

# OMNI-2155-SKU

## Reliability Prediction Report (MTBF)

Summary	Failure Rate: 9020.242040 ppm MTBF: 110,862 Hours
---------	--

Issue date	Approval	Test Engineer
2016/12/12	KJ Wang	Danny Chen

# Reliability Prediction (MTBF)

---

**I . Model Name:** OMNI-2155-SKU

**II . Prediction Date:** DEC.12, 2016

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

**IV . Predicted by:** Danny

**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:**

ONMI-2155-SKU (9697SKU003-D):

- Failure Rate: 9020.242040ppm
- MTBF: 110,862 Hours

**AAEON Reliability Prediction  
Summary**

**File Name:** OMNI-2155-SKU.rfp  
**Duty Cycle:** 100  
**Calculation Model:** Telcordia Issue 2  
**Method:** Method I Case 3

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
OMNI-2155-SKU	9697SKU003-D		1	9020.242040	110,862

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050500104	Resistor	R640		2.547039	1	282340674.079668
1050501004	Resistor	R31,R316,R317,R318,R319,R320,R78		2.547039	7	48991237.965885
1050501054	Resistor	R102,R502		2.547039	2	154078778.388085
1050502204	Resistor	R590,R621,R632,R633,R634,R641		2.547039	6	56573956.677649
1050502224	Resistor	R37,R575,R576		2.547039	3	107020754.986850
1050502724	Resistor	R120		2.547039	1	282340674.079668
1050502734	Resistor	R421		2.547039	1	282340674.079668
1050503934	Resistor	R664		2.547039	1	282340674.079668
1050504724	Resistor	R690,R75		2.547039	2	154078778.388085
1050504734	Resistor	R299		2.547039	1	282340674.079668
1050504764	Resistor	R225,R230		2.547039	2	154078778.388085
1050505604	Resistor	R503		2.547039	1	282340674.079668
1050505633	Resistor	R292		2.547039	1	282340674.079668
1050507524	Resistor	R24,R354,R48		2.547039	3	107020754.986850
1050508224	Resistor	R184,R588		2.547039	2	154078778.388085
1050510034	Resistor	R12,R259,R284,R368,R372,R382,R418,R471,R492,R533,R565		2.547039	11	32049696.385471
1050512104	Resistor	R144		2.547039	1	282340674.079668
1050512424	Resistor	R11		2.547039	1	282340674.079668
1050514044	Resistor	R27,R35		2.547039	2	154078778.388085
1050516004	Resistor	R324,R337		2.547039	2	154078778.388085
1050518734	Resistor	R478		2.547039	1	282340674.079668
1050520004	Resistor	R208,R614		2.547039	2	154078778.388085
1050520034	Resistor	R268		2.547039	1	282340674.079668
1050521524	Resistor	R36,R65,R72		2.547039	3	107020754.986850
1050522004	Resistor	R504		2.547039	1	282340674.079668
1050524004	Resistor	R529,R530,R532,R534,R536,R539,R543,R544,R549,R550,R573		2.547039	11	32049696.385471
1050524904	Resistor	R116,R574		2.547039	2	154078778.388085
1050525524	Resistor	R473,R658		2.547039	2	154078778.388085
1050526124	Resistor	R13,R18		2.547039	2	154078778.388085
1050533034	Resistor	R176		2.547039	1	282340674.079668

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050536514	Resistor	R394		2.547039	1	282340674.079668
1050538314	Resistor	R466		2.547039	1	282340674.079668
1050539224	Resistor	R334		2.547039	1	282340674.079668
1050545364	Resistor	R89		2.547039	1	282340674.079668
1050547004	Resistor	R192		2.547039	1	282340674.079668
1050549904	Resistor	R219,R481,R 613		2.547039	3	107020754.986850
1050549924	Resistor	R279,R328		2.547039	2	154078778.388085
1050549964	Resistor	R104,R105,R 109, R163,R472,R 518, R582		2.547039	7	48991237.965885
1050551004	Resistor	R49		2.547039	1	282340674.079668
1050560424	Resistor	R4,R462,R60		2.547039	3	107020754.986850
1050560464	Resistor	R485,R512		2.547039	2	154078778.388085
1050561934	Resistor	R16,R270		2.547039	2	154078778.388085
1050564924	Resistor	R283,R637		2.547039	2	154078778.388085
1050568124	Resistor	R686		2.547039	1	282340674.079668
1050580664	Resistor	R146		2.547039	1	282340674.079668
1050586624	Resistor	R247,R32		2.547039	2	154078778.388085
1050593114	Resistor	R272		2.547039	1	282340674.079668
1050701504	Resistor	R617,R618,R 620		2.547039	3	107020754.986850
1050703334	Resistor	R356		2.547039	1	282340674.079668
1050704304	Resistor	R568		2.547039	1	282340674.079668
1052500171	Resistor	R143,R74		2.547039	2	154078778.388085
1053500489	Resistor	R434,R659		2.547039	2	154078778.388085
1054508099	Resistor	R687		2.547039	1	282340674.079668
1059700001	Resistor	R249,R250,R 251, R310		2.547039	4	82309758.689546
1059701001	Resistor	R346		2.547039	1	282340674.079668
105A500139	Resistor	R10,R389,R3 90,R464, R465,R467,R 671, R674,R8,R86		2.547039	10	35079934.879747
105A500239	Resistor	R689		2.547039	1	282340674.079668
105A501033	Resistor	R593,R646		2.547039	2	154078778.388085
105A501039	Resistor	R132,R140,R 258, R265,R315,R 326, R327,R335,R 432,R66, R97		2.547039	11	32049696.385471
105A501053	Resistor	R380,R742		2.547039	2	154078778.388085
105A501523	Resistor	R704		2.547039	1	282340674.079668

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A501529	Resistor	R28,R600,R76		2.547039	3	107020754.986850
105A501539	Resistor	R487,R745		2.547039	2	154078778.388085
105A501829	Resistor	R70,R73		2.547039	2	154078778.388085
105A502039	Resistor	R172,R178,R20,R242,R271,R336,R338,R379,R655,R672,R673		2.547039	11	32049696.385471
105A503039	Resistor	R30,R647		2.547039	2	154078778.388085
105A503309	Resistor	R52,R53		2.547039	2	154078778.388085
105A505109	Resistor	R528,R531,R546,R554,R80		2.547039	5	67008142.102588
105A506829	Resistor	R751		2.547039	1	282340674.079668
105A507509	Resistor	R57,R58,R59		2.547039	3	107020754.986850
105A507533	Resistor	R589		2.547039	1	282340674.079668
105A510009	Resistor	R133,R134,R138,R139,R145,R147,R153,R173,R198,R313,R343,R348,R482,R483,R493,R660,R661,R670,R87		2.547039	19	19019185.781770
105A510733	Resistor	R353		2.547039	1	282340674.079668
105A511323	Resistor	R305		2.547039	1	282340674.079668
105A512003	Resistor	R666		2.547039	1	282340674.079668
105A512039	Resistor	R367,R402		2.547039	2	154078778.388085
105A512123	Resistor	R371		2.547039	1	282340674.079668
105A512403	Resistor	R205		2.547039	1	282340674.079668
105A518214	Resistor	R580,R581		2.547039	2	154078778.388085
105A520523	Resistor	R329		2.547039	1	282340674.079668
105A522623	Resistor	R61		2.547039	1	282340674.079668
105A533003	Resistor	R667		2.547039	1	282340674.079668
105A544229	Resistor	R433		2.547039	1	282340674.079668
105A545323	Resistor	R638		2.547039	1	282340674.079668
105A549919	Resistor	R393,R401		2.547039	2	154078778.388085
105A556229	Resistor	R96		2.547039	1	282340674.079668
105A561924	Resistor	R77		2.547039	1	282340674.079668

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A700003	Resistor	R103,R156,R166, R170,R182,R221, R252,R260,R282, R451,R461,R519, R591,R639,R685		2.547039	15	23852782.943395
105A700009	Resistor	R1,R110,R111,R113, R117,R119,R122,R14, R141,R159,R171, R183,R190,R196,R2, R206,R22,R222,R23, R231,R232,R233, R234,R238,R243, R245,R255,R256,R26, R261,R262,R269, R286,R288,R29,R293, R294,R300,R301, R303,R304,R306, R312,R325,R34,R341, R344,R350,R351, R357,R		2.547039	112	3384913.455750
105A700139	Resistor	R197,R239,R253, R254,R273,R276, R278,R298,R309,R33, R497,R642,R649,R83, R98		2.547039	15	23852782.943395
105A700203	Resistor	R579		2.547039	1	282340674.079668
105A701009	Resistor	R314,R385,R577, R744		2.547039	4	82309758.689546



**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A701039	Resistor	R106,R108,R112, R137,R167,R199,R25, R266,R267,R342, R345,R347,R352, R358,R361,R365, R366,R369,R370, R377,R378,R384, R386,R391,R395, R396,R397,R398, R399,R413,R422, R444,R474,R475, R476,R495,R505, R631,R665,R668, R676,R679,R684, R695,R696,R699, R701,R705,R		2.547039	77	4888867.088938
105A701059	Resistor	R123,R496,R526, R557,R693		2.547039	5	67008142.102588
105A701069	Resistor	R150		2.547039	1	282340674.079668
105A702229	Resistor	R339,R340,R404, R419,R648		2.547039	5	67008142.102588
105A702269	Resistor	R17,R19,R463,R56, R657,R7,R71,R9,R93		2.547039	9	38754445.632391
105A703309	Resistor	R289,R663,R680		2.547039	3	107020754.986850
105A703329	Resistor	R330,R331,R332, R333,R355,R383, R387,R629		2.547039	8	43225424.698300

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105A704729	Resistor	R412,R427,R677, R681,R694,R697, R708,R709,R710, R711,R752,R753, R754,R755,R756, R757,R758,R759		2.547039	18	20032117.836120
105A705139	Resistor	R437,R438,R445, R446		2.547039	4	82309758.689546
105A706829	Resistor	R81,R90		2.547039	2	154078778.388085
105A708229	Resistor	R195,R200		2.547039	2	154078778.388085
105A710039	Resistor	R212,R235,R263, R277,R290,R291,R3, R405,R406,R408, R409,R410,R411, R416,R417,R428, R429,R430,R431, R435,R436,R439, R440,R442,R443, R527,R542,R558, R569,R643,R656, R683,R706,R82,R91, R95		2.547039	36	10261285.143207
105A733009	Resistor	R308,R311,R323, R441,R45,R653		2.547039	6	56573956.677649
105A747009	Resistor	R114,R136,R168, R257,R477,R644, R645,R67,R703,R737, R741,R764		2.547039	12	29507083.749401

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
105B700009	Resistor	R121,R130,R142, R148,R149,R152, R154,R157,R158, R169,R174,R179, R188,R191,R194, R207,R296,R297, R359,R362,R392,R40, R41,R414,R42,R498, R50,R51,R510,R54, R547,R55,R570,R578, R583,R587,R630		2.547039	37	9991988.939157
105B700139	Resistor	R215,R216,R217, R479,R513,R594, R595,R609,R610, R611,R627,R628		2.547039	12	29507083.749401
105B701039	Resistor	R180,R185,R186, R187,R189,R201, R202,R203,R229, R586,R596,R597, R598,R599,R602, R603,R604,R605, R623,R650		2.547039	20	18104712.511396
105B702225	Resistor	R177,R181,R214, R218		2.547039	4	82309758.689546
106B510034	Resistor	RT1,RT2,RT3,RT4		2.547039	4	82309758.689546
106BA22034	Resistor	RT5		2.547039	1	282340674.079668

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1121501690	Capacitor	C17,C177,C186,C188,C19,C20,C208,C216,C22,C244,C255,C259,C262,C263,C264,C265,C266,C270,C272,C273,C278,C279,C280,C281,C282,C283,C284,C287,C290,C291,C303,C305,C307,C309,C316,C317,C318,C319,C326,C330,C331,C332,C333,C337,C338,C339,C340,C341,C342		1.128806	129	6719530.991435
1121501691	Capacitor	C118,C124,C130,C136,C146,C153		1.128806	6	133979725.056342
1122522890	Capacitor	C446		1.128806	1	704977644.692287
1124410190	Capacitor	C261		1.128806	1	704977644.692287
1124418090	Capacitor	C206,C213,C31,C32		1.128806	4	196873384.410843
1124420090	Capacitor	C72,C73		1.128806	2	375289731.076049
1124427090	Capacitor	C304,C308		1.128806	2	375289731.076049
1124433190	Capacitor	C288		1.128806	1	704977644.692287
1124468090	Capacitor	C292		1.128806	1	704977644.692287
1124522290	Capacitor	C229,C347,C362,C399,C497,C534		1.128806	6	133979725.056342
1124547190	Capacitor	C23,C276,C277,C289,C416,C454,C578,C586		1.128806	8	101746760.035398

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1124547290	Capacitor	C16,C27,C34 8,C357, C360,C361,C 372,C47		1.128806	8	101746760.035398
1129522790	Capacitor	C354,C355,C 524, C544		1.128806	4	196873384.410843
1129610080	Capacitor	C251,C257,C 346, C369,C373,C 375, C376,C389,C 394, C396,C403,C 408, C411,C415,C 421, C448,C452,C 453, C466,C479,C 482, C495,C500,C 519, C540,C549,C 560, C562,C563,C 564,C67, C71		1.128806	32	26512863.286539
1129622690	Capacitor	C439,C478		1.128806	2	375289731.076049
1129701790	Capacitor	C185,C212,C 233, C252,C274,C 286, C294,C367,C 440, C472,C474,C 481, C491,C591		1.128806	14	59316298.011235
1129710091	Capacitor	C28,C29,C30 ,C313, C33,C34,C35		1.128806	7	115633865.771428
1129710390	Capacitor	C356,C363,C 365, C378,C398,C 404, C410,C413,C 414, C417,C426,C 539		1.128806	12	68856937.301178
1129715090	Capacitor	C21,C368,C3 97		1.128806	3	257514172.353070

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1129722091	Capacitor	C148,C164,C506, C529,C530,C531, C532,C65		1.128806	8	101746760.035398
1182610191	Capacitor	C240,C258		4.744484	2	86049450.747498
1189610153	Capacitor	C26,C504		4.744484	2	86049450.747498
1189633151	Capacitor	C260		4.744484	1	159663026.715137
118A6221B0	Capacitor	C253		4.744484	1	159663026.715137
118B6101D0	Capacitor	C238,C239,C418, C457,C579,C580		4.744484	6	31179134.677521
118C6331B0	Capacitor	C14,C37,C379,C380, C381,C390,C400, C499,C59		4.744484	9	21223953.983763
11A4410194	Capacitor	C24,C302,C306,C310, C315,C321,C327		1.128806	7	115633865.771428
11A4418280	Capacitor	C359		1.128806	1	704977644.692287
11C1539840	Capacitor	C295		1.128806	1	704977644.692287
11C1547890	Capacitor	C36,C366,C46		1.128806	3	257514172.353070
11C2439240	Capacitor	C585		1.128806	1	704977644.692287
11C2510480	Capacitor	C516		1.128806	1	704977644.692287
11C4401880	Capacitor	C15		1.128806	1	704977644.692287
11C4501380	Capacitor	C311		1.128806	1	704977644.692287
11C4501790	Capacitor	C350		1.128806	1	704977644.692287
11C5510430	Capacitor	C271,C285,C565, C570,C572		1.128806	5	159367490.199266
11C5547660	Capacitor	C541,C542,C543, C569		1.128806	4	196873384.410843
11E1501040	Capacitor	C235,C250,C351, C509		1.128806	4	196873384.410843
11E1510050	Capacitor	C275,C3,C419,C429		1.128806	4	196873384.410843
11E1522440	Capacitor	C358,C371,C393		1.128806	3	257514172.353070
11E1522680	Capacitor	C520		1.128806	1	704977644.692287
11E2501690	Capacitor	C256,C267,C269, C323,C476,C480, C508,C512,C574		1.128806	9	90863428.080946

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11E2510010	Capacitor	C162,C488,C489, C490,C513,C514, C515		1.128806	7	115633865.771428
11E2522060	Capacitor	C492,C498,C525, C526,C527		1.128806	5	159367490.199266
11E2522090	Capacitor	C575,C590		1.128806	2	375289731.076049
11E2522631	Capacitor	C296,C557		1.128806	2	375289731.076049
11E2610030	Capacitor	C1,C10,C11, C12,C13, C2,C4,C5,C6, C7,C8, C9		1.128806	12	68856937.301178
11E2610032	Capacitor	C573		1.128806	1	704977644.692287
11E2647650	Capacitor	C245,C464		1.128806	2	375289731.076049
11E4433090	Capacitor	C25,C503		1.128806	2	375289731.076049
11E4939690	Capacitor	C234,C236		1.128806	2	375289731.076049
11E4947690	Capacitor	C195		1.128806	1	704977644.692287
11E5510610	Capacitor	C556,C559		1.128806	2	375289731.076049
11E9510490	Capacitor	C214,C224,C230, C242,C455,C456, C462,C463,C511		1.128806	9	90863428.080946
11E9522490	Capacitor	C528		1.128806	1	704977644.692287
11E9547680	Capacitor	C194,C438		1.128806	2	375289731.076049
11E9622050	Capacitor	C205,C219,C247, C249,C374,C43,C467, C92		1.128806	8	101746760.035398
11E9622080	Capacitor	C100,C112,C119, C127,C128,C139, C150,C151,C154, C160,C161,C187, C191,C223,C459, C460,C58,C68,C69, C91,C94,C97		1.128806	22	38230892.707156

**Reliability Prediction  
Summary**

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11EA501050	Capacitor	C101,C102,C103, C105,C106,C107, C108,C109,C114, C120,C121,C133, C140,C143,C149, C156,C157,C159, C163,C165,C167, C170,C173,C174, C178,C184,C199, C200,C201,C202, C203,C204,C207, C209,C210,C215, C217,C218,C222, C225,C226,C232, C470,C77,C78,C79, C80,C81,C82,C		1.128806	56	15308283.020186



**Reliability Prediction  
Summary**

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11EA610040	Capacitor	C104,C110,C111, C122,C126,C131, C132,C134,C137, C138,C142,C144, C147,C155,C158, C166,C168,C171, C172,C175,C176, C179,C18,C180,C181, C182,C183,C189, C192,C193,C196, C197,C39,C41,C44, C52,C547,C57,C60, C61,C62,C87,C88, C89,C90,C96		1.128806	46	18574133.926778
11EA647010	Capacitor	C113,C115,C116, C125,C141,C241, C370,C51,C55,C66, C70,C74		1.128806	12	68856937.301178

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
11EB501040	Capacitor	C169,C190,C220,C231,C248,C268,C301,C312,C314,C322,C324,C325,C328,C329,C336,C423,C428,C431,C436,C437,C447,C458,C475,C477,C483,C485,C487,C510,C56,C581,C582,C64		1.128806	32	26512863.286539
11EB510010	Capacitor	C254,C469		1.128806	2	375289731.076049
11EB522640	Capacitor	C364		1.128806	1	704977644.692287
11EB610050	Capacitor	C297,C298,C471,C553		1.128806	4	196873384.410843
11EB622010	Capacitor	C293,C335,C38,C494,C50,C507,C517,C518		1.128806	8	101746760.035398
11EB647020	Capacitor	C299,C300,C334		1.128806	3	257514172.353070
121110156T	Inductor	L8		4.944252	1	154760964.143460
121110156Z	Inductor	L11		4.944252	1	154760964.143460
1211101573	Inductor	L6,L7		4.944252	2	83201062.149749
1211102266	Inductor	L13	37.1	9.250778	1	82714895.016095
121110226X	Inductor	L12		4.944252	1	154760964.143460
121110226Y	Inductor	L15		4.944252	1	154760964.143460
1211103376	Inductor	L2		4.944252	1	154760964.143460
1211106874	Inductor	L10		4.944252	1	154760964.143460
1211110077	Inductor	L9	37.7	9.334511	1	81972927.262789
1211204700	Inductor	L3,L4,L5		4.944252	3	57363284.375370
1212306030	Inductor	FB14,FB22,FB23,FB24,FB27,FB28,FB29,FB5,FB7		4.944252	9	20443842.451049
121230603N	Inductor	L1,L16		4.944252	2	83201062.149749
1212308054	Inductor	FB1,FB21,FB25,FB26,FB3,FB4,FB6		4.944252	7	25970990.056682

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
12123C0031	Inductor	FB15,FB17,F B18, FB19,FB2		4.944252	5	35631881.582999
12123D0001	Inductor	FB10,FB11,F B12, FB13,FB16,F B20,FB8, FB9		4.944252	8	22874049.098230
1214309006	Inductor	CH1,CH10,C H11,CH12, CH13,CH14,C H15, CH16,CH17,C H18, CH19,CH2,C H3,CH8, CH9		4.944252	15	12521115.446963
12310024A0	Miscellaneous	Y2		19.200000	1	23844262.770939
12310027A3	Miscellaneous	Y1		19.200000	1	23844262.770939
123132505C	Miscellaneous	Y4		19.200000	1	23844262.770939
1231332726	Miscellaneous	Y3		19.200000	1	23844262.770939
1300034040	Semiconductor	D11,D12		7.793411	2	50578095.223398
1300041480	Semiconductor	D26,D31		7.793411	2	50578095.223398
1300414849	Semiconductor	D48,D50		7.793411	2	50578095.223398
1301003440	Semiconductor	D49,D51		7.793411	2	50578095.223398
1301005444	Semiconductor	D18,D19		7.793411	2	50578095.223398
1301013041	Semiconductor	D1,D46		7.793411	2	50578095.223398
1301400642	Semiconductor	D14		7.793411	1	92807310.010983
1301793040	Semiconductor	D15,D35,D47		7.793411	3	35106858.962001
1302005641	Semiconductor	D16		7.793411	1	92807310.010983
1304000043	Optical Device	LED2		79.003355	1	6497172.749112
1304300140	Optical Device	LED1		79.003355	1	6497172.749112
1304500240	Optical Device	LED3		79.003355	1	6497172.749112
1305000360	Semiconductor	D36		7.793411	1	92807310.010983
130505ESD0	Semiconductor	D10,D13,D20 ,D23, D27,D28,D29 ,D32, D33,D34,D37 ,D40, D41,D43,D52 ,D53		7.793411	16	7341618.295818
1305080040	Semiconductor	D17,D2,D21, D22,D24, D25,D3,D30, D38,D39, D4,D42,D44, D45,D5, D6,D7,D8,D9		7.793411	19	6225751.500036
1310390410	Semiconductor	Q39		22.463360	1	31642600.748419
1310390413	Semiconductor	Q27,Q30,Q6, Q7		22.463360	4	9270607.712006

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1311390612	Semiconductor	Q29,Q3		22.463360	2	17315095.066101
1315015530	Semiconductor	Q14,Q15,Q16		22.463360	3	12043329.789539
1315036640	Semiconductor	Q24		22.463360	1	31642600.748419
1315036640	Semiconductor	Q33	29.8	47.756677	1	14883764.463018
131504C850	Semiconductor	Q12		22.463360	1	31642600.748419
131504C850	Semiconductor	Q13	46.7	69.181538	1	10274404.828223
1315050340	Semiconductor	Q36,Q37		22.463360	2	17315095.066101
1315086540	Semiconductor	Q10,Q9		22.463360	2	17315095.066101
1315190100	Semiconductor	U15,U42,U47,U50		22.463360	4	9270607.712006
1315230511	Semiconductor	Q17,Q20,Q38		22.463360	3	12043329.789539
1315700216	Semiconductor	Q18,Q19,Q21,Q22,Q26,Q31,Q32,Q34, Q35		22.463360	9	4366472.106532
1315720010	Semiconductor	Q1,Q28		22.463360	2	17315095.066101
1315873500	Semiconductor	Q23		22.463360	1	31642600.748419
1315D4C500	Semiconductor	Q25		22.463360	1	31642600.748419
1315EM6K10	Semiconductor	Q11,Q2,Q4,Q8		22.463360	4	9270607.712006
1430023050	Integrated Circuit	U44	20.7	172.568076	1	2979765.101184
1430455200	Integrated Circuit	U12,U16,U25,U26,U3,U31,U35,U4,U40,U9		43.803003	10	1762784.467435
1430532190	Integrated Circuit	U20,U24		43.803003	2	6834791.244197
1430812460	Integrated Circuit	U2		43.803003	1	11739202.588727
1437323KA0	Integrated Circuit	U46,U6		43.803003	2	6834791.244197
143ALC2690	Integrated Circuit	U30		43.803003	1	11739202.588727
1440033660	Integrated Circuit	U28		43.803003	1	11739202.588727
1440210IT0	Integrated Circuit	U32		43.803003	1	11739202.588727
14406300U0	Integrated Circuit	U43	31.7	77.230891	1	6658117.307233
14407517A0	Integrated Circuit	U8		43.803003	1	11739202.588727
145900AUC1	Integrated Circuit	U36		43.803003	1	11739202.588727
145900AUC1	Integrated Circuit	U37	24.5	217.818052	1	2360742.486092
145901G080	Integrated Circuit	U19		43.803003	1	11739202.588727
14590AUP10	Integrated Circuit	U1		43.803003	1	11739202.588727
1462001280	Integrated Circuit	U22		43.803003	1	11739202.588727
1490034600	Integrated Circuit	U11	35.1	405.683715	1	1267520.263060
14909660T0	Integrated Circuit	U17		43.803003	1	11739202.588727
14S1035803	Integrated Circuit	U34		43.803003	1	11739202.588727
14S3121600	Integrated Circuit	U27		43.803003	1	11739202.588727
14S3121800	Integrated Circuit	U23		43.803003	1	11739202.588727
14S3378900	Integrated Circuit	U29	31.5	329.896150	1	1558709.701253
14S3435600	Integrated Circuit	U33		43.803003	1	11739202.588727

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14S3524700	Integrated Circuit	U13		43.803003	1	11739202.588727
14S3902500	Integrated Circuit	U45,U5		43.803003	2	6834791.244197
14S4186600	Integrated Circuit	U48		43.803003	1	11739202.588727
14S4600004	Integrated Circuit	U7		43.803003	1	11739202.588727
14S4814380	Integrated Circuit	U38,U39		43.803003	2	6834791.244197
14S5A00821	Integrated Circuit	U14,U18,U21		26.018600	3	9949526.289768
1540100040	Resistor	RN1,RN2,RN3,RN4		9.971436	4	17049357.262242
1601613200	Connection	PW1		16.184835	1	35685591.360212
1651526002	Connection	DIMM1		16.184835	1	35685591.360212
1652003101	Connection	CN25		16.184835	1	35685591.360212
1652514212	Connection	CN23		16.184835	1	35685591.360212
165300310G	Connection	JP1,JP11,JP2,JP3,JP4,JP5,JP7		16.184835	7	6941176.714407
165300320K	Connection	JP10,JP8,JP9		16.184835	3	14515880.849373
165300420Q	Connection	CN14		16.184835	1	35685591.360212
165300520X	Connection	JP6		16.184835	1	35685591.360212
165320520V	Connection	CN22		16.184835	1	35685591.360212
1653300107	Connection	JP10(3-4),JP2(2-3),JP4(1-2),JP7(1-2),JP9(3-4)		16.184835	5	9343344.843761
165330010E	Connection	JP11(1-2),JP3(2-3),JP5(1-2)		16.184835	3	14515880.849373
165330010G	Connection	JP1(1-2)		16.184835	1	35685591.360212
1654004010	Connection	CN7		16.184835	1	35685591.360212
1654020004	Connection	CN6		16.184835	1	35685591.360212
1654030003	Connection	CN5		16.184835	1	35685591.360212
1654226303	Connection	CN2		16.184835	1	35685591.360212
1654401935	Connection	CN15		16.184835	1	35685591.360212
1654409103	Connection	CN26,CN27		16.184835	2	20390152.380746
1654801831	Connection	CN19,CN24		16.184835	2	20390152.380746
1654900703	Connection	CN13		16.184835	1	35685591.360212
1654903902	Connection	CN4		16.184835	1	35685591.360212
1655302020	Connection	CN16,CN17		16.184835	2	20390152.380746
1655302025	Connection	CN12		16.184835	1	35685591.360212
1655305025	Connection	CN8		16.184835	1	35685591.360212
1655813031	Connection	CN1		16.184835	1	35685591.360212
1655902034	Connection	CN20		16.184835	1	35685591.360212
1655905038	Connection	CN10,CN9		16.184835	2	20390152.380746
1655909034	Connection	CN3		16.184835	1	35685591.360212
1655910032	Connection	CN18		16.184835	1	35685591.360212
1655912032	Connection	CN11		16.184835	1	35685591.360212
175011901C	Miscellaneous	CN20		306.000000	1	1681683.006787

**Reliability Prediction  
Summary**

**File Name:** OMNI-2155-SKU.rfp  
**Assembly:** 9697SKU003-D  
**Ref Des:**  
**Description:**

**Failure Rate:** 9020.242040  
**MTBF (hrs):** 110,862  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1752000501	Miscellaneous	FS4,FS5		2.400000	2	143944727.196625
1752001603	Miscellaneous	F1,F2,FS2		2.400000	3	101854599.204190
1752001900	Miscellaneous	FS1,FS3		2.400000	2	143944727.196625
175910000B	Miscellaneous	BZ1		2.400000	1	254626042.602335