

## INSTALLATION GUIDE

# NI PXI-6682 Series

This guide contains instructions for installing your NI PXI-6682 or NI PXI-6682H module and NI-Sync software.

## What You Need to Get Started

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To set up and use the NI PXI-6682 Series, you need the following items:

- NI PXI-6682 Series Timing and Triggering Module
- NI PXI-6682 Series User Manual*
- NI-VISA
- NI-Sync* CD
- One of the following software packages and documentation:
  - LabVIEW
  - LabWindows™/CVI™
  - Microsoft Visual C++ (MSVC)
- PXI or PXI Express (PXIe) chassis
- PXI or PXIe embedded controller or a desktop computer connected to the chassis using MXI hardware

If you are using the NI PXI-6682 Series in a system to synchronize NI PXI-4472, NI PXI-5112, NI PXI-5411, NI PXI-6115, or E Series DAQ modules, you can refer to the *NI-Sync User Manual*, which you can find on the *NI-Sync* CD or download from [ni.com/manuals](http://ni.com/manuals).

# Installing the Software

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Refer to the `readme.htm` file that accompanies the *NI-Sync* CD for software installation directions.



**Note** Be sure to install the driver software *before* installing the NI PXI-6682 Series module.

# Installing the Hardware

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The following are general installation instructions. Consult the chassis user manual or technical reference manual for specific instructions and warnings about installing new modules.

1. Power off and unplug the chassis.



**Caution** Do not install the NI PXI-6682 Series module in the system controller slot (slot 1) of a chassis.

2. Choose an available slot in the chassis.

**NI PXI-6682:** Install the NI PXI-6682 in an available PXI slot.

The NI PXI-6682 is a star trigger controller for PXI. It can replace PXI\_CLK10 and control the PXI\_STAR triggers. This functionality is only available when the NI PXI-6682 is installed in Slot 2 of a PXI chassis. The PXI triggers are accessible from any PXI slot.

**NI PXI-6682H:** Install the NI PXI-6682H in an available PXI slot. If you are using a PXI Express (PXIe) system, install the NI PXI-6682H in an available PXI or PXIe/hybrid slot.

The PXI-6682H is a special version of the PXI-6682, designed to also fit in hybrid slots on PXIe chassis. It does not have the ability to replace PXI\_CLK10 or drive the PXI\_STAR triggers.

3. Remove the filler panel for the PXI or PXIe hybrid slot you chose in step 2.
4. Ground yourself using a grounding strap or by holding a grounded object. Follow the ESD protection precautions described in the *Unpacking* section of Chapter 1, *Introduction*, of the *NI PXI-6682 Series User Manual*.
5. Remove any packing material from the front panel screws and backplane connectors.
6. Insert the NI PXI-6682 Series module into the PXI/PXIe hybrid slot. Use the injector/ejector handle to fully insert the module into the chassis.

7. Screw the front panel of the module to the front panel mounting rail of the chassis.
8. Visually verify the installation. Make sure the module is not touching other modules or components and is fully inserted into the slot.
9. Plug in and power on the chassis.

The NI PXI-6682 Series module is now installed.

## Verifying the Installation

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During the first boot following the software and hardware installation of the NI PXI-6682 Series module, Windows detects the device and associates it with the NI-Sync driver software.

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