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PXIe-8100

## **INSTALLATION GUIDE**

# **NI PXIe-8100**

This document contains information about installing your NI PXIe-8100 controller in a PXI Express chassis. For complete configuration and troubleshooting information (including information about BIOS setup, adding RAM, and so on), see the *NI PXIe-8100 User Manual*. The manual is in PDF format on the documentation CD included with your controller and on the National Instruments Web site, ni.com/manuals.

# Installing the NI PXIe-8100

This section contains general installation instructions for the NI PXIe-8100. Consult your PXI Express chassis user manual for specific instructions and warnings.

1. Plug in your chassis before installing the NI PXIe-8100. The power cord grounds the chassis and protects it from electrical damage while you install the module.

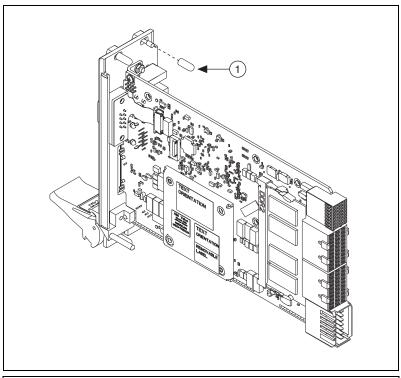


**Caution** To protect both yourself and the chassis from electrical hazards, leave the chassis powered off until you finish installing the NI PXIe-8100 module.

- 2. Remove any filler panels blocking access to the system controller slot (Slot 1) in the chassis.
- 3. Touch the metal part of the case to discharge any static electricity that might be on your clothes or body.



4. Remove the protective plastic covers from the four bracket-retaining screws as shown in Figure 1.



1 Protective Screw Cap (4X)

Figure 1. Removing Protective Screw Caps

5. Make sure the injector/ejector handle is in its downward position. Align the NI PXIe-8100 with the card guides on the top and bottom of the system controller slot.



**Caution** Do *not* raise the injector/ejector handle as you insert the NI PXIe-8100. The module will not insert properly unless the handle is in its downward position so that it does not interfere with the injector rail on the chassis.

- 6. Hold the handle as you slowly slide the module into the chassis until the handle catches on the injector/ejector rail.
- 7. Raise the injector/ejector handle until the module firmly seats into the backplane receptacle connectors. The front panel of the NI PXIe-8100 should be even with the front panel of the chassis.
- 8. Tighten the four bracket-retaining screws on the top and bottom of the front panel to secure the NI PXIe-8100 to the chassis.
- 9. Check the installation.

- 10. Connect the keyboard and mouse to the appropriate connectors. If you are using a PS/2 keyboard and a PS/2 mouse, a Y-splitter adapter is available to connect both to a single USB connector. National Instruments offers a Y-splitter adapter cable, part number 778713-02, available through the online catalog at ni.com/products.
- 11. Connect the VGA monitor video cable to the VGA connector.
- 12. Connect devices to ports as required by your system configuration.
- 13. Power on the chassis.
- 14. Verify that the controller boots. If the controller does not boot, refer to the *What if the NI PXIe-8100 Does Not Boot?* section of this guide.

Figure 2 shows an NI PXIe-8100 installed in the system controller slot of a National Instruments NI PXIe-1062Q chassis.

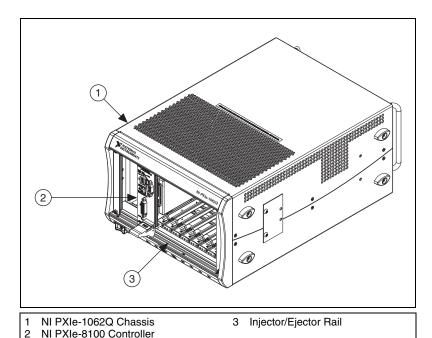


Figure 2. NI PXIe-8100 Controller Installed in a PXI Express Chassis

# **How to Remove the Controller from the PXI Express Chassis**

The NI PXIe-8100 controller is designed for easy handling. To remove the unit from the PXI Express chassis, complete the following steps.

- 1. Power off the chassis.
- 2. Unscrew the four bracket-retaining screws in the front panel.
- 3. Press the injector/ejector handle down.
- 4. Slide the unit out of the chassis.

## What if the NI PXIe-8100 Does Not Boot?

Several problems can cause a controller not to boot. Here are some things to look for and possible solutions.

## Things to Notice

- Which LEDs come on? The PWROK/FAULT LED should stay lit green. The Drive LED should blink during boot as the disk is accessed.
- What appears on the display? Does it hang at some particular point (BIOS, Operating System, and so on)? If nothing appears on the screen, try a different monitor. Does your monitor work with a different PC? If it hangs, note the last screen output that you saw for reference when consulting National Instruments technical support.
- What has changed about the system? Did you recently move the system? Was there electrical storm activity? Did you recently add a new module, memory chip, or piece of software?
- Refer to your chassis user manual for additional troubleshooting steps.

## Things to Try

- Make sure the chassis is plugged in to a working power source.
- Check any fuses or circuit breakers in the chassis or other power supply (possibly a UPS).
- Make sure the controller module is firmly seated in the chassis.
- Remove all other modules from the chassis.
- Remove any nonessential cables or devices.
- Try the controller in a different chassis.
- Try a similar controller in this same chassis.
- Clear the CMOS. (Refer to the *System CMOS* section of *NI PXIe-8100 User Manual*.)
- Make sure the RAM is properly seated.

For more troubleshooting information, refer to the *NI PXIe-8100 User Manual*. The manual is in PDF format on the recovery CD included with your controller and on the National Instruments Web site, ni.com/manuals.

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