

Test Report

ICR-1745-EU-A

(Reliability Prediction)

Report No : 26R061A0

Report Issue Date : February 26, 2026

Mark. Tai

Approval

Mei Chou

Test Engineer

Advantech QA Laboratory
台北市內湖區陽光街365巷33號1樓
1F., No.33, Ln. 365, Yangguang St., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)
TEL: 886-2-2792-7818 FAX: 886-2-2794-7305
www.advantech.com.tw

Reliability Prediction

I. Date: 2026/02/26

II. Model Name: ICR-1745-EU-A

III. Revision: N/A

IV. Description: 5G v1i router with 5GE, IO & GNSS, EMEA

**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 : 2,017.288559 FITs.

.MTBF : 495,715 hours.

Reliability Prediction

VII. Index: A. Failure Rate & Assembly MTBF

B. Part Failure List

**Reliability Prediction
Summary**

File Name: ICR-1745-EU-A.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 2017.288559
MTBF (hrs): 495,715
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		0.177788	1	0.259480
1211007191-01	Inductor		0.199768	1	0.277125
1652000984	Connection		0.049045	1	0.065268
1652008392-01	Connection		0.245225	1	0.326339
1653002101-02	Connection		0.049045	1	0.065268
1654011392-01	Connection		0.177788	1	0.259480
1654014673-01	Connection		0.177788	1	0.259480
1654015859-01	Connection		0.177788	1	0.259480
1655006379-01	Connection		0.177788	4	0.872115
1000000153	Resistor		0.066589	1	0.088615
1000000165	Resistor		0.066589	1	0.088615
1000000177	Resistor		0.066589	4	0.309817
1000000331	Resistor		0.066589	4	0.309817
1000000432	Resistor		0.066589	1	0.088615
1000000558	Resistor		0.066589	2	0.164100
1000000644	Resistor		0.066589	1	0.088615
1000000719	Resistor		0.066589	1	0.088615
1000001951	Resistor		0.066589	1	0.088615
1000002016	Resistor		0.117311	1	0.230442
1000004956	Resistor		0.117311	1	0.230442
1000006377	Resistor		0.066589	7	0.522570
1000007666	Resistor		0.117311	1	0.230442
1000008732	Resistor		0.066589	1	0.088615
1000009084	Resistor		0.066589	1	0.088615
1000010247	Resistor		0.117311	1	0.230442
1000011785	Resistor		0.117311	1	0.230442
1000011961	Resistor		0.117311	1	0.230442
1000014044	Resistor		0.117311	2	0.395249
1000014962	Resistor		0.117311	1	0.230442
1000014963	Resistor		0.117311	13	1.927284
1000015375	Resistor		0.282201	2	0.956784
1000016079	Resistor		0.282201	22	7.480352
1059700001	Resistor		0.066589	10	0.733358
105A50103A	Resistor		0.066589	2	0.164100
105A510004	Resistor		0.066589	10	0.733358
105A510014	Resistor		0.066589	2	0.164100
105A510023	Resistor		0.066589	1	0.088615
105A510033	Resistor		0.066589	5	0.381454
105A510034	Resistor		0.066589	4	0.309817
105A515014	Resistor		0.066589	1	0.088615
105A516023	Resistor		0.066589	1	0.088615
105A520014	Resistor		0.066589	2	0.164100
105A52003A	Resistor		0.066589	1	0.088615
105A52052A	Resistor		0.066589	1	0.088615
105A52491A	Resistor		0.066589	1	0.088615

**Reliability Prediction
Summary**

File Name: ICR-1745-EU-A.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 2017.288559
MTBF (hrs): 495,715
Temperature: 30
Environment: GB, GC - Ground Benign, Controlled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
105A575064	Resistor		0.066589	20	1.427195
105A700004	Resistor		0.117311	39	5.264954
105A700203	Resistor		0.066589	2	0.164100
105A70513A	Resistor		0.066589	1	0.088615
105A710014	Resistor		0.066589	2	0.164100
105A710034	Resistor		0.066589	1	0.088615
105A747014	Resistor		0.066589	13	0.942582
1100000330	Capacitor		0.094067	2	0.205183
1100000331	Capacitor		0.094067	2	0.205183
1100000332	Capacitor		0.094067	32	3.078344
1100002112	Capacitor		0.094067	2	0.205183
1100002118	Capacitor		0.094067	2	0.205183
1100003175	Capacitor		0.094067	3	0.303082
1100004046	Capacitor		0.094067	2	0.205183
1100004125	Capacitor		0.094067	3	0.303082
1100006146	Capacitor		0.094067	1	0.106122
1100006537	Capacitor		0.094067	9	0.882770
1100006705	Capacitor		0.094067	3	0.303082
1100006782	Capacitor		0.094067	1	0.106122
1100007214	Capacitor		0.094067	1	0.106122
1100007318	Capacitor		0.094067	38	3.648865
1100008150-01	Capacitor		0.790747	1	1.043865
1100008180	Capacitor		0.094067	1	0.106122
1100009083	Capacitor		0.094067	2	0.205183
1100009189	Capacitor		0.094067	8	0.786635
1100009837	Capacitor		0.094067	5	0.497292
1100009865	Capacitor		0.094067	2	0.205183
1100009922	Capacitor		0.094067	3	0.303082
1100010056-01	Capacitor		3.329462	1	5.448288
1100010085	Capacitor		0.094067	3	0.303082
1100010087	Capacitor		0.094067	1	0.106122
1100010105	Capacitor		0.094067	2	0.205183
1100010106	Capacitor		0.094067	9	0.882770
1100010107	Capacitor		0.094067	2	0.205183
1100010109	Capacitor		0.094067	5	0.497292
1100010278	Capacitor		0.094067	2	0.205183
1100010464	Capacitor		0.094067	20	1.935256
1100011218	Capacitor		0.094067	3	0.303082
1100011395	Capacitor		0.094067	3	0.303082
1124410091	Capacitor		0.094067	9	0.882770
1124410190	Capacitor		0.094067	20	1.935256
1124415091	Capacitor		0.094067	2	0.205183
1124456091	Capacitor		0.094067	1	0.106122
1124468090	Capacitor		0.094067	3	0.303082
1124510291	Capacitor		0.094067	3	0.303082
1124522190	Capacitor		0.094067	3	0.303082

**Reliability Prediction
Summary**

File Name: ICR-1745-EU-A.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 2017.288559
MTBF (hrs): 495,715
Temperature: 30
Environment: GB, GC - Ground Benign, Controlled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
1211004013	Inductor		0.091560	1	0.113437
1211004399	Inductor		0.199768	1	0.277125
1211006898-01	Inductor		0.199768	3	0.731727
1211007026-01	Inductor		0.199768	1	0.277125
1212000069	Inductor		0.091560	4	0.408910
1212004109-01	Inductor		0.091560	1	0.113437
1231004106-01	Miscellaneous		1.900492	1	3.132758
1252001788	Inductor		8.157183	5	57.865434
1290001290	Miscellaneous		0.400000	1	0.654555
1300000191	Semiconductor		9.932778	3	38.887420
1300003972	Semiconductor		0.749129	11	10.570227
1300005336-01	Semiconductor		0.749129	1	1.460830
1300006154-01	Semiconductor		0.749129	2	2.508113
1300006374-01	Semiconductor		1.948353	2	5.052000
1300006691-01	Semiconductor		0.749129	4	4.417130
1300007359-01	Semiconductor		1.948353	4	9.415803
1300007391-01	Semiconductor		1.948353	3	7.254001
1305000500-01	Semiconductor		0.749129	4	4.417130
1305002800	Semiconductor		0.749129	2	2.508113
1304006057-01	Optical Device		0.106187	2	0.357321
1304006097-01	Optical Device		0.106187	3	0.495651
1310006283-01	Semiconductor		1.352386	1	2.397329
1310006371-01	Semiconductor		1.352386	3	5.854517
1310006826-01	Semiconductor		1.352386	1	2.397329
1410000052	Integrated Circuit		1.440000	1	1.440000
1410012119	Integrated Circuit		0.700000	1	0.700000
1410023537-01	(BY VENDOR)		0.400000	1	0.400000
1410024069-01	(BY VENDOR)		0.900000	2	1.800000
1410028633-01	(BY VENDOR)		0.100000	1	0.100000
1410030121-01	(BY VENDOR)		0.200000	1	0.200000
1410030157-01	Integrated Circuit		2.067722	1	4.021145
1410032782-01	(BY VENDOR)		0.200000	3	0.600000
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
1410036168-01	(BY VENDOR MTBF)		1811.988110	1	1811.988110
1600003018-01	Switching Device		5.517557	1	9.210798
1651003842-01	Connection		0.367837	2	1.061215
1653005261	Connection		0.245225	1	0.326339
1653008935-01	Connection		0.196180	3	0.699692
1654002618	Connection		0.177788	1	0.259480