360	2	17315095.066101
1315200312.0000 00000000000	Semiconductor	Q55		22.463360	1	31642600.748419
1315230114.0000 00000000000	Semiconductor	Q60		22.463360	1	31642600.748419
1315503010.0000 00000000000	Semiconductor	Q10,Q14,Q1 6,Q18, Q21,Q23,Q8, Q9		22.463360	8	4877097.849338
1315700211.0000 00000000000	Semiconductor	Q1,Q108,Q1 9,Q2,Q20, Q3,Q36,Q37, Q38,Q4, Q42,Q49,Q5, Q50,Q51, Q53,Q54,Q5 8,Q59,Q6, Q77		22.463360	21	1952685.860459

**File Name:** FWS-7810.rfp  
**Assembly:** 9697781003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8637.739340  
**MTBF (hrs):** 115,771  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315700212.0000 00000000000	Semiconductor	Q82		22.463360	1	31642600.748419
1315703011.0000 00000000000	Semiconductor	Q41	19.7	37.565834	1	18921425.329023
1315703011.0000 00000000000		Q13,Q15,Q17,Q22,Q28,Q41		0.000000	5	0.000000
1430958200.0000 00000000000	Integrated Circuit	U1	27.5	260.791417	1	1971737.930951
	Integrated Circuit	U11	25.7	61.890039	1	8308482.934437
1469128350.0000 00000000000	Integrated Circuit	U17		11.063278	1	58231413.220643
	Integrated Circuit	U49		11.063278	1	58231413.220643
	Integrated Circuit	U12		43.803003	1	11739202.588727
	Integrated Circuit	U13		26.018600	1	25551442.237972
	Integrated Circuit	TF1,TF2,TF3,TF4		43.803003	4	3879156.910661
	Integrated Circuit	U2		43.803003	1	11739202.588727
	Integrated Circuit	U5,U8		43.803003	2	6834791.244197
	Integrated Circuit	U16		26.018600	1	25551442.237972
	Integrated Circuit	U29	23.3	67.740932	1	9814047.920794
	Integrated Circuit	U30	21.7	63.712039	1	10434648.875219
	Integrated Circuit	U22,U23,U24,U28U31		26.018600	5	6292206.574138
	Integrated Circuit	U21	26.6	76.728786	1	8664450.252577
	Integrated Circuit	U38		26.018600	1	25551442.237972
	Integrated Circuit	U7		26.018600	1	25551442.237972
	Integrated Circuit	U20		26.018600	1	25551442.237972
	Integrated Circuit	U27,U35		26.018600	2	14194252.866846
	Integrated Circuit	U39,U40,U41,U42,U44,U45,U46,U47		11.063278	8	9485898.777921
	Integrated Circuit	U9		26.018600	1	25551442.237972
1540775082.0000 00000000000	Resistor	RP3,RP4,RP5,RP6		9.971436	4	17049357.262242
1540782080.0000 00000000000	Resistor	RP1		9.971436	1	51606907.671214
1540782280.0000 00000000000	Resistor	RP2		9.971436	1	51606907.671214
1601110201.0000 00000000000	Switching Device	SW1		23.541578	1	23887758.027611
	Connection	DIMM1,DIMM3		16.184835	2	20390152.380746
	Connection	DIMM2,DIMM4		8.828092	2	39263183.907396
1651611500.0000 00000000000	Connection	U3		16.184835	1	35685591.360212

**File Name:** FWS-7810.rfp  
**Assembly:** 9697781003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 8637.739340  
**MTBF (hrs):** 115,771  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Connection	LAN1,LAN2,L AN3, LAN4		16.184835	4	11344857.509064
	Connection	LAN5,LAN6,L AN7, LAN8		16.184835	4	11344857.509064
1652826200.0000 00000000000	Connection	COM1/USB1		16.184835	1	35685591.360212
1653002100.0000 00000000000	Connection	CN4		16.184835	1	35685591.360212
1653003100.0000 00000000000	Connection	COMS1		16.184835	1	35685591.360212
1653004200.0000 00000000000	Connection	FP1,FP2		16.184835	2	20390152.380746
	Connection	KB/MS1		16.184835	1	35685591.360212
	Connection	CN16		16.184835	1	35685591.360212
	Connection	COM2		16.184835	1	35685591.360212
	Connection	VGA1		16.184835	1	35685591.360212
	Connection	USB2		16.184835	1	35685591.360212
1653212100.0000 00000000000	Connection	LPC1		16.184835	1	35685591.360212
1653212203.0000 00000000000	Connection	LCM1		16.184835	1	35685591.360212
1653300100.0000 00000000000	Connection	FP1(5-7)		16.184835	1	35685591.360212
1653300101.0000 00000000000	Connection	COMS1(1-2) 1		16.184835	1	35685591.360212
1653300102.0000 00000000000	Connection	JP2(1-2)		16.184835	1	35685591.360212
1655004011.0000 00000000000	Connection	CN11,CN12,C N13, CN15,CN7		16.184835	5	9343344.843761
1655004018.0000 00000000000	Connection	CPU_FAN11, SYS_FAN11, SYS_FAN22		16.184835	3	14515880.849373
1655408023.0000 00000000000	Connection	ATX2		16.184835	1	35685591.360212
1655424022.0000 00000000000	Connection	ATX1		16.184835	1	35685591.360212
	Miscellaneous	BT1A		306.000000	1	1681683.006787
1750220326.0000 00000000000	Connection	BT1		16.184835	1	35685591.360212
1752002700.0000 00000000000	Miscellaneous	FS1,FS2		2.400000	2	143944727.196625
1812850290.0000 00000000000	Resistor	R173		59.596669	1	8668615.590992