PXI-2549 Features

2025-03-20

Contents

PXI-2549 Overview

PXI-2549 Pinout

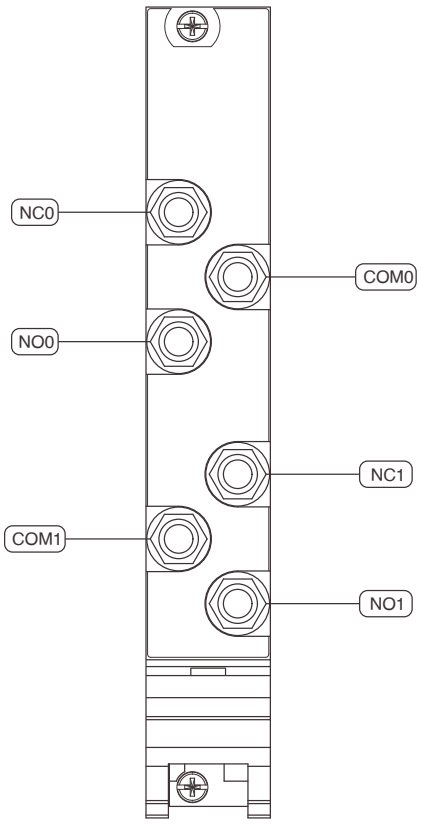
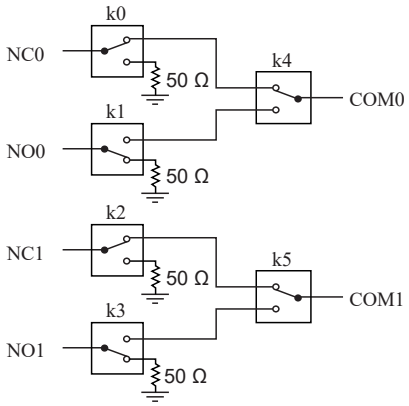


Table 1. Signal Descriptions

Signal	Description
COM***x***	Routing destination for corresponding signal connections
NC***x***	Normally closed signal connection
NO***x***	Normally open signal connection

PXI-2549 Hardware Diagram



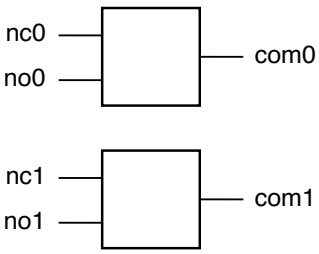
PXI-2549 Topology

This figure describes the topology of the module.

Module software name: 2549/Terminated 2-SPDT
(NISWITCH_TOPOLOGY_2549_TERMINATED_2_SPDT)

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-2549 Specifications*** for more information about termination power derating. Terminators cannot withstand the full rated power of the module

Dual SPDT 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 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 is always connected to each 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 (NC***x***) from COM***x*** upon initial connection.

The following sequence of tasks illustrates the VI/function calls necessary to make consecutive connections—one between NO 1 and COM1 and the other between NC 1 and COM1:

1. Call the niSwitch Connect Channels VI or the `niSwitch_Connect` function with parameters `no1` and `com1`.
2. Call the niSwitch Disconnect Channels VI or the `niSwitch_Disconnect` function with parameters `no1` and `com1`.
3. Call the niSwitch Connect Channels VI or the `niSwitch_Connect` function with parameters `nc1` and `com1`.

When scanning the module, a typical scan list entry might be `no1->com1;`. This entry routes the signal connected to NO 1 to COM 1.