Test procedure for a card tested on the ATE and in the Mark V Test System.

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Eric Rouse	11/2/2001
B	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5.	Jeffrey Barton	7/8/2010
C	Added section 7 to functionally test the card in Mark V Turbine.	C. Wade	1/16/2014

PREPARED BY E. Rouse	REVIEWED BY Jeffrey Barton	REVIEWED BY	QUALITY APPROVAL *Charlie Wade*
DATE 11/2/2001	DATE 7/09/2010	DATE	DATE 6/23/2010

Functional test procedure for an ATE and Mark V tested item.

1. **SCOPE**

    1.1 This is a functional testing procedure for a DS200TCDAG1B card on ATE and Mark V Test System.

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 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	H033779	ATE1
1	H188677	Test Fixture for DS200TCDA
1	None	Banana to banana plug connector wire
1	#39	Personality Board
1	H190115	HMI Computer for Mark V Turbine
1	H190117	Mark V Turbine System

6. TESTING PROCESS

6.1 Setup

    6.1.1 As required by ATE instructions

6.2 Testing Procedure

    6.2.1 Identify the test to be used on the ATE by matching the model number with the ones on the system and follow the instructions given after execution.
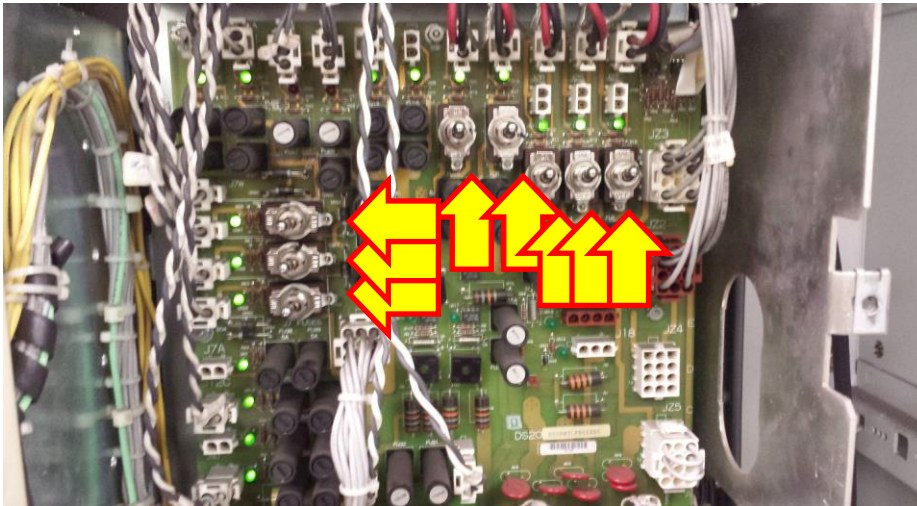
    6.2.2 If board passes all ATE tests go to next step.
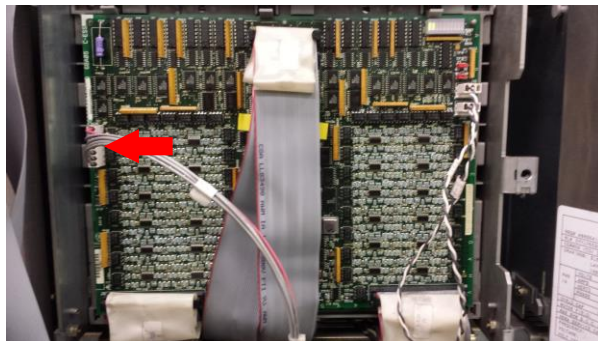
7. DS200TCDA Testing in Mark V Rack

7.1 Removal of existing TCDA card.

    7.1.1 Installing the replacement DS200TCDA into Mark V Turbine System

    7.1.2 Remove Power to Respective Core:

    7.1.3 After verifying the POWER has been removed, remove the POWER INPUT Connector to the TCDA FIRST! (Indicated by the RED ARROW above).


    7.1.4 Disconnect remaining: Connectors, Chassis Ground and Ribbon Cable.

7.1.5 Remove the TCDA by releasing the 6 retaining clips on the card tray, 3 located on the physical top of the card and 3 on the bottom.

7.2 Installation of replacement DS200TCDA card.

7.2.1 Remove the EEPROM on original TCDA board and install it on the replacement board.

7.2.2 Set ALL jumpers to match the ORIGINAL… DO NOT CHANGE THE ORIGINAL BOARDS JUMPERS

7.2.3 Install the TCDA by securing it with the retaining clips on the card tray, 6 total, 3 located on the physical top of the card and 3 on the physical bottom.

7.2.4 Connect the POWER INPUT Connector to the TCDA LAST! (Indicated by the RED ARROW above)

7.2.5 Connect remaining: Connectors, Chassis Ground and Ribbon Cable.

7.2.6 Keep in mind of the total connectors disconnected, some cores may have different amount of connectors. (ex. D Core)

7.2.7 Connect the POWER INPUT Connector to the TCDA.

7.2.8 Recheck ALL connectors to verify none are misaligned (off one pin), partially connected or orientated 180 degrees of what it should be.
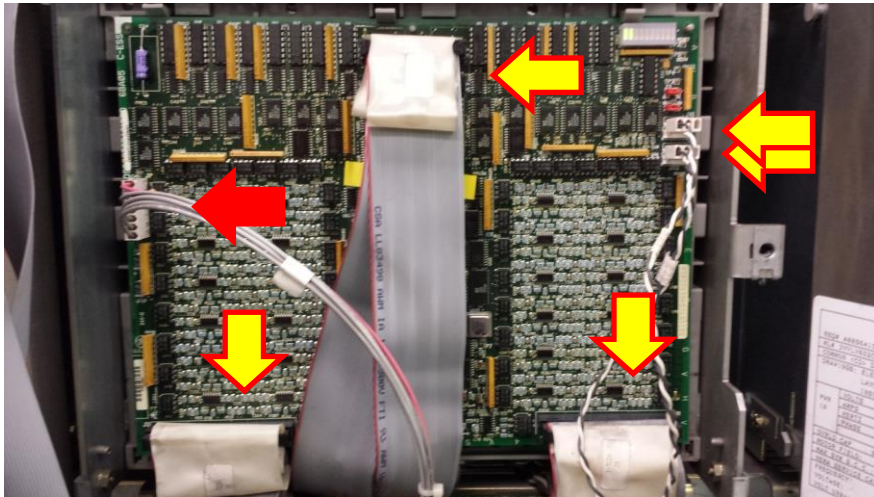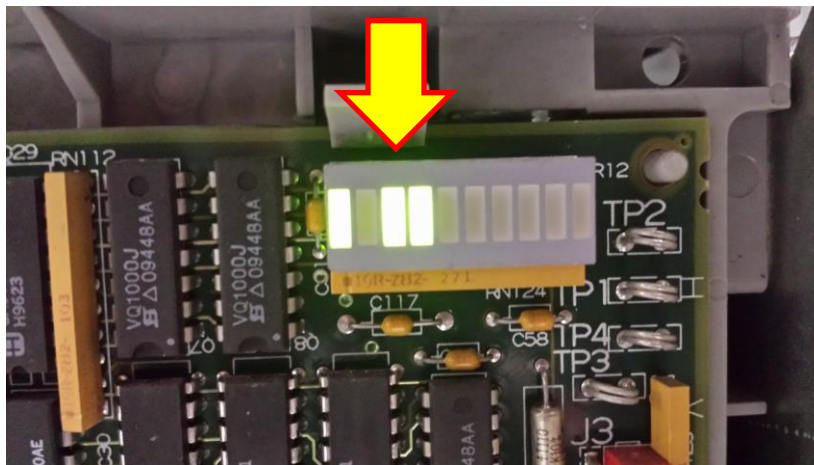

7.2.9 Restore power to core via the TCPD

7.2.10 Verify that the core boots and condition is A7 via the SLCC display

7.2.11 Verify TCDA synchs with the other cores (if applicable) by watching the BAR GRAPH LEDs

blink in unison. This must happen if card is to work properly.

7.3 Burn-in Time.

7.3.1 Burn-in time for Mark V cards normal repair

7.3.2 DS200TCDA   1 hour minimum in Mark V rack

7.3.3 Burn-in time for Mark V cards Revitalization Program

7.3.4 DS200TCDA   3 hours minimum in Mark V rack

7.4 ***TEST COMPLETE for DS200TCDA card***

7. NOTES

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

8. Attachments

8.1 None at this time.