
PXle-2747 User Manual

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PXIe-2747 User Manual

The PXIe-2747 User Manual provides detailed descriptions of the product functionality and the step by step processes for use.

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For information not found in the User Manual for your product, such as specifications and API reference, browse ***Related Information***.

Related information:

- [PXIe-2747 Specifications](#)
- [Getting Started with Express Switches](#)
- [NI-Switch User Manual](#)
- [NI-SWITCH LabVIEW VI Reference](#)
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Note The PXIe-2747 is not recommended for switching balanced signals, such as IQ modulated differential signals, where the balance between the signals is very important.

PXIe-2747 Pinout

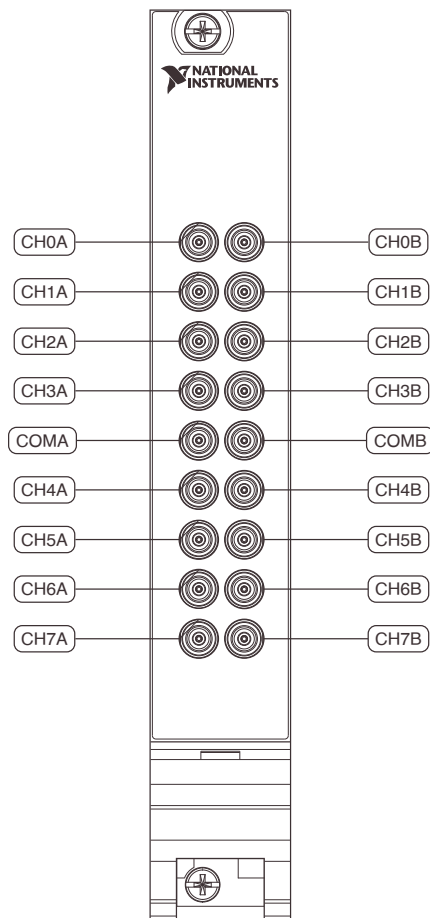


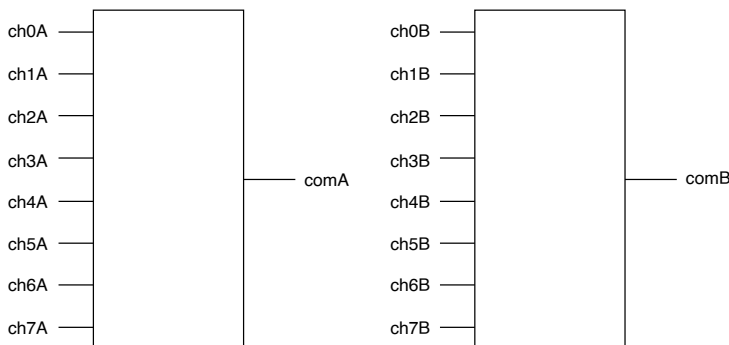
Table 1. Signal Descriptions

Signal	Description
CHxA	Bank A signal connection
CHxB	Bank B signal connection
COMx	Routing destination for channels on the corresponding bank

PXIe-2747 Topology

Dual 8×1 Multiplexer (SP8T) Topology

Software module name: 2747/Dual 8x1 Mux (NISWITCH_TOPOLOGY_2747_DUAL_8X1_MUX). This module supports immediate operation mode.



Making a Connection

Call the `niSwitch Connect Channels VI` or the `niSwitch_Connect` function to connect channels in this topology. If applicable, you must call the `niSwitch Disconnect Channels VI` or the `niSwitch_Disconnect` function to disconnect an existing connection before you call the `niSwitch Connect Channels VI` or then `niSwitch_Connect` function.



Note The `niSwitch Disconnect Channels VI` or the `niSwitch_Disconnect` function does not operate the relay until the next `niSwitch Connect Channels VI` or the next `niSwitch_Connect` function is executed. Thus, one channel of the 4×1 multiplexer is always connected to a common channel. If you have reset the module or called the `niSwitch Disconnect All Channels VI` or the `niSwitch_DisconnectAll` function, you do not need to disconnect the default channel from COM upon initial connection.

The following procedure illustrates the VI/function calls necessary to make

consecutive connections—one between CH1 and COM and the other between CH2 and COM:

1. Call the `niSwitch Connect Channels VI` or the `niSwitch_Connect` function with parameters `ch1` and `com`.
2. Call the `niSwitch Disconnect Channels VI` or the `niSwitch_Disconnect` function with parameters `ch1` and `com`.
3. Call the `niSwitch Connect Channels VI` or the `niSwitch_Connect` function with parameters `ch2` and `com`.

Figure 1. Channel Pairing and Relay Assignments

