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# PXI-2546

# Features

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2025-03-20

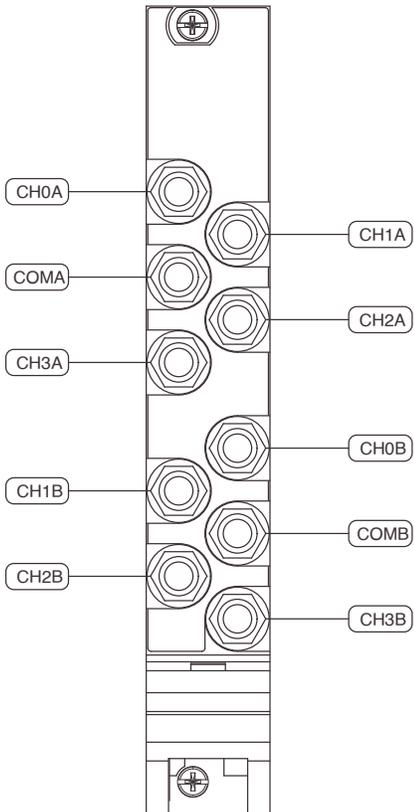


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# PXI-2546 Overview

## PXI-2546 Pinout

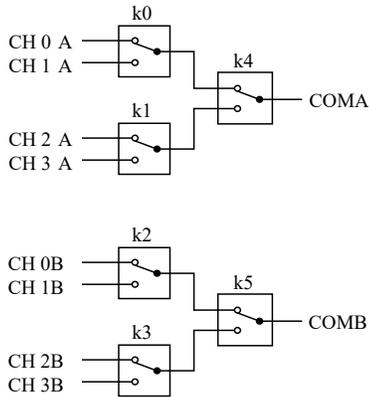


**Table 1. Signal Descriptions**

Signal	Description
CHx <sub>A</sub>	Bank A signal connection
CHx <sub>B</sub>	Bank B signal connection
COMx	Routing destination for channels on the corresponding bank

# PXI-2546 Hardware Diagram

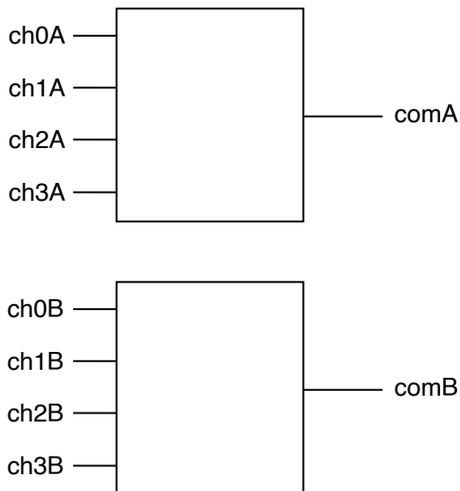
This figure shows the hardware diagram of the module.



# 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.