
PXI-2545

Features

2025-03-20



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PXI-2545 Overview

PXI-2545 Pinout

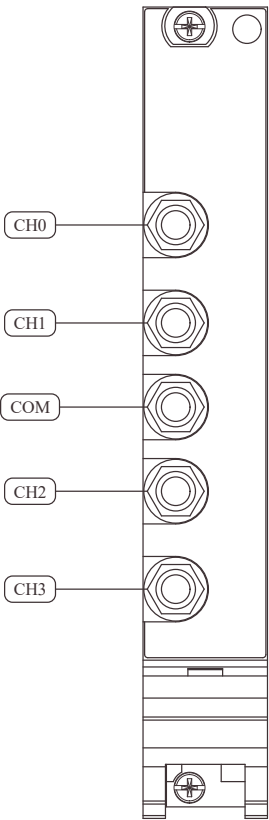
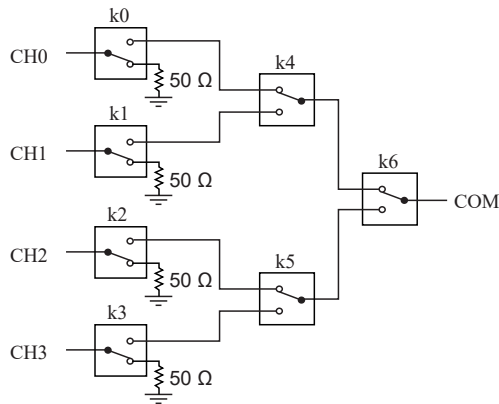


Table 1. Signal Descriptions

Signal	Description
CHx	Signal connection
COM	Routing destination for all channels

PXI-2545 Hardware Diagram

This figure shows the hardware diagram of the module.



PXI-2545 Topology

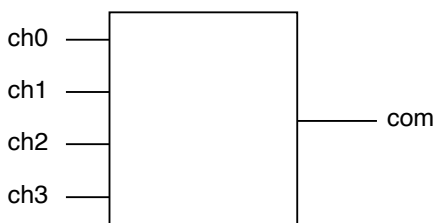
This figure describes the topology of the module.

Module software name: 2545/4x1 Terminated Mux
(NISWITCH_TOPOLOGY_2545_4X1_TERMINATED_MUX)



Notice The terminators on the module are rated for 1.5 W at 25 °C. When operating at ambient temperatures greater than 25 °C, a termination power derating applies. Refer the ***PXI-2545 Specifications*** for more information about termination power derating. Terminators cannot withstand the full rated power of the module.

4x1 Multiplexer



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 All channels are disconnected from COM when the module is in its power on state. Any input channel not connected to COM is connected to its associated 50 Ω terminator.

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

When scanning the module, a typical scan list entry might be `ch1->com;`. This entry routes the signal connected to CH 1 to COM.