Installing the Adapter Card

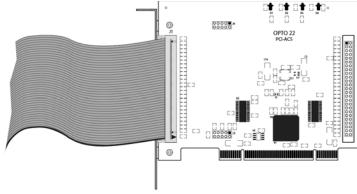
Use this Quick Start to install the PCI-AC5 or PCIe-AC5 adapter card and the PC-Based Direct I/O Software Development Kit (SDK) included on the mini-CD that comes with the card. If you don't have the CD, you can download the SDK from our website at www.opto22.com or request the CD by calling Opto 22 at 800-321-6786 (toll-free in the U.S. and Canada) or 951-695-3000.

For additional hardware and software information, see Opto 22 form 1211, the *PCI-AC5, PCIe-AC5, and AC5 User's Guide*. This guide is included on the CD and contains full instructions for installing and using the card and the SDK.

Installing the Adapter Card

You can install the PCI-AC5 adapter card into any PCI expansion slot of a computer; the PCIe-AC5 can be installed into any PCIe expansion slot. **Note the power requirements** listed in the Specifications table in form 1211, *PCI-AC5*, *PCIe-AC5*, and AC5 User's Guide.

- **1.** Turn off the computer. Remove the power cord and the computer's cover.
 - The power cord must be removed, as a spike may cause the computer to boot.
- **2.** Before handling the card, discharge static electricity by touching the computer's metal chassis.
- **3.** Starting with the connector end that allows the cable to lie flat, push the ribbon cable through one



of the slot openings in the computer, and then attach the cable to the adapter card.

CAUTION: Do not scratch this card or other cards in the computer, as scratching may irreversibly damage the card or other devices.

- **4.** Install the card in the expansion slot. Verify that the card is properly seated in the motherboard socket. Secure the card to the chassis.
- **5.** Connect the other end of the ribbon cable to the I/O mounting rack. For cable part numbers and pinouts, see the *PCI-AC5*, *PCIe-AC5* User's Guide.
- **6.** Reinstall the power cord. To see the card's LED (for testing purposes), leave the computer cover off temporarily.
- **7.** Turn on the computer. The BIOS automatically performs configuration the first time you boot up the computer with the card installed.

If a "Found New Hardware" message appears, simply click Cancel. The PC-Based Direct I/O SDK setup program will install the device driver automatically.

Installing the SDK

The PC-Based Direct I/O software development kit (SDK) helps developers build custom applications for the PCI-AC5 and PCIe-AC5. (The SDK does not support the AC5 or G4AC5.)

The SDK is available on the CD that comes with the adapter card¹, and contains sample applications with source code, Windows drivers, and user documentation. It works with .NET platform languages including **C#**° and **VB.NET**°, and supports both 64-bit and 32-bit versions of:

- Windows® 10 Professional
- Windows 8.1 Professional
- Windows 7 Professional²

NOTE: If you're using an unsupported operating system, you'll need to write your own driver. For details, see form 1211, the PCI-AC5, PCIe-AC5, AC5 and G4AC5 User's Guide.

The SDK includes sample applications with source code, Windows drivers, and user documentation.

NOTE: If you are using an unsupported operating system or a non-PC hardware platform, you will need to write your own driver. For more information, see the PCI-AC5, PCIe-AC5, and AC5 User's Guide.

TIP: To ensure reliable control operations, disable Sleep and Hibernation modes (by setting both sleep and hibernation time durations to "never") in your operating system's Power settings.

- If you don't have the CD, you can download the SDK from our website, or you can request the CD by calling Opto 22 at 800-321-6786 (toll-free in the U.S. and Canada) or 951-695-3000.
- For Windows 7 to properly identify the SDK's digital signatures and files, Microsoft Security Advisory 3123479 update (or higher) must be installed. To download the update, see https://support.microsoft.com/en-us/kb/3123479.

 To start the PC-Based Direct I/O SDK Setup Wizard, insert the CD that came with the card into the computer's CD-ROM drive (or, if you've downloaded the SDK from ourwebsite, double-click the installer).

NOTE: If Windows Security dialog boxes appear, click the appropriate buttons (for example, Yes, Open, Run, or Install) to continue.

2. Follow the Setup Wizard's prompts to accept the License Agreement and select the location where the SDK will be installed. Note that if the SDK is already installed, the Setup Wizard prompts you to uninstall it before continuing.

For additional information on installing the card and using the driver, see form 1211, *PCI-AC5*, *PCIe-AC5*, and *AC5 User's Guide*. The guide is on the PC-Based Direct I/O SDK CD. You can also download it from our website at www.opto22.com or request it by calling Opto 22 at 800-321-6786 (toll-free in the U.S. and Canada) or 951-695-3000.

For Help

If you have trouble installing or using the card and cannot find the help you need in form 1211, *PCI-AC5*, *PCIe-AC5*, and *AC5 User's Guide*, contact Opto 22 Product Support:

Phone: 800-TEK-OPTO (800-835-6786 toll-free in the

U.S. and Canada) 951-695-3080

Monday through Friday, 7 a.m. to 5 p.m.

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Fax: 951-695-3017

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