

Keysight Technologies

Merging Boards on Keysight x1149
Boundary Scan Analyzer

Application Note

Introduction

This application note shows how to connect two or more boards to form a single boundary scan chain using the Keysight Technologies, Inc. x1149 boundary scan analyzer.

The Keysight x1149 boundary scan software has a 'merge device' function that will enable users to connect the two boards together and create a jumper connection between the two boards.

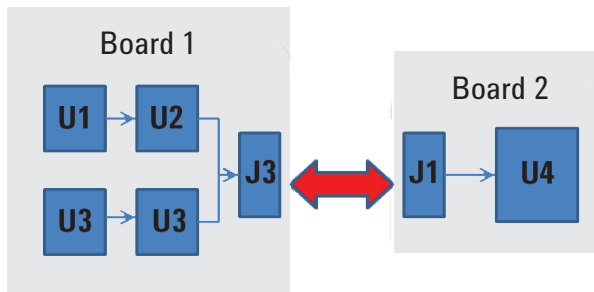
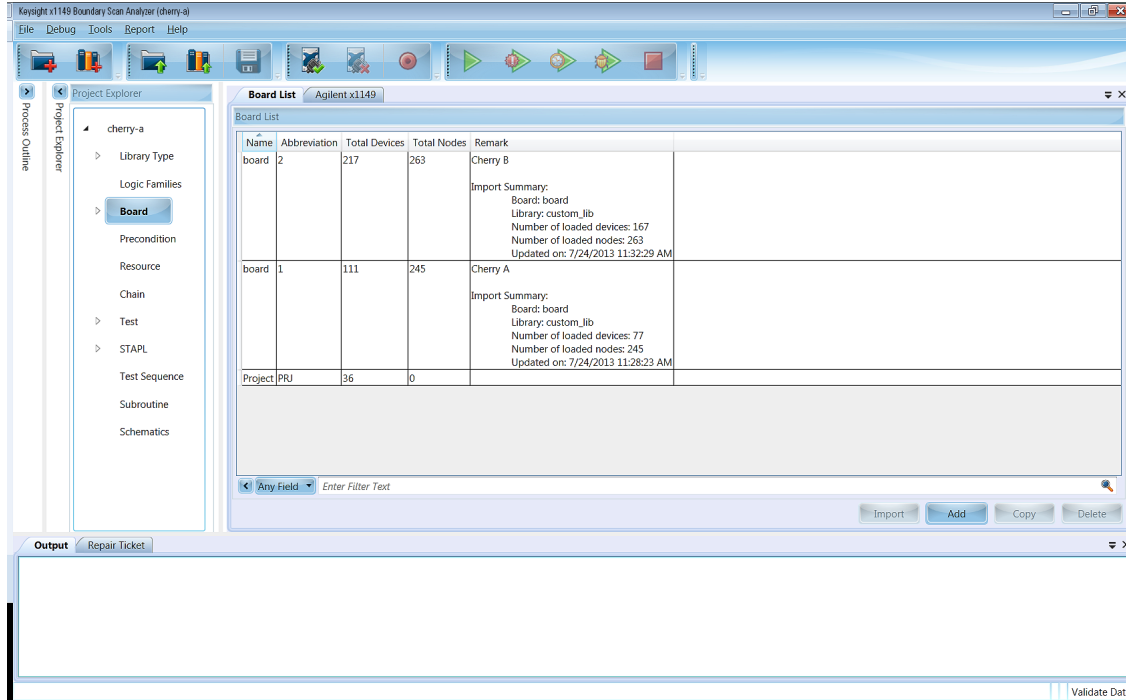


Figure 1: Boundary scan project involving two or more boards

The following steps describe the procedure for merging these two boards:

Open a Keysight boundary scan project with two or more boards



Select the first board (Cherry-a)

– Click on “Device” > “Connector” > “Merge Device”

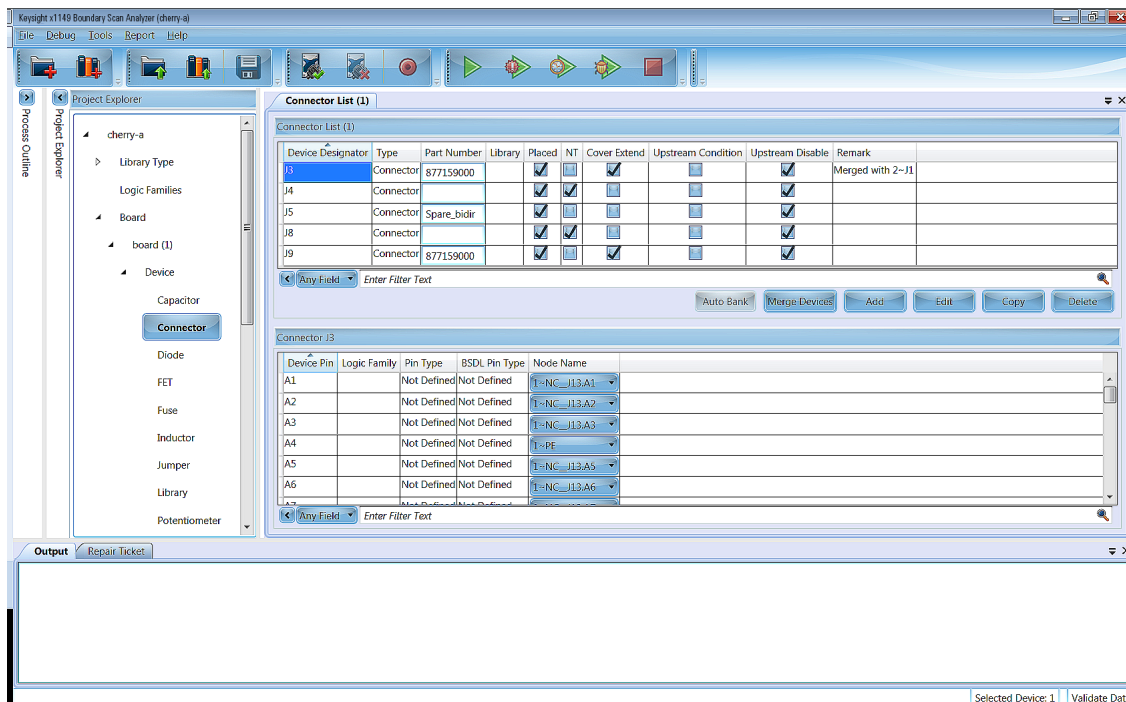


Figure 3: Merge device

Select the device to merge

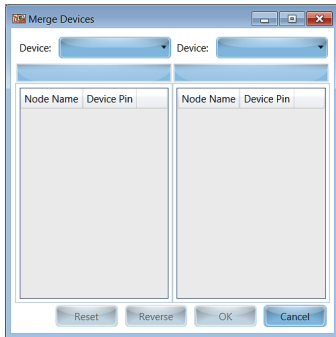


Figure 4: The 'merge devices' table

- Click on the Device selection box. A drop down menu will appear to select the device on.

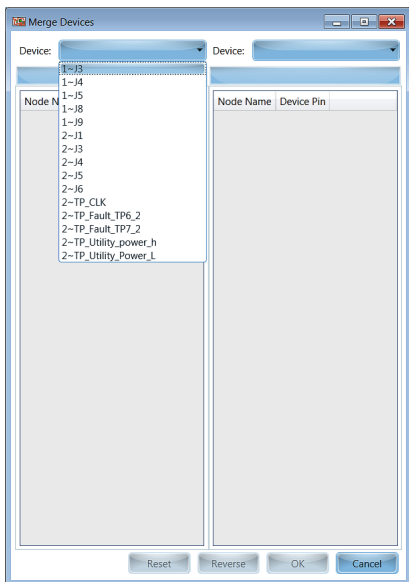


Figure 5: Select board 1 device to merge

- Device "J3" selected on board 1 will show the pin and the node name

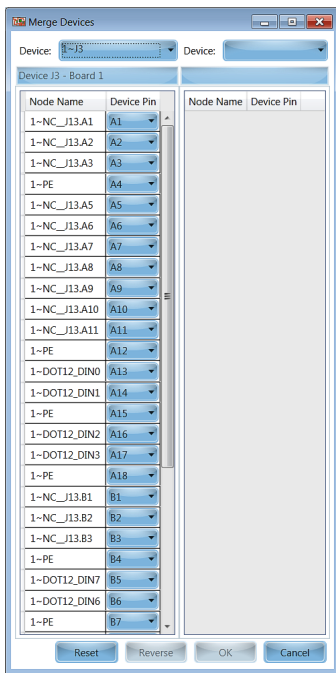


Figure 6: Select board 1 "J3" device to merge

- Upon clicking the 'Device' selection, a drop down menu will appear for the user to select the device to merge into the board 1 device "J3".

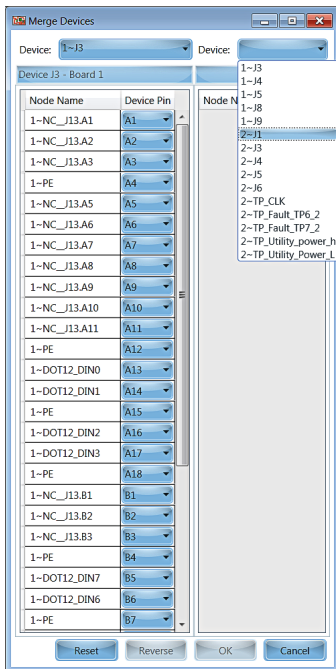


Figure 7: The selected "J3" device on board 1 with node name and pin name

- The GUI for device “J1” selected on board 2 will show the pin and the node name

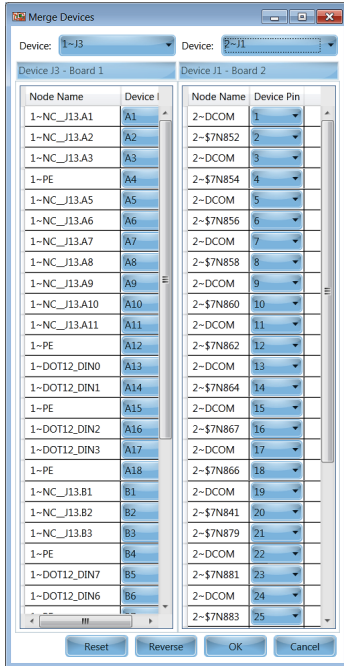


Figure 8: Selected “J1” device on board 2 with node name and pin name

Merging board 1 and board 2 devices

- A jumper will be created in the PRJ to connect the board 1 and board 2 devices

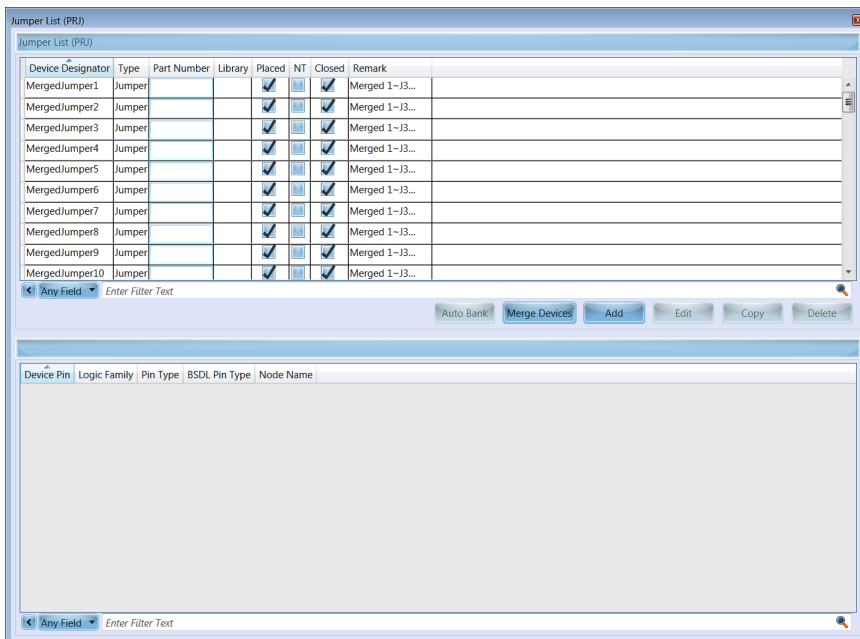


Figure 9: Merge device jumper

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