

INSTALLATION GUIDE

NI PXI-8109 and NI PXIe-8133 Flex Cable Replacement

This guide describes how to install the flex cable replacement for the NI PXI-8109 and NI PXIe-8133 embedded controllers. For more detail and a video demonstration of the cable replacement, please visit ni.com/info and enter the Info Code 8133FlexReplace.

The flex cable can be replaced by hand. No tools are needed and the controller does not need to be disassembled. Perform the following steps for installation and removal instructions.

1. Locate the single-ended board to board flex cable on your NI PXI-8109 or NI PXIe-8133 embedded controller as shown below in Figure 1.

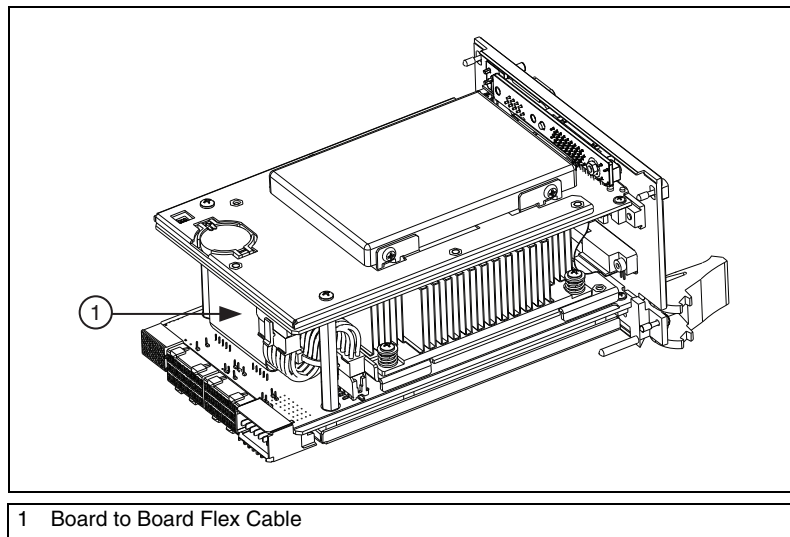


Figure 1. View of the Controller Back End with Board to Board Flex Cable



Caution Touch the metal part of the case to discharge any static electricity that might be on your clothes or body.

2. Remove the existing cable by completing steps a and b below.



Caution Do *not* put pressure on additional components near the connector or scrape the connector against components while removing the cable.

- a. Gently remove by hand (no tools necessary) both sides of the cable from the mating connectors on the two boards of the controller.
 1. Disconnect one side of the flex cable from its mating connector.
 2. Straighten the cable after disconnecting the first side.
 3. Disconnect the second side of the flex cable from its mating connector.
 - b. Discard the old cable.
3. Install the new cable.
 - a. The replacement cable will be flattened when it arrives.
 - b. Each connector is keyed in a way to prevent improper installation.
 - c. Connect one side of the new flex cable to the appropriate keyed connector on the controller.
 - d. Slowly bend the cable using large angles such that the second flex cable connector is above the mating connector on the controller, and make the connection.



Caution Tight bends or creases in the cable will damage its functionality.

- e. Once both sides of the cable are in place apply moderate pressure on both sides to ensure a good connection. Do *not* push on other components in the process. You may need to gently push the middle of the cable toward the inside of the controller to square up the connectors on the board.
4. Verify the cable is installed correctly.
 - a. Install the controller into a chassis.
 - b. Power on the chassis.
 - c. Verify the controller boots properly.

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