g	GE Energy	**Functional Testing Specification**

Parts & Repair Services *Louisville, KY*	**LOU-TOFFEE-IS220PAICH1A**

Test Procedure for an IS220PAICH1A card tested on the Toffee System

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	E Rouse	02/23/2010
B	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5.	F. Howard	7/6/2010
C			

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DATE 02/23/2010	DATE 7/6/2010	DATE	DATE 02/23/2010

Functional test procedure for an IS220PAICH1A card tested on the Toffee Test system

1. **SCOPE**

    1.1 This is a functional testing procedure for the IS220PAICH1A Analog In/Out IO Pack.

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 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 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	H188818	Toffee Test System #14
1	H188857	Toffee test fixture for IS220PAICH1A

6. TESTING PROCESS

6.1 Setup

6.1.1 Install IS220PAIC fixture H188857 onto TOFFEE test System.

6.1.1 Install Unit Under Test into test fixture. Plug the black and white wire into back of unit. Plug the red Ethernet cable into the receptacle on the left and the blue Ethernet cable into the right.

6.2 Testing Procedure

6.2.1 Double click on the OPERATOR INTERFACE icon on screen.

6.2.2 On the user name dialogue box, choose either administrator or technician. If administrator password is NGTF2008*, technician password is KISS, case sensitive. The next window should say configuration management and you should always click on no.

6.2.3 Screen will flicker and box marked single pass will be highlighted. Click on it and it should put up another dialogue box that says Orange book is old. Click o.k. If Orange book needs to be updated, there is an icon for that but I would let Paul or Eric do it until user is familiar with system.

6.2.4 The next dialogue box should say select DUT (device under test) . Detected fixture should have the model number being tested and family name should say MVIe. Click the drop down box DUT and your model number should be the only option. Select it and it should appear in the DUT model number. Put your revision level of unit being tested in DUT REV and click ok.

6.2.5 A delay dialogue box appears, counts down and then asks for a serial number, enter 14 and check the boxes marked RUN UPLOADS and DELETED LOGS. Click ok. If you logged on as an administrator, you will not get this dialogue box. The test will automatically run these.

6.2.6 A delay dialog box appears and counts down, do not stop it and then system runs test. You will get either a pass or fail message.

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 Changes to the electronic Toffee test are recorded in the Software Control Database

8. ATTACHEMENTS

8.1 Picture of the Toffee Test System