MODIFICATION RECOMMENDED

3070-91 <u>S E R V I C E N O T E</u>

Supersedes: None

KEYSIGHT

Keysight i3070 Series 5 In-Circuit Test System

Serial Numbers:

E9901E - ALL; E9902E - ALL; E9903E - ALL; E9905E - ALL E9905EL - ALL; E9988E - ALL;

Control XTPA card new firmware 14091012_2.xsvf

Parts Required: P/N Description

Qty.

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to **www.keysight.com**.

NONE

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION X ON SPECIFIED FAILURE CATEGORY: [[]] AGREEABLE TIME	STANDARDS LABOR:	0.0 Hours		
LOCATION X CUSTOMER INSTALLABLE CATEGORY: [[]] ON-SITE (active On-site contract required) [[]] SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP X SEE TEXT	USED [[]] RETURN PARTS: [[]] SCRAP X SEE TEXT		
AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTI	L: 15 Jan 2016		
[[]] Calibration Required X Calibration NOT Required	PRODUCT LINE: 80 – In-Circuit Tester AUTHOR: Wee-Sheng, Yong			
ADDITIONAL INFORMATION:				

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Situation:

The existing Control XTPA "**11100709_2**" firmware may encounter Diagnostics test 1256 safeguard timeout failure, although it doesn't affect the control card functionality.

The new Control XTPA "**14091012_2**" firmware is to improve safeguard timeout accuracy of diagnostics test 1256. It is recommended to update this new firmware to all the Control XTPA cards. There is no impact to Control XTP card. Hence, no action is required for XTP card.

All the new i3070 In-Circuit systems and spare Control XTPA cards will be programmed with new firmware with effect of 26 Jan 2015.

Users who have testheads that are installed with Control XTPA of one version and firmware release of another version may detected this differences at failing diagnostics "Test 6, Subtest 0" with the error "FPGA firmware error" (Figure 1). This is a symptom that the firmware versions are different.



Figure 1: Diagnostics error message

Solution/Action:

- A. Check the firmware version on Control XTPA card
 - 1) Execute the testhead diagnostics application by double clicking on the "DGN" icon on the desktop (alternatively, type "dgn" at the command prompt in a shell window)
 - 2) To boot up the testhead,
 - i. Click on "Testhead Functs" (F4) and click on "Testhead Power On" (F1)
 - ii. After the testhead is booted up, click "Exit" till Service Package Level 1.
 - iii. Then, select "Configuration", follow by "Programmable Card Configuration".
 - iv. Check on Actual and Expected value and execute the recommended action listed below.

Card Name	Actual	Expected	Recommended Action
ControlXTPA	14091012_2	14091012_2	No action needed
ControlXTPA	14091012_2	11100709_2	Perform step "B", "C" and "E"
ControlXTPA	11100709_2	14091012_2	Perform step "D" and "E"
ControlXTPA	11100709_2	11100709_2	Perform "B", "C", "D" and "E"

- B. Get the correct firmware version from K.com
 - 1) First download the firmware from http://www.keysight.com/find/i3070patches
 - 2) Search for "XTPA Firmware" at the above website
 - 3) Download the file "**xtpa_14091012_2.xsvf**" from the website.
- C. Replace the firmware file in Controller (one time only process)
 - 1) Rename the file "C:\Agilent_ICT\lib\xtpA.xsvf" to "xtpa_11100709_2.xsvf".
 - 2) Copy the "xtpa_14091012_2.xsvf" (downloaded from website) to "C:\Agilent_ICT\lib" on your controller.
 - 3) Rename it to "xtpA.xsvf".
- D. Program the new firmware into the Control XTPA card (one time only process)
 - 1) Boot up the testhead as described earlier.
 - 2) Launch the diagnostics application.
 - 3) Click on "Configuration" and click on "Programmable Card Configuration"
 - 4) Click on "Update All" (F1) button to program all the Control XTPA cards.
 - 5) Please ensure that the jumper P4402 is in an open position to allow In-System Programming. It is recommended that it is put in closed position (write protect) during normal operation.



Figure 2: Location of P4402 jumper

- E. Confirmation and AutoAdjust
 - 1) Reboot the testhead and check the firmware version on Control XTPA card. (Note: Please refer to step "A" for checking procedure)
 - 2) You should notice the Actual and Expected value show as "14091012_2" (Figure 3).
 - 3) Click "Exit" till "Service Package Level 1" Page. Then, select "Autoadjust All", follow by "AutoAdj All" (F6).
 - 4) Proceed to production once Autoadjust Passed.

🗙 dgn.exe	•						
Menu Se	lect			Pro	grammable Ca	ard Configura	tion
	Mod	Slot	CardName	HardwareID	Actual	Expected	
	0 1 2	6 6 6	ControlXTPA ControlXTPA ControlXTPA ControlXTPA	Seq FPGA Seq FPGA Seq FPGA	14091012_2 14091012_2 14091012_2	14091012_2 14091012_2 14091012_2	
	3	6	ControlXTPA	Seq FPGA	14091012_2	14091012_2	
Update All	G	ioto art	Halfway Previous to Start Page	dgn.exe	Next Hal Page to	lfway Goto 5 End End	Exit

Figure 3: Diagnostics firmware version

Constraints of the upgrade:

N/A

Solution/Action:

N/A

Revision History:

Service Note Revision	Date	Author	Reason For Change
01	14 th Jan 2015	Wee-Sheng	As published