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GE Energy

**Functional Testing Specification***Parts & Repair Services  
Louisville, KY***LOU-FLUKE1-DS3800HSAA****Test Procedure for DS3800HSAA card tested with the Fluke 9010A troubleshooter.****DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column**

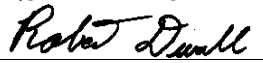
REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release, Obsoleted several other procedures and rolled them into this one. Obsoleted: LOU-GED-DS3800NFCB-B, LOU-GED-DS3800HFPC-B, LOU-GED-DS3800HIOC-B, LOU-GED-DS3800HSCA-B, LOU-GED-DS3800HXTA-B, LOU-GED-DS3800NBIA-B, LOU-GED-DS3800DOWC-B,	R. Duvall	07/02/02
B	Page 4 Section 6.3, Chip Orientation	C. Wade	9/6/2007
C	Updated table 1 and added Section 6.5	C. Wade	4/9/2009
D	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5 and updated general format of document. Removed those parts not required for testing this card.	J. Wychulis	8/12/2010

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<b>PREPARED BY</b> R. Duvall	<b>REVIEWED BY</b> J. Wychulis	<b>REVIEWED BY</b>	<b>QUALITY APPROVAL</b> 
<b>DATE</b> 07/02/02	<b>DATE</b> 8/16/2010	<b>DATE</b>	<b>DATE</b> 07/02/02

<p><b>LOU-FLUKE1-DS3800HSAA</b> <b>REV. D</b></p>	<p><b>g</b></p> <p><b>GE Energy</b> <i>Parts &amp; Repair Services</i> <i>Louisville, KY</i></p>	<p><b>Page 2 of 6</b></p>
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## Functional test procedure for various cards tested with the Fluke 9010A

### 1. SCOPE

- 1.1 This is a functional testing procedure for various cards tested with the Fluke 9010A Troubleshooter.

### 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.
- 2.1.1 **Fluke 9010 Operations manual**
- 2.1.2 **Documentation for card being tested**

### 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 the local documented procedures 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.

Qty	Reference #	Description
1		Fluke 9010A Micro-system Troubleshooter connected to a PC that has a connection to the Louisville Server
1		2 <sup>nd</sup> Fluke 9010A Micro-system Troubleshooter if required by test.
1		Z80 Pod as called out in next table.
1	H033668	Fixture Number

**5.2** The following equipment is required to perform individual card tests. See table 1.

Card Tested	Test Setup	Fixture ID	Secondary Item	Additional Equipment	Primary Program	Secondary Program
DS3800HSAA	Setup 1	H033668			HSAA .S	

Table 1

## 6. **TESTING PROCESS**

### 6.1 Setup

**6.1.1** Per requirements in section 5

### 6.2 Testing Procedure

**6.2.1** Setup equipment per figure indicated in reference table.

**6.2.2** Load test program indicated in table into Fluke 9010A.

**6.2.3** Apply power to UUT.

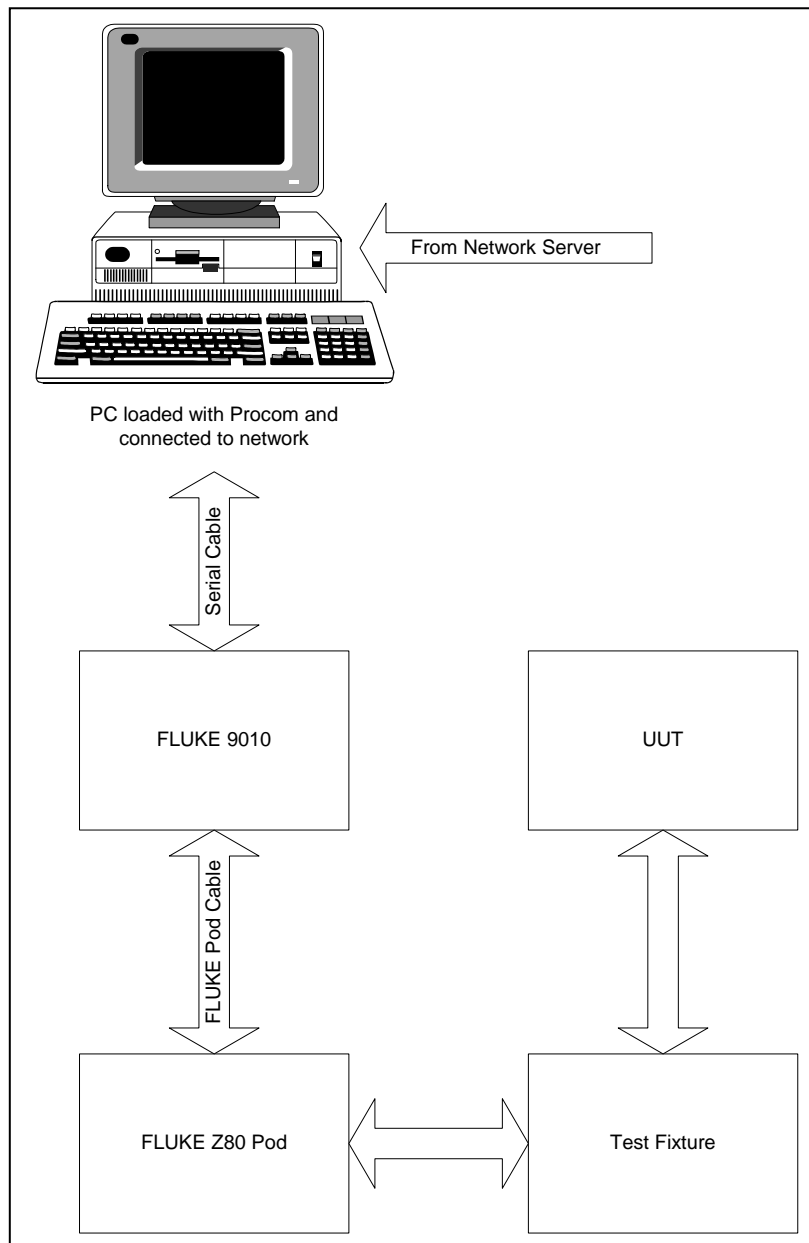
**6.2.4** Execute Program 0 on Fluke.

**6.2.5** Follow instructions on terminal screen.

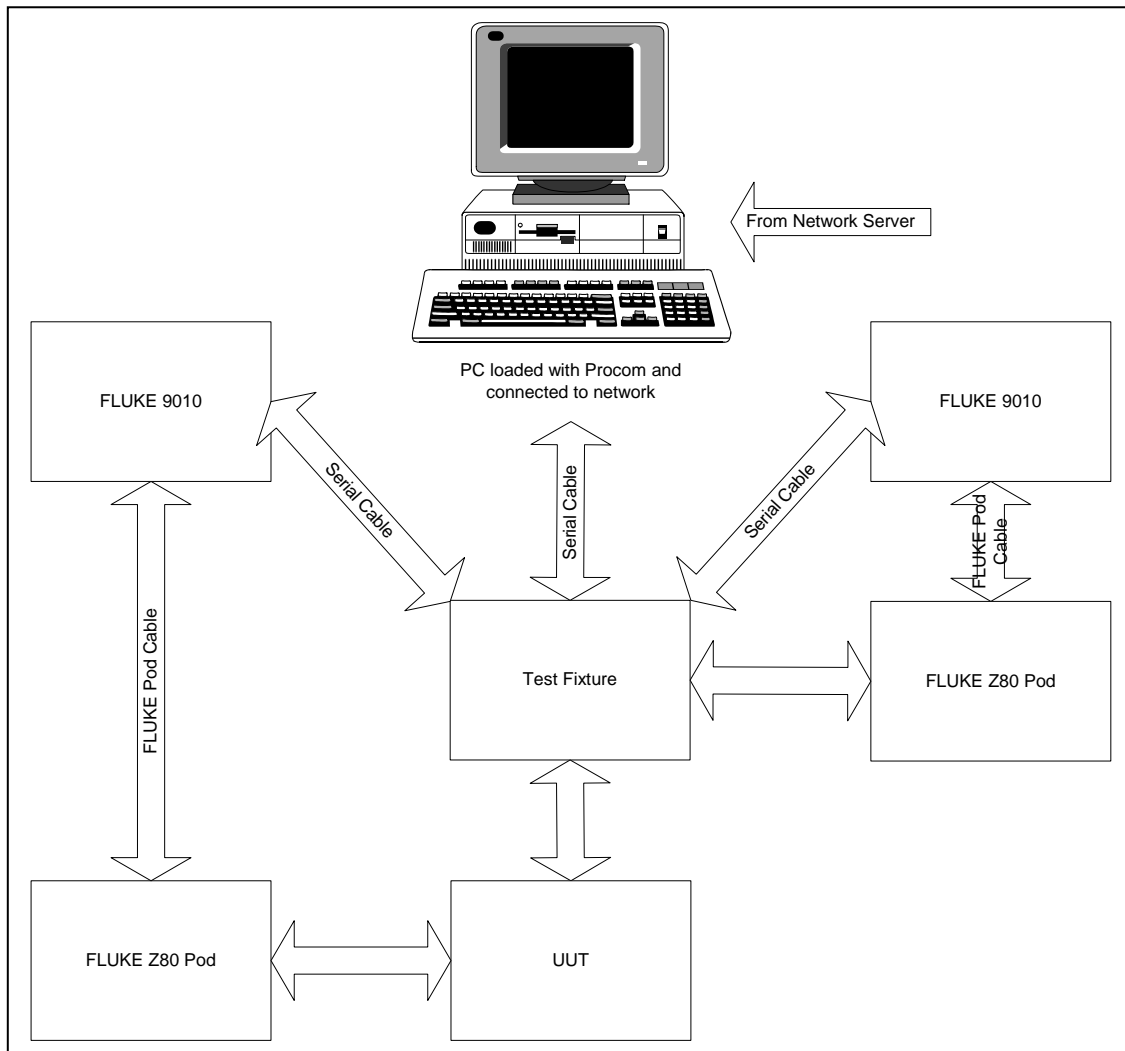
### 6.3 Chip Orientation

**6.3.1** **SPECIAL NOTE: If firmware has to be checked outside of card and then reinstalled before sending back to customer, be sure to check orientation of all socketed chips.**

7. **NOTES**  
7.1 Setup 1



## 7.2 Setup 2



### 7.3 Setup 3

