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# PXI-2546

# Features

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2025-03-20

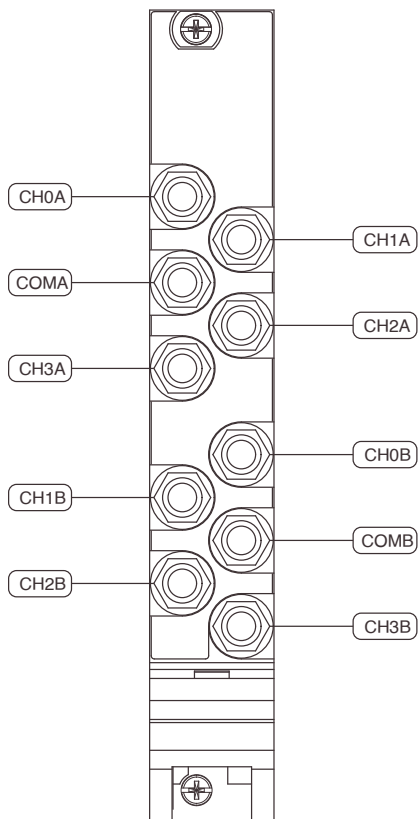


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# PXI-2546 Overview

## PXI-2546 Pinout

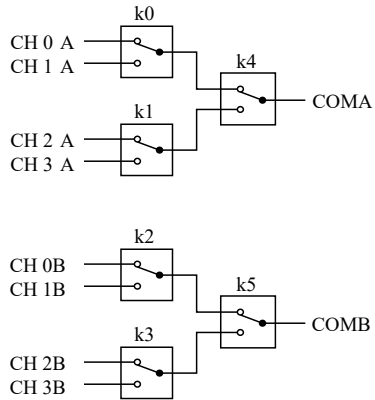


**Table 1.** Signal Descriptions

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

# PXI-2546 Hardware Diagram

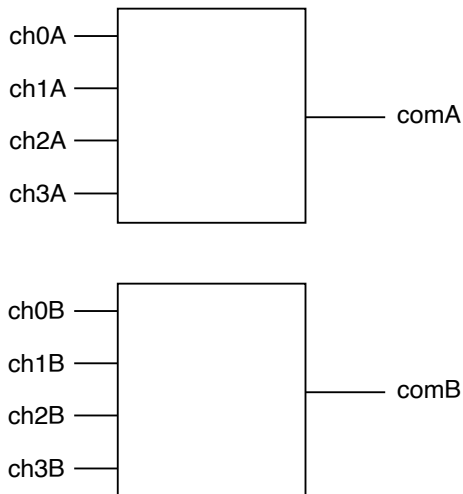
This figure shows the hardware diagram of the module.



## PXI-2546 Topology

This figure describes the topology of the module.

Module software name: 2546/Dual 4x1 Mux  
(NISWITCH\_TOPOLOGY\_2546\_DUAL\_4X1\_MUX)



## 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 the `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 each of the 4x1 multiplexers is always connected to the 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 (ch0) from COM upon initial connection.

The following sequence of tasks illustrates the VI/function calls necessary to make consecutive connections—one between CH 1A and COM A and the other between CH 2B and COM B:

1. Call the niSwitch Connect Channels VI or the `niSwitch_Connect` function with parameters `ch1A` and `comA`.
2. Call the niSwitch Disconnect Channels VI or the `niSwitch_Disconnect` function with parameters `ch1A` and `comA`.
3. Call the niSwitch Connect Channels VI or the `niSwitch_Connect` function with parameters `ch2B` and `comB`.

When scanning the module, a typical scan list entry might be `ch1A->comA;`. This entry routes the signal connected to CH 1A to COM A.