g GE Industrial Systems *Renewal Services* *Louisville, KY*	**Functional Testing Specification** **LOU-GED-531X155TXMx**

Test Procedure for a 531X155TXMACG1 TACH ISOLATOR / BUFFER Card

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

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A	Initial release	D. Laemmle	3/3/03
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Functional test procedure for 531x155TXMACG1

1. SCOPE

1.1 This is a functional testing procedure for a 531X155TXMACG1.

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 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 85 DMM or equiv.
1		Tenma 72-5015 Function Generator or equiv
1		Tektronix 2215A Oscilloscope or equiv.
1		15VDC power supply

6. TESTING PROCESS

6.1 Setup

6.1.1 Set jumpers JP-2 & JP-3 to position 2-3. Set Jumpers JP1 & JP-4 to position 1-2.

6.2 Testing Procedure

6.2.1 Connect +15V to +V stab terminal and com to –V stab terminal.

6.2.2 Connect positive going 10Khz square wave to A (TB-1 pin 3) and com to “not A” (bar on top) (TB1 pin 6).

6.2.3 Connect + scope to TXA+ and scope com to TXA-.

6.2.4 Apply 15V power and square wave input. See output square waves at same frequency. Output square waves will have somewhat rounded edges. Raise input to 60Khz and see output follow.

6.2.5 Move square wave input at 10Khz to B (TB1-pin 10) and com to “ not B “ . (TB1- pin 13).

6.2.6 Move scope to TXB+ and scope com to TXB-.

6.2.7 With 15V applied see output square waves. Raise the input frequency to 60Khz and see output follow.

6.2.8 Test complete. Replace jumpers JP1-JP-4 in 1-2 position.

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time