

FWS-2273

Reliability Prediction Report (MTBF)

Summary	Failure Rate: 9113.679563 MTBF: 109,725 Hours
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Issue date	QE Manager	Test Engineer
2017-10-19	KJ Wang	Louie Lee

Reliability Prediction (MTBF)

I . Model Name: FWS-2273

II . Prediction Date: October. 19th, 2017

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:

FWS-2273 (M/B: 9697227301-D):

- Failure Rate: 9113.679563

- MTBF: 109,725 Hours

**AAEON Reliability Prediction
Summary**

File Name: FWS-2273.rfp
Duty Cycle: 100
Calculation Model: Telcordia Issue 2
Method: Method I Case 3

Failure Rate: 9113.679563
MTBF (hrs): 109,725
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
FWS-2273	9697227301-D		1	9113.679563	109,725

File Name: FWS-2273.rfp
Assembly: 9697227301-D
Ref Des:
Description:

Failure Rate: 9113.679563
MTBF (hrs): 109,725
Temperature: 30
Environment: GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500104	Resistor	R142,R45,R835,R889		2.547039	4	82309758.689546
1050501054	Resistor	R92		2.547039	1	282340674.079668
1050501064	Resistor	R1076		2.547039	1	282340674.079668
1050501224	Resistor	R1058,R1063		2.547039	2	154078778.388085
1050502004	Resistor	R1112,R1113,R126, R235		2.547039	4	82309758.689546
1050502204	Resistor	R111,R133,R137,R143,R233,R85		2.547039	6	56573956.677649
1050502224	Resistor	R1062,R1084,R1089,R1150,R1158,R1159,R497,R498,R653,R804,R903,R907, R934		2.547039	13	27342571.921361
1050502734	Resistor	R123		2.547039	1	282340674.079668
1050503324	Resistor	R1061,R1133,R189,R208,R218,R221,R222,R224,R227,R228,R292,R326,R343,R359,R360,R365,R366,R374,R383,R409,R411,R412,R413,R415,R416,R418,R423,R465,R531,R544,R562,R598,R764,R917,R992,R999		2.547039	36	10261285.143207
1050503334	Resistor	R1001,R1010,R257,R301,R318,R320,R44,R457,R464,R496,R503,R915,R930		2.547039	13	27342571.921361

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1050503634	Resistor	R3		2.547039	1	282340674.079668
1050504724	Resistor	R1034,R1043, R1074, R1077,R1080, R1083, R145,R150,R 173, R198,R453,R 47,R567, R579,R580,R 610, R749,R762,R 783, R784,R904,R 914		2.547039	22	16518584.576317
1050504724-00	Resistor	R434,R550,R 564, R582		2.547039	4	82309758.689546
1050504734-00	Resistor	R157,R50		2.547039	2	154078778.388085
1050504764	Resistor	R66		2.547039	1	282340674.079668
1050505634-00	Resistor	R563		2.547039	1	282340674.079668
1050506224	Resistor	R761		2.547039	1	282340674.079668
1050510034	Resistor	R1085,R1157, R1160, R1161,R1166, R130, R238,R52,R5 72,R830		2.547039	10	35079934.879747
1050510504	Resistor	R985,R989		2.547039	2	154078778.388085
1050511304	Resistor	R927		2.547039	1	282340674.079668
1050512034-00	Resistor	R746,R795		2.547039	2	154078778.388085
1050512104	Resistor	R62		2.547039	1	282340674.079668
1050512124	Resistor	R406,R565		2.547039	2	154078778.388085
1050513704	Resistor	R918		2.547039	1	282340674.079668
1050516004	Resistor	R509,R510,R 511, R512,R661,R 679, R680,R683,R 685, R687,R691,R 693		2.547039	12	29507083.749401
1050516034	Resistor	R28		2.547039	1	282340674.079668
1050516524	Resistor	R204,R99		2.547039	2	154078778.388085
1050517804	Resistor	R860,R921		2.547039	2	154078778.388085
1050520004	Resistor	R1073,R1075, R319		2.547039	3	107020754.986850
1050520034	Resistor	R941		2.547039	1	282340674.079668
1050520510	Resistor	R116		2.547039	1	282340674.079668
1050521024	Resistor	R70		2.547039	1	282340674.079668
1050522004	Resistor	R216		2.547039	1	282340674.079668

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1050522124	Resistor	R232		2.547039	1	282340674.079668
1050524904	Resistor	R666,R973		2.547039	2	154078778.388085
1050528734	Resistor	R211		2.547039	1	282340674.079668
1050531624	Resistor	R239		2.547039	1	282340674.079668
1050532464	Resistor	R63		2.547039	1	282340674.079668
1050533034	Resistor	R1056,R4		2.547039	2	154078778.388085
1050533204	Resistor	R151,R152		2.547039	2	154078778.388085
1050536514	Resistor	R697,R698,R960, R975		2.547039	4	82309758.689546
1050540204	Resistor	R144,R894,R900		2.547039	3	107020754.986850
1050547004	Resistor	R1121,R1127,R1128,R1129,R1130,R1131,R1134,R1135,R1136,R1137,R32,R33,R69		2.547039	13	27342571.921361
1050549904	Resistor	R93		2.547039	1	282340674.079668
1050568124	Resistor	R131		2.547039	1	282340674.079668
1050580614	Resistor	R249		2.547039	1	282340674.079668
1050582504	Resistor	R41		2.547039	1	282340674.079668
1050588724	Resistor	R115		2.547039	1	282340674.079668
1050593104	Resistor	R42		2.547039	1	282340674.079668
1050700004	Resistor	R1101,R1104,R1116,R1117,R1122,R1123,R261,R264,R267,R275,R278,R288,R481,R482,R483,R484,R487,R488,R489,R490,R967, R968		2.547039	22	16518584.576317

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1050701034	Resistor	R1102,R1105, R1118, R1124,R311, R312, R327,R328,R 329, R330,R335,R 336, R338,R342,R 347, R349,R350,R 357, R369,R381,R 393, R429,R435,R 445, R479,R485,R 486, R491		2.547039	28	13089488.559853
1050708234	Resistor	R172		2.547039	1	282340674.079668
1059700001	Resistor	R639,R801,R 879, R898,R926		2.547039	5	67008142.102588
105A500103	Resistor	R147,R518,R 61,R643, R803		2.547039	5	67008142.102588
105A500139	Resistor	R102,R105,R 107, R1132,R169, R205, R25,R527,R5 47,R591, R613,R702,R 812, R813,R913,R 986		2.547039	16	22425139.809646

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105A501039	Resistor	R1,R1029,R114, R1153,R136, R153, R181,R182,R197, R265,R282,R286,R29, R31,R43,R49,R541, R571,R627,R629, R631,R636,R638, R640,R641,R642, R644,R645,R646, R648,R651,R656, R662,R663,R664,R71, R806,R809,R814, R815,R816,R817, R818,R819,R821, R825,R84,R867,R875, R		2.547039	67	5601929.449697
105A501233	Resistor	R847		2.547039	1	282340674.079668
105A501323	Resistor	R22,R892		2.547039	2	154078778.388085
105A501539	Resistor	R522,R763,R911		2.547039	3	107020754.986850
105A502039	Resistor	R1082,R18,R19,R2, R36,R57,R60,R79, R80		2.547039	9	38754445.632391
105A502263	Resistor	R620,R820,R837, R897		2.547039	4	82309758.689546
105A503039	Resistor	R741,R877		2.547039	2	154078778.388085
105A503309	Resistor	R184,R255,R314, R654,R828,R834, R836,R853,R864, R865,R881		2.547039	11	32049696.385471
105A505109	Resistor	R285,R297,R308, R309,R869,R880		2.547039	6	56573956.677649

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105A506829	Resistor	R604,R906,R949		2.547039	3	107020754.986850
105A510009	Resistor	R128,R148,R149, R206,R207,R237, R259,R284,R296, R799		2.547039	10	35079934.879747
105A512039	Resistor	R546		2.547039	1	282340674.079668
105A513323	Resistor	R132		2.547039	1	282340674.079668
105A515009	Resistor	R101,R118,R760		2.547039	3	107020754.986850
105A515033	Resistor	R1095		2.547039	1	282340674.079668
105A515423	Resistor	R100,R48		2.547039	2	154078778.388085
105A516903	Resistor	R248		2.547039	1	282340674.079668
105A521039	Resistor	R747,R765		2.547039	2	154078778.388085
105A532429	Resistor	R250		2.547039	1	282340674.079668
105A534823	Resistor	R155		2.547039	1	282340674.079668
105A538323	Resistor	R743		2.547039	1	282340674.079668
105A549919	Resistor	R370,R380,R455, R466,R559,R597, R602		2.547039	7	48991237.965885
105A553629	Resistor	R122		2.547039	1	282340674.079668
105A560469	Resistor	R258		2.547039	1	282340674.079668
105A562034	Resistor	R35		2.547039	1	282340674.079668
105A700003	Resistor	R10,R1045,R1049, R1091,R1096,R185, R535,R619,R623, R831,R873,R882, R891,R901,R905, R936,R956,R965, R977,R988		2.547039	20	18104712.511396

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105A700009	Resistor	R1006,R1007, R1009, R1011,R1014, R1024, R1028,R1036, R1046, R1060,R1079, R1081, R1087,R1093, R1148, R1151,R1152, R127, R138,R140,R141, R146,R180,R191, R192,R195,R196, R201,R209,R223, R225,R226,R230, R236,R242,R324, R340,R344,R345, R358,R361,R362, R363,R364,		2.547039	117	3242667.952473
105A70000A	Resistor	R1037,R1054, R1064, R117,R203,R281, R294,R430,R478, R502,R506,R521, R555,R600,R601, R618,R72,R73, R793, R969,R981,R991		2.547039	22	16518584.576317
105A700139	Resistor	R1016,R1047, R1052, R1094,R1097, R1100, R439,R593,R8		2.547039	9	38754445.632391

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105A701039	Resistor	R1008,R1044, R1048, R1050,R1055, R1057, R1065,R1098, R1176, R125,R165,R 171, R213,R241,R 253, R289,R291,R 303, R305,R313,R 315, R317,R323,R 325, R331,R332,R 334, R346,R348,R 352, R354,R356,R 378, R379,R390,R 391, R401,R404,R 407, R428,R433,R 443, R449,R451,R 458, R467,R		2.547039	83	4542343.752032
105A701053	Resistor	R134		2.547039	1	282340674.079668
105A701069	Resistor	R353		2.547039	1	282340674.079668
105A702269	Resistor	R744,R94		2.547039	2	154078778.388085

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105A703309	Resistor	R1025,R1035, R251, R256,R260,R 266, R283,R293,R 295, R298,R307,R 310, R373,R396,R 405, R425,R440,R 444, R447,R456,R 463, R476,R494,R 508, R542,R553,R 569, R955,R966,R 978, R979,R982,R 983		2.547039	33	11164784.962504
105A703329	Resistor	R1021,R1022 ,R1138, R1140,R1142 ,R220, R246,R262,R 263, R268,R273,R 274, R279,R371,R 402, R460,R461,R 945, R950		2.547039	19	19019185.781770
105A704729	Resistor	R1031,R1162 ,R163, R168,R179,R 186, R214,R384,R 39,R67, R68,R748,R7 96		2.547039	13	27342571.921361
105A705129	Resistor	R800,R802		2.547039	2	154078778.388085
105A706809	Resistor	R217		2.547039	1	282340674.079668
105A708209	Resistor	R119,R154,R 858,R96		2.547039	4	82309758.689546
105A710009	Resistor	R21,R23,R26 ,R27, R37,R7,R811		2.547039	7	48991237.965885
105A710039	Resistor	R1149		2.547039	1	282340674.079668

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105A715009	Resistor	R11,R12,R13 ,R14, R753,R754,R 767, R768,R769,R 770, R771,R772,R 773, R774,R775,R 776, R781,R785,R 787, R788,R789,R 790, R791,R792,R 896, R957,R972		2.547039	27	13557741.157915
105A716533	Resistor	R231		2.547039	1	282340674.079668
105A733009	Resistor	R677,R686,R 689, R694		2.547039	4	82309758.689546
105A747009	Resistor	R872		2.547039	1	282340674.079668
106B510034	Resistor	RT1,RT4		7.724580	2	38596617.434771
106B704723	Resistor	RT2,RT3		7.724580	2	38596617.434771
106BA01033	Resistor	R899,R940		7.724580	2	38596617.434771
1121415090	Capacitor	C412		1.128806	1	704977644.692287

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1121501690	Capacitor	C101,C108,C122, C123,C128,C129, C130,C131,C147, C173,C174,C175, C176,C177,C178, C180,C181,C182, C215,C217,C219,C22, C222,C240,C241, C242,C310,C318, C323,C339,C352, C353,C38,C385,C391, C401,C405,C458, C459,C510,C520, C544,C545,C555, C557,C558,C559, C560,C5		1.128806	84	10266401.768736
1122522890	Capacitor	C303,C435,C550, C643		1.128806	4	196873384.410843
1124418090	Capacitor	C613,C614		1.128806	2	375289731.076049
1124418190	Capacitor	C354,C355,C356, C362,C363,C390, C392,C393,C399, C402,C410,C427		1.128806	12	68856937.301178
1124427090	Capacitor	C153,C155,C156, C161,C170,C171, C191,C192,C213, C223,C224,C225, C226,C230		1.128806	14	59316298.011235
1124433190	Capacitor	C31		1.128806	1	704977644.692287
1124468090	Capacitor	C109,C46,C54		1.128806	3	257514172.353070

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1124522190	Capacitor	C212		1.128806	1	704977644.692287
1124533191	Capacitor	C373,C375		1.128806	2	375289731.076049
1124533280	Capacitor	C205,C287,C322, C330,C37,C92		1.128806	6	133979725.056342
1124539180	Capacitor	C113		1.128806	1	704977644.692287
1124547190	Capacitor	C58		1.128806	1	704977644.692287
1129522790	Capacitor	C121,C285,C286, C288,C289		1.128806	5	159367490.199266
1129601080	Capacitor	C337		1.128806	1	704977644.692287
1129610080	Capacitor	C136,C140,C142, C144,C15,C152,C158, C172,C179,C194, C195,C198,C199, C202,C207,C209, C214,C357,C441, C451,C470,C471, C525,C562,C574, C585,C645,C99		1.128806	28	30212160.975569
1129610260	Capacitor	C282,C304,C305, C306,C307		1.128806	5	159367490.199266
1129701690	Capacitor	C11,C148,C154,C159, C167,C18,C193,C200, C26,C348,C575,C576		1.128806	12	68856937.301178
1129701790	Capacitor	C50		1.128806	1	704977644.692287
1129722091	Capacitor	C97,C98		1.128806	2	375289731.076049
1189610153	Capacitor	C102,TC1		4.744484	2	86049450.747498
118A622192	Capacitor	C597,C627		4.744484	2	86049450.747498
118A6221B0	Capacitor	C311		4.744484	1	159663026.715137
118C639191	Capacitor	C110,C6,C71		4.744484	3	59399119.141203
11A4310040	Capacitor	C406,C438		1.128806	2	375289731.076049
11C1410440	Capacitor	C16,C364,C396		1.128806	3	257514172.353070

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11C1539840	Capacitor	C145,C150,C204,C208,C220		1.128806	5	159367490.199266
11C1539841	Capacitor	C164,C166		1.128806	2	375289731.076049
11C1547890	Capacitor	C69		1.128806	1	704977644.692287
11C1647780	Capacitor	C27,C336,C91		1.128806	3	257514172.353070
11C2501790	Capacitor	C104,C106,C90,C96		1.128806	4	196873384.410843
11C2510480	Capacitor	C111,C211,C259,C62,C7		1.128806	5	159367490.199266
11C2522480	Capacitor	C53		1.128806	1	704977644.692287
11C4501790	Capacitor	C25,C55,C63,C67,C70		1.128806	5	159367490.199266
11C4510240	Capacitor	C196,C279		1.128806	2	375289731.076049
11C4522191	Capacitor	C64		1.128806	1	704977644.692287
11C4522290	Capacitor	C329,C411,C93		1.128806	3	257514172.353070
11C9510490	Capacitor	C124,C125,C126,C127,C143,C146,C149,C160,C165,C183,C184,C185,C186,C187,C188,C189,C201,C203,C206,C210,C218,C221,C231,C232,C233,C234,C235,C236,C237,C238,C245,C246,C247,C248,C249,C250,C251,C252,C254,C255,C260,C261,C262,C263,C264,C265,C266,C267,		1.128806	96	8998527.621104

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Ref Des:
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Failure Rate: 9113.679563
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E1510050	Capacitor	C313,C418,C420, C421,C423,C529, C530,C535,C536, C548,C553,C567, C620,C621,C622, C623,C632,C633, C634		1.128806	19	44097696.883526
11E1522680	Capacitor	C368,C382,C395, C644,C76		1.128806	5	159367490.199266
11E1547650	Capacitor	C229		1.128806	1	704977644.692287
11E2501080	Capacitor	C216,C335,C338, C344,C379,C47		1.128806	6	133979725.056342
11E2501690	Capacitor	C100,C105,C114, C115,C120,C132, C133,C134,C135, C138,C157,C23,C281, C283,C284,C290, C291,C3,C300,C301, C326,C331,C332, C345,C358,C359, C367,C369,C371, C374,C376,C381, C387,C397,C40,C400, C403,C404,C409, C414,C426,C429, C440,C447,C462, C463,C464,C465, C473		1.128806	79	10907152.962731
11E2510010	Capacitor	C14		1.128806	1	704977644.692287

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Failure Rate: 9113.679563
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2622011	Capacitor	C360,C361,C388, C389,C4,C43,C44,C5, C577,C578,C60,C616, C617		1.128806	13	63728475.410842
11E4433090	Capacitor	C312		1.128806	1	704977644.692287
11E4510440	Capacitor	C253,C325,C56		1.128806	3	257514172.353070
11E9547682	Capacitor	C276,C277,C563, C602,C624,C625, C626		1.128806	7	115633865.771428
11E9610080	Capacitor	C137,C141,C151,C19, C20,C278,C30,C314, C350,C380,C543, C572,C601,C629,C65		1.128806	15	55479656.844874
11E9622050	Capacitor	C445		1.128806	1	704977644.692287
11E9622052	Capacitor	C21		1.128806	1	704977644.692287
11E9622080	Capacitor	C10,C116,C117,C13, C197,C315,C327, C328,C334,C340, C341,C35,C39,C640		1.128806	14	59316298.011235
11EA610040	Capacitor	C12,C32,C51		1.128806	3	257514172.353070
11EA647010	Capacitor	C139,C168,C190, C243,C256,C319, C320,C321,C366, C370,C398,C407, C431,C486,C496, C497,C499,C508, C513,C519,C522, C528,C541,C556, C595,C75,C89		1.128806	27	31305223.485317

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Failure Rate: 9113.679563
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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11EB501040	Capacitor	C1,C228,C317,C33,C34,C343,C347,C372,C378,C384,C386,C413,C415,C416,C417,C422,C428,C430,C434,C437,C443,C444,C446,C448,C449,C450,C452,C453,C454,C455,C466,C467,C468,C472,C479,C48,C480,C488,C49,C503,C504,C509,C515,C516,C517,C518,C527,C531,C532,C		1.128806	59	14541999.022292
11EB522011	Capacitor	C169,C377,C383,C408,C419,C432,C433,C442,C477,C485,C565		1.128806	11	74892583.279796
11EB547440	Capacitor	C95		1.128806	1	704977644.692287
11EB610050	Capacitor	C316,C324,C36		1.128806	3	257514172.353070
121110156P	Inductor	L7		4.944252	1	154760964.143460
121110226Y	Inductor	L2		4.944252	1	154760964.143460
1211104271	Inductor	L3		4.944252	1	154760964.143460
1211106879	Inductor	L4		4.944252	1	154760964.143460
1211115073	Inductor	L1		4.944252	1	154760964.143460
1211133075	Inductor	L6		4.944252	1	154760964.143460
1211147071	Inductor	L5		4.944252	1	154760964.143460
1212306030	Inductor	FB10,FB11,FB14,FB8		4.944252	4	43912872.424775
1212306033	Inductor	FB4		4.944252	1	154760964.143460
1212306031	Inductor	FB1,FB13		4.944252	2	83201062.149749

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
121230603S	Inductor	FB12,FB2,FB3,FB5		4.944252	4	43912872.424775
12123A000E	Inductor	FB17,FB18,FB23,FB24,FB6,FB7,FB9		4.944252	7	25970990.056682
12123C000E	Inductor	FB15,FB16,FB19,FB20,FB21,FB22		4.944252	6	30055900.223009
1214109007	Inductor	CH10,CH11,CH7,CH8		4.944252	4	43912872.424775
12143B0002	Inductor	CH1,CH12,CH2,CH3,CH4,CH5,CH6,CH9		4.944252	8	22874049.098230
12310025A8	Miscellaneous	Y2,Y3,Y4,Y7,Y8,Y9		19.200000	6	3109492.345532
1231019251	Miscellaneous	Y10		19.200000	1	23844262.770939
123132505D	Miscellaneous	Y5,Y6		19.200000	2	8854051.752197
1231332726	Miscellaneous	Y12		19.200000	1	23844262.770939
12330048A0	Miscellaneous	Y11		19.200000	1	23844262.770939
1252NS8920	Inductor	TF1,TF2,TF3,TF4,TF5		4.944252	5	35631881.582999
1301053040	Semiconductor	D1,D2,D4		7.793411	3	35106858.962001
1301400642	Semiconductor	D5,D6		7.793411	2	50578095.223398
1301793040	Semiconductor	D10,D11		7.793411	2	50578095.223398
1304001120	Optical Device	LED1,LED3		79.003355	2	3783722.582110
1304001121	Optical Device	LED2		79.003355	1	6497172.749112
1304001122	Optical Device	LED10,LED4,LED5,LED6,LED7,LED9		79.003355	6	1523626.609050
1304200043	Optical Device	LED11,LED13		79.003355	2	3783722.582110
1304500240	Optical Device	LED12,LED14		79.003355	2	3783722.582110
1305001242	Semiconductor	D3		7.793411	1	92807310.010983
1305099140	Semiconductor	D7,D8		7.793411	2	50578095.223398
1305100541	Semiconductor	U3,U39,U4,U40,U41,U42,U5,U6		22.463360	8	4877097.849338
1310039040	Semiconductor	Q14,Q57		22.463360	2	17315095.066101
1310390411	Semiconductor	Q54		22.463360	1	31642600.748419
1310390413	Semiconductor	Q51,Q59		22.463360	2	17315095.066101
1311390612	Semiconductor	Q76		22.463360	1	31642600.748419
131411171J	Semiconductor	U10		22.463360	1	31642600.748419
1315036640	Semiconductor	Q9		22.463360	1	31642600.748419

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1315200312	Semiconductor	Q28,Q29,Q30,Q34,Q35,Q5,Q71,Q79		22.463360	8	4877097.849338
1315230211	Semiconductor	Q38,Q40,Q45,Q47		22.463360	4	9270607.712006
1315230511	Semiconductor	Q18,Q39,Q41,Q44,Q46		22.463360	5	7551839.591592
1315443512	Semiconductor	Q7		22.463360	1	31642600.748419
1315700211	Semiconductor	Q78		22.463360	1	31642600.748419
1315700216	Semiconductor	Q17,Q3,Q53		22.463360	3	12043329.789539
1315EM6K10	Semiconductor	Q1,Q11,Q12,Q13,Q16,Q19,Q21,Q23,Q24,Q25,Q27,Q36,Q37,Q4,Q42,Q43,Q48,Q49,Q50,Q52,Q56,Q58,Q6,Q60,Q61,Q67,Q77,Q8,Q80,Q81,Q82,Q83		22.463360	32	1300932.597594
1315EMB090	Semiconductor	Q15,Q55		22.463360	2	17315095.066101
1430006710	Integrated Circuit	U8		43.803003	1	11739202.588727
1430012821	Integrated Circuit	U45		43.803003	1	11739202.588727
1430036010	Integrated Circuit	U16,U9		43.803003	2	6834791.244197
1430080650	Integrated Circuit	U1		43.803003	1	11739202.588727
1430082480	Integrated Circuit	U7		43.803003	1	11739202.588727
14308239B0	Integrated Circuit	U31		43.803003	1	11739202.588727
1440002130	Integrated Circuit	U50		43.803003	1	11739202.588727
1440038080	Integrated Circuit	U17		43.803003	1	11739202.588727
1440210ISO	Integrated Circuit	U24,U25		43.803003	2	6834791.244197
1440211AT0	Integrated Circuit	U20,U21,U28,U29		43.803003	4	3879156.910661
1440N33500	Integrated Circuit	U23		21.706765	1	23689035.791249
145901G080	Integrated Circuit	U47		26.018600	1	25551442.237972
1462251281	Integrated Circuit			11.063278	1	58231413.220643
1462K273A0	Integrated Circuit	U34		11.063278	1	58231413.220643
1482640HC1	Integrated Circuit	U11		26.018600	1	25551442.237972
1490011840	Integrated Circuit	U27		43.803003	1	11739202.588727
149TS01040	Integrated Circuit	U32,U33		43.803003	2	6834791.244197
14S3104500	Integrated Circuit	U35,U36,U37,U43,U44		43.803003	5	3214211.402100
14S4033001	Integrated Circuit	U12		43.803003	1	11739202.588727
14S4081102	Integrated Circuit	U15,U2,U58		43.803003	3	4923240.069161
14S4872800	Integrated Circuit	U18		43.803003	1	11739202.588727

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14S5912300	Integrated Circuit	U38		26.018600	1	25551442.237972
14S5974741	Integrated Circuit	U48,U49		26.018600	2	14194252.866846
14S6216060	Integrated Circuit	U52,U53		11.063278	2	32567094.099626
1540722085	Resistor	RP1,RP2,RP3 ,RP4, RP5		9.971436	5	14126297.426094
1540775082	Resistor	RP10,RP6,RP 7,RP8, RP9		9.971436	5	14126297.426094
1540782280	Resistor	RP11		9.971436	1	51606907.671214
1601006BR0	Connection	SW2		16.184835	1	35685591.360212
1601615600	Connection	SW1		16.184835	1	35685591.360212
1651508010	Connection	CN11,CN29		16.184835	2	20390152.380746
1651520404	Connection	DIMM1		16.184835	1	35685591.360212
165250320K	Connection	CN27		16.184835	1	35685591.360212
165280820B	Connection	CON1		16.184835	1	35685591.360212
1652848202	Connection	CN22		16.184835	1	35685591.360212
165300210C	Connection	CN18,CN19		16.184835	2	20390152.380746
1653003101	Connection	CN1,JP1,JP2		16.184835	3	14515880.849373
165300420Q	Connection	CN16		16.184835	1	35685591.360212
1653005201	Connection	CN4,CN6,CN 7		16.184835	3	14515880.849373
1653300102	Connection	JP1(2-3)		16.184835	1	35685591.360212
1653300107	Connection	JP2(1-2)		16.184835	1	35685591.360212
165392521S	Connection	CN31		16.184835	1	35685591.360212
1654226303	Connection	CN13,CN30		16.184835	2	20390152.380746
165440193A	Connection	CN20		16.184835	1	35685591.360212
1654801831	Connection	CN21		16.184835	1	35685591.360212
1654902037	Connection	CN14,CN15		16.184835	2	20390152.380746
165490700G	Connection	CN12		16.184835	1	35685591.360212
1655004011	Connection	CN9		16.184835	1	35685591.360212
1655004018	Connection	CPU_FAN1		16.184835	1	35685591.360212
1655902030	Connection	CN3		16.184835	1	35685591.360212
1655912032	Connection	LPC1		16.184835	1	35685591.360212
1750113019	Miscellaneous	CN3		306.000000	1	1681683.006787
1751300005	Relay	RELAY1,REL AY10, RELAY11,REL AY12, RELAY13,REL AY14, RELAY15,REL AY16, RELAY2,REL AY3, RELAY4,REL AY5, RELAY6,REL AY7, RELAY8,REL AY9		19.477355	16	2689762.931351

**Reliability Prediction
Summary**

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1752000501	Miscellaneous	FS3		2.400000	1	254626042.602335
1752002500	Miscellaneous	FS4,FS5		2.400000	2	143944727.196625
1752004600	Miscellaneous	FS1,FS2		2.400000	2	143944727.196625