

3070-102

Modification Recommended Service Note

Supersedes: NONE

E9905E-AS2/N1178-AS2/N1178A-AS3 Async systems or upgrades

Serial Numbers: ALL Manufacturing ID Number: ALL

The Problem –

Testhead Configurator software cannot support new CAP switch N1178-66804.

Parts Required:

P/N Description Qty. NONE

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[[]] ON SPECIFIED FAILURE [x] AGREEABLE TIME	STANDARDS LABOR: 1.5 Hours		
LOCATION CATEGORY:	[x] CUSTOMER INSTALLABLE [x] ON-SITE (active On-site contract required) [x] SERVICE CENTER [x] CHANNEL PARTNERS	SERVICE: [[]] RETURN USED [[]] RETURN INVENTORY: [[]] SCRAP PARTS: [[]] SCRAP [x] SEE TEXT [x] SEE TEXT		
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: 11/15/2022		
	[[]] Calibration Required [x] Calibration NOT Required	PRODUCT LINE: PL80 AUTHOR: LKW		

ADDITIONAL INFORMATION:



Situation:

CAP switch N1178-66801 is used on early Async systems or upgrades to handle the switching of the iCAP connections between the operating modes. The switching is handled by a software called Testhead Configurator. **Testhead Configurator supports i3070 software version 9.20p and 9.20pc only.** It does not support version 10.0p and above.

N1178-66801 has been replaced by a new revision part N1178-66804. Testhead Configurator cannot control N1178-66804 because of different chip ID. Cap configuration will not be available.



An upgraded version of the software called Async Tester Utility was introduced to support N1178-66804. Async Tester Utility only support i3070 software version 10.0p and above. Although it can handle the switching, it cannot update the testhead config and GPIB adaptor settings automatically on older software versions.



This created a broken link for users running software version below 10.0p but had their CAP switch upgraded to N1178-66804. It will not be possible to use Testhead Configurator or Async Tester Utility to handle the switching correctly.

Problem Matrix :

i3070 SW version	Cap Switch hardware	Software	Result
Below	N1178-66801	Testhead Configurator	ОК
10.0p		Async Tester Utility	Not supported. Cannot update config and GPIB settings
	N1178-66804	Testhead Configurator	Cannot switch hardware
		Async Tester Utility	Not supported. Cannot update config and GPIB settings
10.0p and	N1178-66801	Not tested. No such system built	
above			
	N1178-66804	Testhead Configurator	Not supported. Cannot switch hardware
		Async Tester Utility	ОК

Solution/Action:

The solution requires an upgrade of the Oracle Virtual Box Manager to version 6.1.26 and Testhead Configurator to version 2.0. After which, user can perform switching using Testhead Configurator 2.0.

Upgrade Oracle Virtual Box Manager

Virtual Box Manager version 6.0.2 exhibits intermittent lock up of USB device assignment into the virtual machines. As such, it is recommended to download and upgrade the virtual box manager to version 6.1.26.

Link to download Virtual Box Manager 6.1.26 : https://www.virtualbox.org/wiki/Download_Old_Builds_6_1 Download "Window hosts" and "Extension Pack"

← → C				
🔢 Apps 📃 MyLinks 🚱 MIT App Inventor				
	VirtualBox Download VirtualBox (Old Builds): VirtualBox 6.1 The Extension Packs in this section are released under the VirtualBox Personal Use and Evaluation Lic license.			
About	• ⇒6.1 SDK (6.1.28)			
Screenshots	VirtualBox 6.1.26 (released July 28 2021)			
Downloads				
Documentation				
End-user docs				
Technical docs	 ⇔Oracle Linux 8 / Red Hat Enterprise Linux 8 / CentOS 8 ⇒ Oracle Linux 7 / Red Hat Enterprise Linux 8 / CentOS 8 			
Contribute	 Boracle Linux / / Red Hat Enterprise Linux / / CentOS / Boracle Linux 6 / Red Hat Enterprise Linux 6 / CentOS 6 			
Community	■ ⊕Ubuntu 19.10 / 20.04 / 20.10 / 21.04			
	■ G>Obuntu 16.04 / 18.10 / 19.04			
	■ ⊕Debian 11			
	■ G>Debian 10			
	⊕openSUSE 15.0			
	G>OpenSOSE 13.2 / Leap 42 G>Fedora 33 / 34			
	 B⇒Fedora 32 B>All distributions 			
	Gran distribuyons Gran distribuyons			
	• PDS thethsums, SHA230 thethsums			

Installation Steps:

- 1. Double click on "VirtualBox-6.1.26-145957-Win.exe" and follow the on-screen instructions to complete the installation.
- 2. Double click on "Oracle_VM_VirtualBox_Extension_Pack-6.1.26.vbox-extpack and follow the on-screen instructions to complete the installation. This will launch Virtual Manager will startup. Do not start any VM at this moment.



3. Complete the installation of the extension pack before starting any of the virtual machines(VM).



4. Start Mod2 and Mod3 virtual machines(VM).



5. Login into each of the VM and execute "VBoxWindowsAdditions.exe" under the below path.



6. Follow the on-screen instructions to complete the installation and select Yes to reboot the VM.



7. The upgrade is completed.

Upgrading Testhead Configurator to version 2.0

Download Testhead Configurator 2.0 package: https://ldrv.ms/u/s!AgAhfg7bigZ6ijyVoyPnFaa-c0l8?e=dcdex7

1. Unzip and copy Testhead Configurator folder to the host PC under C:\Shared\ folder



2. Rename C:\Shared\Keysight_ICPT folder to a different name.



3. From the Testhead Configurator folder, copy Keysight_ICPT to host PC C:\Shared



4. Start Mod2 and Mod3 VM and login.

5. In each of the VM, go into C:\Shared folder and copy Keysight_ICPT to C:\ root. Do this for both VM.

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ycle Bin DataLogCo Pushbutton	File Home	Share View				
Debug	← → * ↑	> This PC > Local Disk (C:)				
	OneDrive	A Name				
Board DGN Software	💻 This PC	Agilent_ICT				
nsultant License Terms	📃 Desktop					
	Documents	Nutrach4				
3TI m		PerfLogs				
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ard Test Fixture	Pictures	Program Files (x86)				
isgin constituint	Videos	ProgramData				
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File Home Share View		Vindows				
Keysight_ICPT						
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This PC ^ Nam	e	Date modified				
Desktop	021	11/3/2021 10:27				
Documents	syncTesterUtility_ori	9/7/2021 1:03 P				
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😴 CD Drive (D:) VirtualBox (estheadConfigurator	11/12/2021 3:08				
🛫 Shared (\\VBoxSvr) (Z:)	٢	9/ // 2021 12:13				
- Notwork V <		>				
10 items 1 item selected						

6. In MOD2 VM and MOD3 VM, execute the command "C:\Keysight_ICPT\CreateScheduleTasks.bat" using command line prompt.



7. Go to Task Scheduler, should see the RestartBootServices and SetBootFilesPermissions as below:



8. In Task Scheduler Library, double click on RestartBootServices and enable "Run with highest privileges" and click OK.

🕑 Task Scheduler				
File Action View Help				
Task Scheduler (Local) Name Status Triggers OneDrive Standalone Up Ready At 8:00 PM on 5/1/1992 - After triggered, repeat every 1.00:00:00 in RestartBootServices Ready At 12:00 AM on 11/12/2021 StuddownWindows Readv At 12:00 AM on 11/12/2021 ShutdownWindows Readv At 12:00 AM on 11/12/2021 ShutdownWindows Readv At 12:00 AM on 11/12/2021 ShutdownWindows Readv Conditions SetTions Studion Studio				
New Participation Conditions Security Instory (disabled)				
Name: RestartBootServices				
Location: \				
Author: DESKTOP-8PUOD28\Calibrate				
Description:				
Security options				
When running the task, use the following user account:				
Calibrate Change User or Group				
Run only when user is logged on				
 Run whether user is logged on or not Do not store password. The task will only have access to local computer resources. Run with highest privileges 				
OK Cancel				
Bun with highest privileges				

9. In Task Scheduler Library, double click on SetBootFilesPermissions and enable "Run with highest privileges" and click OK.

Task Scheduler						
File Action View Help						
Task Scheduler (Local) Task Scheduler Library Task Scheduler Library Task Scheduler Library OneDrive Standalone Onetrive Stan	Status Triggers Jp Ready At 8:00 PM on 5/1/1992 - After triggered, repeat every 1.0 Ready At 12:00 AM on 11/12/2021 ns Ready At 12:00 AM on 11/12/2021 Ready At 12:00 AM on 11/12/2021 Ready H0-					
SetBootFilesPermissions Properties (Local Com	puter) X					
General Triggers Actions Conditions Settin	gs History (disabled)					
Name: SetBootFilesPermissions						
Location:						
Author: DESKTOP-8PUOD28\Calibrate						
Description:						
Security options						
When running the task, use the following user	account:					
Calibrate	Change User or Group					
Run only when user is logged on						
O Run whether user is logged on or not						
Do not store password. The task will only have access to local computer resources.						
Run with highest privileges						
Hidden Configure for: Windows Vi	sta", Windows Server" 2008 🗸 🗸					
	OK Cancel					
	mileges					

10. In the host PC's Desktop, remove the original Testhead Configurator short cut (if any), and create a new shortcut pointing to C:\Shared\TestheadConfigurator\TestheadConfigurator.exe.

This PC →	Local Dis	k (C;) > Shared > TestheadConfigurator	✓ 🖏 Search Testhe	مadConfigur
	* ^	Name	Date modified	Туре
	*	Telerik.Windows.Documents.Core.dll	11/5/2021 4:41 PM	Application ex
ty(Agni2.2)		Telerik.Windows.Documents.Fixed.dll	11/5/2021 4:41 PM	Application ex
		Telerik.Windows.Themes.Expression_Dark.dll	11/5/2021 4:41 PM	Application ex
		Telerik.Windows.Zip.dll	11/5/2021 4:41 PM	Application ex
		TestheadConfigurator.exe	11/12/2021 2:24 PM	Application
		TestheadConfigurator.exe.config	11/9/2021 10:09 AM	CONFIG File
		TestheadConfigurator.pdb	11/12/2021 2:24 PM	PDB File
		UnbootMod0.bat	11/5/2021 4:41 PM	Windows Batc
		UnbootMod1.bat	11/5/2021 4:41 PM	Windows Batc

Switching Testhead operating modes

Use Testhead Configurator 2.0 for switching between testhead configuration modes.

אلې KEYSIGHT Testhead Configurator 2.0 🗕 🗖 🗙				
Testhead Configurator				
Read Testhead Configuration				
Read from CapSwitch and HsISwitch				
Cap Configuration: Mode 2: Mod 3,2 combined and Mod 1,0 combined (0xA)				
Hsl Configuration: Mode 2: Mod 3,2 combined and Mod 1,0 combined (0x7E)				
Set Testhead Configuration				
Step 1: Determine the type of i3070 ICT System				
Step 2: Select the Testhead Configuration to switch				
Mode 5: Mod 3,2 separated: Mod3, Mod2		Ţ		
Step 3: Set Config				
Step 4: Update GPIB Settings				
Step 5: Update Config Files				
Result:				
Cap Configuration: Mode 5: All modules Separated (0x3)				
Hsl Configuration: Mode 5: All modules Separated (0x0)				
Ready				

- 1. Close all VM and launch Testhead Configurator.
- 2. Click on "**Read from CapSwitch and HslSwitch**" and you should be able to see the configuration of both switches.
- 3. Select the target mode at Step2.
- 4. At Step3, click on "**Set Config**" to set the cap and hsl switches. You can read back the switch board configuration again using the Read button.
- 5. At Step4, click on "Update GPIB Settings". If any VM is active, shut it down.
- 6. Set the USB-GPIB adaptor serial number for each module and click OK.
- 7. The targeted VM will now start up.
- 8. Once the VM startup, login to the VM using "calibrate" username. Leave the VM as it is.
- 9. At Testhead Configurator Step5, click on "**Update Config Files**". The testhead config files for the selected mode will be updated into the VM. A console window will launch, and commands lines will be executed. Press any key at the console window to complete the operation.
- 10. After console window completed its operation and closes, you may proceed to boot the testhead in each of the VM as usual.

Revision History:			
Date	Service Note Revision	Author	Reason for Change
12 Nov 2021	01	LKW	As Published