PXI-2591 Features

2025-03-20

Contents

PXI-2591 Overview

PXI-2591 Pinout

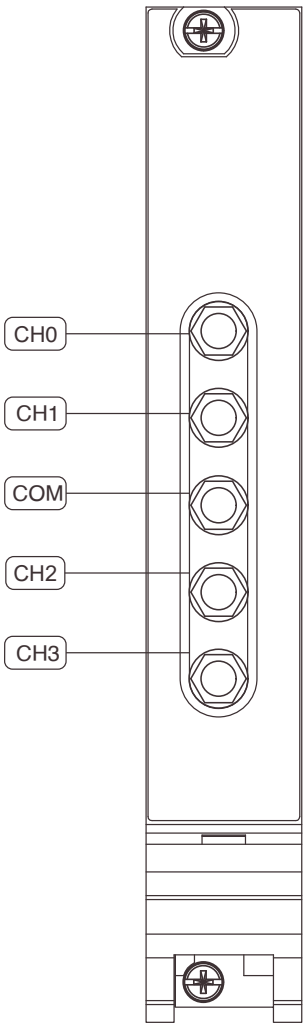
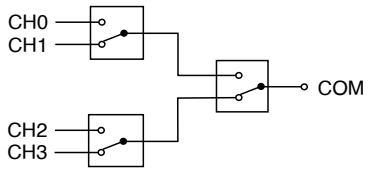


Table 1. Signal Descriptions

Signal	Description
CH***x***	Signal connection
COM	Routing destination for all channels

PXI-2591 Hardware Diagram

This figure shows the hardware diagram of the module.

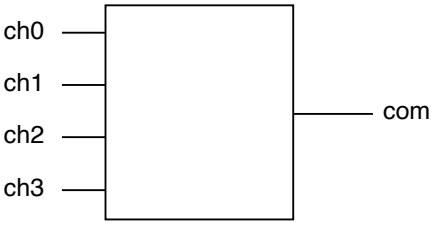


PXI-2591 Topology

This figure describes the topology of the module.

Module software name: 2591/4x1 Mux (NISWITCH_TOPOLOGY_2591_4X1_MUX)

4x1 Multiplexer



Making a Connection

In this topology, you can connect channels by calling the niSwitch Connect Channels VI or the `niSwitch_Connect` function.

To connect the CH***x*** terminal to the COM terminal, disconnect the previously connected terminal from the COM.

For example, to connect CH2 to COM after connecting CH1 to COM, use the following code:

```
niSwitch_Disconnect(vi, "ch1", "com")
```

```
niSwitch_Connect(vi, "ch2", "com")
```

Note For an initial connection, you do not need to disconnect the default channel (ch3) from COM after the module has been reset or a call to the niSwitch Disconnect All Channels VI or the `niSwitch_DisconnectAll` function has been made.

Note `niSwitch_Disconnect(vi, "ch1", "com")` does not activate the relay until the `niSwitch_Connect(vi, "ch2", "com")` is executed. One channel of the 4x1 multiplexer is always connected to the common channel.

When scanning the module, a typical scan list entry could be `ch1->com;`. This entry routes the signal connected to CH1 to COM.