g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS3800NVCB**

Test Procedure for a DS3800NVCB, a Voltage Conditioning Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Steve Pharris	07/15/09
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Steve Pharris			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
07/15/2009			7/15/2009

1. SCOPE

1.1 This is a functional testing procedure for a DS3800NVCB, a vibration & pressure amplifier card.

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 the 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 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		Fluke 87 DMM (or Equivalent)
1	H033882	Rainbow Box
1	H033772	Power supply for DS3800 cards
1	H033767	Standard Connector box for DS3800 cards

6. TESTING PROCESS

6.1 Setup

6.1.1 Make the following connections:

PA1-PA9

PA55-SW85 Set to L

PA65-SW84 Set to H

PA37-SW83 Set to L

PA44-SW82 Set to L

PA63-SW81 Set to L

PA67-SW87 Set to L

DMM to PA78

6.2 Testing Procedure

6.2.1 Apply power to card.

6.2.2 Verify DMM reads 10VDC

6.2.3 Set SW84-L

6.2.4 Verify DMM read 0VDC

6.2.5 Set SW84-H

6.2.6 Set SW83-H

6.2.7 Verify DMM reads 10VDC

6.2.8 Set SW82-H and SW83-L

6.2.9 Verify DMM reads 10VDC

6.2.10 Set SW83-H

6.2.11 Verify DMM reads 10VDC

6.2.12 Set SW81-H

6.2.13 Set SW82 and SW83-L

6.2.14 Verify DMM reads 10VDC

6.2.15 Set SW83-H

6.2.16 Verify DMM reads 10VDC

6.2.17 Connect JA10 to +5VDC

6.2.18 Set SW82-H

6.2.19 Set SW83-L

6.2.20 Verify DMM reads 10VDC

6.2.21 Set SW83-H

6.2.22 Move connection at JA10 to JA8

6.2.23 Verify DMM reads 5VDC

6.2.24 Set SW81-SW83-L

6.2.25 Move connection at JA8 to JA14

6.2.26 Set SW87-H

6.2.27 Verify DMM reads 5VDC

6.2.28 Set SW83-H

6.2.29 Move connection from JA14 to JA12

6.2.30 Verify DMM reads 5VDC

6.2.31 Remove connection at JA12

6.2.32 Set SW82-H and SW83-L

6.2.33 Verify DMM reads 6.2VDC

6.2.34 Set SW83-H

6.2.35 Verify DMM reads –6.2VDC

6.2.36 Set SW81-H

6.2.37 Set SW82 and SW83-L

6.2.38 Verify DMM reads 7.5VDC

6.2.39 Set SW83-H

6.2.40 Verify DMM reads –7.5VDC

6.2.41 Set SW83-L and SW82-H

6.2.42 Verify DMM reads 5VDC

6.2.43 Set SW83-H

6.2.44 Verify DMM reads 0VDC

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time

8. ATTACHMENTS

8.1 None at this time