

ABB

Functional Testing Specification

Parts & Repair Services
Louisville, KY

LOU-UTS-DS200DCFBG2B

Test Procedure for DS200DCFB card tested on the UTS Test System

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	E. Rouse	1/2/2008
B	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5. Added part number to note section.	J. Hardin	7/1/2010
C	Added burn in test on DFE drive and changed header to reflect DS200DCFBG2B model number	L. Groves	11/26/2013
D	Removed the mandatory replacement of +15 and -15 regulators as well as optocouplers , Change these components on an as needed basis.	J. Morgan	2/25/2021

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QUALITY APPROVAL

Charlie Wade

DATE
1/2/2008

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3/18/2014

DATE
11/26/2013

DATE
1/2/2008

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Functional test procedure for a DS200DCFB card tested on the UTS Test System.

1. SCOPE

1.1 This is a functional testing procedure for a DS200DCFB card on UTS3000.

2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein.
Unless otherwise indicated, the latest issue shall apply.

3.1.1 Check board's electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning

4.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.

4.2 Equipment Inspection

4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:

4.2.1.1 Wires broken or cracked

4.2.1.2 Terminal strips / connectors broken or cracked

4.2.1.3 Loose wires

4.2.1.4 Components visually damaged

4.2.1.5 Capacitors leaking

4.2.1.6 Solder joints damaged or cold

4.2.1.7 Circuit board burned or de-laminated

4.2.1.8 Printed wire runs burned or damaged

5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

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Qty	Reference #	Description
1	H188701	UTS3000 Tester
1	H188809	DCFB Fixture
1	H190111	DFE Test Drive

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6. TESTING PROCESS

6.1 Setup

6.1.1 As required by UTS3000 instructions.

6.2 Testing Procedure

6.2.1 Identify the test to be used on the UTS3000 by matching the model number with the ones on the system and follow the instructions given after execution.

6.3 ****UTS TEST COMPLETE****

6.4 After UTS test is complete, place card in the DFE test fixture for burn in.

6.5 Install card in DFE fixture, H190111.

6.6 Connect the following cables to card:

V1, V2, V3, P1A, P2A, VM1A, VM2A, 1A1PL, 1F1PL, 1CPL, 1PL, MACPL, 1FPL, 5PL, 2PL, CPTPL, FAPL, 4PL, CNPL

6.7 Verify all jumpers and dip switches match test card.

6.8 Apply power to drive by releasing E-STOP.

6.9 Verify green LEDs (MPOK, IPOK, STATUS) on IS200ICIA card illuminate.

6.10 Log onto test computer (T00752901) by entering password – cando01B

6.11 Click on toolbox icon.

6.12 Open “Innovation Drive with DCFBG2.icb” file.

6.13 Click on the “Run Wizard” icon.

6.14 Highlight “Cell Test” and hit OK

6.15 Click on “Execute” to perform test- message should be cell test passed, if not troubleshoot before continuing.

6.16 Turn on Run-34 switch on test panel and verify card adjusts from 10 to 90 percent MS.

6.17 Let card burn in running both forward and reverse.

6.18 Burn-in period shall be 30 to minutes, 15 minutes in each direction.

6.19 *** *TEST COMPLETE* ***

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7. NOTES

7.1 Please replace the capacitors if over 5 years old, C44, C87-C89, C91, C92,
& Relay K2.

Location	Part Number
C44	104X122AA372
C87	104X122AA362
C88	104X122AA362
C89	104X122AA362
C91	68A7188P330X
C92	104X122AA362
U32	PDUR1000NN15M15
U43	PDUR1000PN15M15
K2	104X166AA075
U19	PDUO1001HP2611
U20	PDUO1001HP2611
U26	PDUO1001HP2611
U27	PDUO1001HP2611

8. Attachments

8.1 None at this time.