

# Test Report

ICR-1642-CN-A

(Reliability Prediction)

Report No : 24R326A0

Report Issue Date : August 29, 2024

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Approval

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**Reliability Prediction**

**I. Date: 2024/08/29**

**II. Model Name: ICR-1642-CN-A**

**III. Revision: N/A**

**IV. Description: LTE Cat4 v1 router with 2GE & IO, CHINA**

**V. Equipment: Windchill Risk and Reliability Calculation Method:  
Telcordia Issue 4 ; Method I Case 3.**

**VI. Prediction Result : GB, GC – Ground Benign, Controlled**

**.Environment : GB**

**.Temperature : 30°C**

**.Quality : Level II**

**.Stress : 50%**

**.Failure Rate: 773.501905 FITs.**

**.MTBF : 1,292,822 hours.**

**Reliability Prediction**

- VII. Index: A. Failure Rate & Assembly MTBF**
- B. Part Failure List**

**Reliability Prediction  
Summary**

**File Name:** ICR-1642-CN-A.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 773.501905  
**MTBF (hrs):** 1,292,822  
**Temperature:** 30  
**Environment:** GB, GC - Ground Benign, Controlled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1652002024	Connection		0.049045	1	0.065268
1652008574-01	Connection		0.245225	1	0.326339
1211005927-01	Inductor		0.199768	1	0.277125
1652000984	Connection		0.049045	1	0.065268
1652008392-01	Connection		0.245225	1	0.326339
1654015603-01	Connection		0.177788	1	0.259480
1655006379-01	Connection		0.024522	2	0.060432
1000000153	Resistor		0.066589	1	0.088615
1000000165	Resistor		0.066589	1	0.088615
1000000177	Resistor		0.066589	8	0.593057
1000000331	Resistor		0.066589	2	0.164100
1000000642	Resistor		0.066589	1	0.088615
1000002016	Resistor		0.117311	1	0.230442
1000003459	Resistor		0.117311	2	0.395249
1000004956	Resistor		0.117311	1	0.230442
1000006038	Resistor		0.117311	1	0.230442
1000006377	Resistor		0.066589	3	0.237496
1000007666	Resistor		0.117311	1	0.230442
1000007788	Resistor		0.066589	1	0.088615
1000007947	Resistor		0.066589	1	0.088615
1000009424	Resistor		0.117311	8	1.255700
1000010247	Resistor		0.117311	1	0.230442
1059700001	Resistor		0.066589	12	0.872975
105A50103A	Resistor		0.066589	15	1.081466
105A510004	Resistor		0.066589	4	0.309817
105A510014	Resistor		0.066589	14	1.012075
105A510023	Resistor		0.066589	3	0.237496
105A510033	Resistor		0.066589	2	0.164100
105A510034	Resistor		0.066589	1	0.088615
105A516023	Resistor		0.066589	1	0.088615
105A520014	Resistor		0.066589	1	0.088615
105A52003A	Resistor		0.066589	1	0.088615
105A52491A	Resistor		0.066589	1	0.088615
105A52492A	Resistor		0.066589	1	0.088615
105A700004	Resistor		0.117311	20	2.843011
105A700203	Resistor		0.066589	2	0.164100
105A70513A	Resistor		0.066589	2	0.164100
105A707509	Resistor		0.066589	8	0.593057
105A710014	Resistor		0.066589	1	0.088615
105A715004	Resistor		0.066589	1	0.088615
105A747014	Resistor		0.066589	14	1.012075
1100000331	Capacitor		0.094067	2	0.205183
1100000332	Capacitor		0.094067	36	3.458749
1100002115	Capacitor		0.094067	1	0.106122
1100002118	Capacitor		0.094067	2	0.205183
1100003175	Capacitor		0.094067	3	0.303082

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110004046	Capacitor		0.094067	2	0.205183
110004125-03	Capacitor		0.094067	3	0.303082
110006146	Capacitor		0.094067	1	0.106122
110006537	Capacitor		0.094067	4	0.400379
110006782	Capacitor		0.094067	4	0.400379
110007177	Capacitor		0.094067	13	1.266339
110007214	Capacitor		0.094067	1	0.106122
110007318	Capacitor		0.094067	32	3.078344
110008150-01	Capacitor		0.790747	1	1.043865
110009083	Capacitor		0.094067	2	0.205183
110009289-01	Capacitor		0.790747	2	1.936871
110009824	Capacitor		0.094067	3	0.303082
110009837	Capacitor		0.094067	3	0.303082
1100010002	Capacitor		0.094067	8	0.786635
1100010056-01	Capacitor		3.329462	1	5.448288
1100010087	Capacitor		0.094067	1	0.106122
1100010088	Capacitor		0.094067	1	0.106122
1100010105	Capacitor		0.094067	2	0.205183
1100010109	Capacitor		0.094067	2	0.205183
1100010135	Capacitor		0.094067	1	0.106122
1100010278	Capacitor		0.094067	1	0.106122
1100010422	Capacitor		0.094067	1	0.106122
1100011315-01	Capacitor		0.094067	1	0.106122
1100011317-01	Capacitor		0.094067	1	0.106122
1121610790	Capacitor		0.094067	4	0.400379
1124410091	Capacitor		0.094067	2	0.205183
1124410190	Capacitor		0.094067	8	0.786635
1124433091	Capacitor		0.094067	5	0.497292
1124510291	Capacitor		0.094067	4	0.400379
1211004013	Inductor		0.091560	1	0.113437
1211004399	Inductor		0.199768	1	0.277125
1211005880-01	Inductor		0.083237	1	0.161117
1231004106-01	Miscellaneous		1.900492	1	3.132758
1252001788	Inductor		8.157183	2	27.201048
1300000191	Semiconductor		9.932778	3	38.887420
1300000373	Semiconductor		0.749129	4	4.417130
1300002706	Semiconductor		0.749129	1	1.460830
1300004402-02	Semiconductor		1.948353	4	9.415803
1300005769-01	Semiconductor		1.948353	1	2.771587
1300007359-01	Semiconductor		1.948353	4	9.415803
1304003100-01	Optical Device		0.106187	3	0.495651
1304006057-01	Optical Device		0.106187	2	0.357321
1310006408-01	Semiconductor		1.352386	2	4.178173
1310006826-01	Semiconductor		1.352386	2	4.178173
1410000052	Integrated Circuit		1.440000	1	1.440000
1410012119	Integrated Circuit		0.700000	1	0.700000

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1410023537-01	(BY VENDOR)		0.400000	1	0.400000
1410023741-01	Integrated Circuit		0.900000	2	1.800000
1410024069-01	(BY VENDOR)		0.900000	1	0.900000
1410027741-01	(BY VENDOR)		1.100000	1	1.100000
1410030157-01	Integrated Circuit		2.067722	1	4.021145
1410030512-01	(BY VENDOR)		0.100000	1	0.100000
1410030744-01	Integrated Circuit		1.604067	1	2.537255
1410033194-01	Integrated Circuit		0.554899	1	1.079123
1410034398-01	Integrated Circuit		0.776886	1	1.510826
1410034600-01	Integrated Circuit		5.066438	1	7.229443
1410034641-01	(BY VENDOR MTBF)		626.452590	1	626.452590
1600003018-01	Switching Device		5.517557	1	9.210798
1651003842-01	Connection		0.367837	2	1.061215
1653005261	Connection		0.245225	1	0.326339
1654002618	Connection		0.177788	3	0.673166
1100010085	Capacitor		0.094067	8	0.786635