ABB	Functional Testing Specification
Parts & Repair Services Louisville, KY	LOU-GED-DS200NATOG1A

### Test Procedure for a DS200NATOG1A

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE		
Α	Initial release	J. Hardin	01/02/2019		

PREPARED BY J. Hardin	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL L. Groves
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#### 1. SCOPE

**1.1** This is a functional testing procedure for DS200NATOG1A resistor board.

#### 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, cracked, or loosely connected
    - 4.2.1.2 Terminal strips / connectors broken or cracked
    - 4.2.1.3 Components visually damaged
    - 4.2.1.4 Capacitors bloated or leaking
    - 4.2.1.5 Solder joints damaged or cold
    - 4.2.1.6 Circuit board burned or de-laminated
    - 4.2.1.7 Printed wire runs / Traces 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.

Qty	Reference #	Description
1	Fluke meter	Digital multimeter

#### 6. Modifications/Upgrades

**6.1** Check Orange Book for any modifications or upgrades.

#### 7. Testing Process

#### 7.1 Setup

7.1.1 There was an issue with cracked resistors on this board, check ECN's to make sure they don't need to be changed. Must change out EBG and Caddock resistors. EBG resistors can be identified by EBG, SSP32/F, 1M245B, XXXXX. Use only Ohmite resistors.

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## 7.2 Testing Procedure

**7.2.1** Test the board per the following table.

From TP#	To TP#	Measurement
VAIN	E2	2.49 M ohm +\- 10%
	E3	3.735 M ohm +\- 10%
	JV-4	7.42 M ohm +\- 10%
	TP-1	6.24 M ohm +/-10%
VBIN	E5	2.49 M ohm +\- 10%
	E6	3.735 M ohm +\- 10%
	JV-6	7.42 M ohm +\- 10%
	TP-2	6.24 M ohm +/-10%
VCIN	E8	2.49 M ohm +\- 10%
	E9	3.735 M ohm +\- 10%
	JV-8	7.42 M ohm +\- 10%
	TP-3	6.24 M ohm +/-10%
VDIN	E11	2.49 M ohm +\- 10%
	E12	3.735 M ohm +\- 10%
	JV-10	7.42 M ohm +\- 10%
	TP-4	6.24 M ohm +/-10%
VEIN	E14	2.49 M ohm +\- 10%
	E15	3.735 M ohm +\- 10%
	JV-12	7.42 M ohm +\- 10%
	TP-5	6.24 M ohm +/-10%
JV-1	JV-3	0 ohm +\- 1.5 ohm
	JV-5	0 ohm +\- 1.5 ohm
	JV-7	0 ohm +\- 1.5 ohm
	JV-9	0 ohm +\- 1.5 ohm
	JV-11	0 ohm +\- 1.5 ohm
	JV-13	0 ohm +\- 1.5 ohm
TPV	JV-19	0 ohm +\- 1.5 ohm
JV-2	JV-14	0 ohm +\- 1.5 ohm
	JV-20	0 ohm +\- 1.5 ohm

## 7.2.2 Then verify that the MOV's are good.

## 7.3 \*\*\*TEST COMPLETE \*\*\*

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### 8. Notes

**8.1** None at this time.

### 9. Attachments

**9.1** None at this time.