



GE Energy

## Functional Testing Specification

*Parts & Repair Services  
Louisville, KY*

**LOU-GED- IC3600LSRB**

### Test Procedure for a IC3600LSRB1A

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

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<b>DATE</b> 02/02/2018	<b>DATE</b>	<b>DATE</b>	<b>DATE</b> 2/5/2018

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## 1. SCOPE

1.1 This is a functional testing procedure for a 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		TENMA 72-5010 (or equivalent) Function Generator
1		12 Volt DC power supply
1		Dual trace Oscilloscope

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## 6. Modifications/Upgrades

6.1 Fill out if applicable.

## 7. Testing Process

7.1 Setup

7.2 Set Function Generator to 20khz 5 vdc positive going square wave, Zero DC offset



**Note:**

## 7.3 Testing Procedure

### 7.4 Circuit A

7.4.1 Jumper pins 6,4,9 and 51 together.

7.4.2 Jumper pins 7,8 and 11 together.

7.4.3 Hook Function generator to pin 8

7.4.4 Hook scope Channel 1 to pin 5

7.4.5 Hook scope Channel 2 to pin10

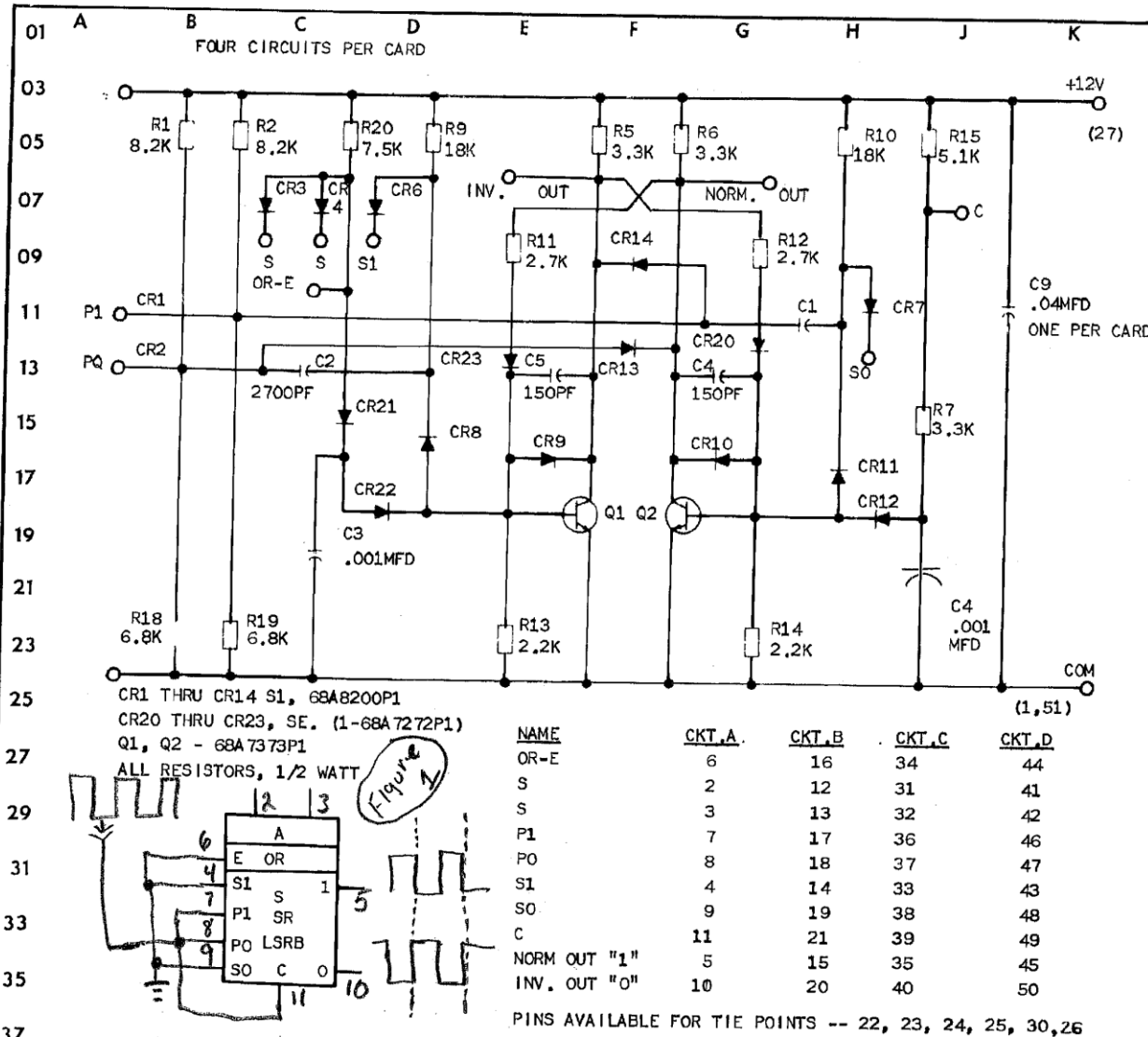
7.4.6 Hook 12vdc power supply + to pin 27 and com to pin 51

7.4.7 Turn on power supply and function generator.

7.4.8 Observe scope, should see a square wave 180 degrees out of phase. (see figure 1)

7.4.9 Repeat for Circuit.B, C and D

FORM IC 2390 2-72



7.4.10

7.4.11

## 7.5 Post Testing Burn-in

Required ☐ Yes ☐ No



**Note:** All MARK I, II, & III Turbine related cards require a post testing burn-in of 100 hours.

7.5.1 Apply BUS or Operational power to the card for a period of 100 hours.

7.5.2 Re-test card while warm using the above procedure.

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**7.6 \*\*\*TEST COMPLETE \*\*\***

**8. Notes**

**8.1** None at this time?

**9. Attachments**

**9.1** None at this time?