g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU–GED-DS3800HDDx-B**

Test Procedure for a DS3800HDDD

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	R. Duvall	07/22/02
B	Rewrite of procedure to correct errors	Steve Pharris	08/02/07
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Steve Pharris			
DATE	**DATE**	**DATE**	**DATE**
08/02/2007			

1. SCOPE

1.1 This is a functional testing procedure for a DS3800HDDD.

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

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, 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	H033549	DS3800HDDL Test Fixture

6. TESTING PROCESS

6.1 Setup

6.1.1 Install card in test fixture and connect cable to front of card.

6.1.2 Set switches on fixture as follows

A0	A1	A2	A3	ST	D0	D1	D2	D3	D4	D5	D6	D7
0	0	0	1	1	1	0	0	0	0	0	0	0

Note:

6.2 Testing Procedure

6.2.1 Apply power to card.

6.2.2 All LED's should light except CR4 and IMOK. (if no LED's light cycle power)

6.2.3 Push RESET on UUT should light RESET LED on test fixture.

6.2.4 Push IMOK on test fixture should light IMOK LED on UUT.

6.2.5 Push DOK on test fixture should light CR4 LED on UUT.

6.2.6 Verify LED operation per table below. (You will have to toggle RD/WR switch to WR at every line to achieve the expected output).

A0	A1	A2	A3	ST	D0	D1	D2	D3	D4	D5	D6	D7	Output
1	0	0	1	1	1	1	1	1	0	0	0	0	**LED 1-4**
1	0	0	1	1	0	0	0	0	0	0	0	0	**LED 5-8**
0	1	0	1	1	0	0	0	0	0	0	0	0	**LED 9-16**
1	1	0	1	1	0	0	0	0	0	0	0	0	**LED 17-24**
0	0	1	1	1	0	0	0	0	0	0	0	0	**LED 25-32**
1	0	1	1	1	0	0	0	0	0	0	0	0	**LED 33-40**
0	1	1	1	1	0	0	0	0	0	0	0	0	**CR1, 2, 3**

6.2.7 Set switches as in 6.1.2

6.2.8 Cycle power on test fixture to reset card.

6.2.9 Hold RD/WR switch in RD position while rotating thumbwheel switches and verify binary count in sequence with thumbwheel on LED's on test fixture. LED's 0-3 for thumbwheel MSB, and LED's 4-7 for thumbwheel LSB.

*6.3 ***TEST COMPLETE ****