g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS200STTCH2A**

Test Procedure for a IS200CTTCH2A card

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1. SCOPE

1.1 This is a functional testing procedure for a IS200STTCH2A 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 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 87 DMM (or Equivalent)
1		5VDC Power Supply

6. Modifications/Upgrades

6.1 Fill out if applicable.

7. Testing Process

7.1 Setup

7.1.1 Using an ohmmeter, verify the following pins of the TB1 connector to the JA1 connector. You should measure 200 ohms +/- 2% between the two pins. Also each one of these points on the TB1 connector should be > 1 Meg ohms from SCOM.

From	To
TB1-1	JA1-4
TB1-2	JA1-3
TB1-5	JA1-23
TB1-6	JA1-22
TB1-7	JA1-6
TB1-8	JA1-5
TB1-11	JA1-25
TB1-12	JA1-24
TB1-14	JA1-7
TB1-17	JA1-27
TB1-18	JA1-26
TB1-19	JA1-10
TB1-20	JA1-9
TB1-23	JA1-29
TB1-24	JA1-28
TB1-26	JA1-11
TB1-29	JA1-31
TB1-30	JA1-30
TB1-31	JA1-14
TB1-32	JA1-13
TB1-35	JA1-33
TB1-36	JA1-32

7.1.2 Verify the following pins of the TB1 connector are < 1 ohm to SCOM.

7.1.2.1 Pins TB1-3, TB1-4, TB1-9, TB1-10, TB1-15, TB1-16, TB1-21, TB1-22, TB1-27, TB1-28, TB1-33, TB1-34, TB1-41, TB1-42.

7.1.3 Using a capacitance meter and measure between 35 to SCOM, 38 to SCOM, and 39 to SCOM of connector JA1. You should measure .1uf +/- 10% at all three points.

7.2 Testing Procedure

7.2.1 Use an external power supply and connect +5VDC to Pin-16 and COM to Pin-15 of the JA1 connector with a uA meter in series with the power supply. At room temp, (70 degrees F) the uA meter should measure approx 298uA. Use a can of freeze spray and cool IC U2. The uA should drop below 250uA.

7.2.2 The ID chip needs to be read to confirm that it has been programmed properly. Take the card over to the chip ID pc located in the Mark VI area of the shop and select the correct revision of the IS200TTC to use, you may see a 5G or 7G next to the number. This refers to the serial and whether it has 5 or 7 digits in it. Select the proper one, as you will be expected to type this number into the system at a given point. When entering data, be sure to use all CAPITAL LETTERS as lower case might cause it not to agree with what's programmed in the chip. If particular revision you need to select doesn't have a 5G or 7G next to it, get it added before proceeding.

7.3 ******TEST COMPLETE ******

8. **Notes**

8.1 None at this time.

9. Attachments

9.1 None at this time.