

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

**Visit our website - *Click HERE***

USER GUIDE

# DAQ Adapter

This guide describes how to install the National Instruments DAQ Adapter and provides pinout information. The DAQ Adapter allows you to connect a 68-pin E or M (E/M) Series data acquisition (DAQ) device to an evaluation board through a PCI edge connector.

## What You Need to Get Started

To set up and use the DAQ Adapter, you need the following:

- ❑ Hardware
  - DAQ Adapter kit:
    - DAQ Adapter
    - Rubber feet (5)
  - One of the following:
    - E Series DAQ device with an SH68-68-EP shielded cable
    - M Series DAQ device with an SHC68-68-EPM or an SHC68-68-EP shielded cable
  - Sensors as required by your application
- ❑ Documentation
  - *DAQ Adapter User Guide*
  - Documentation for your evaluation board

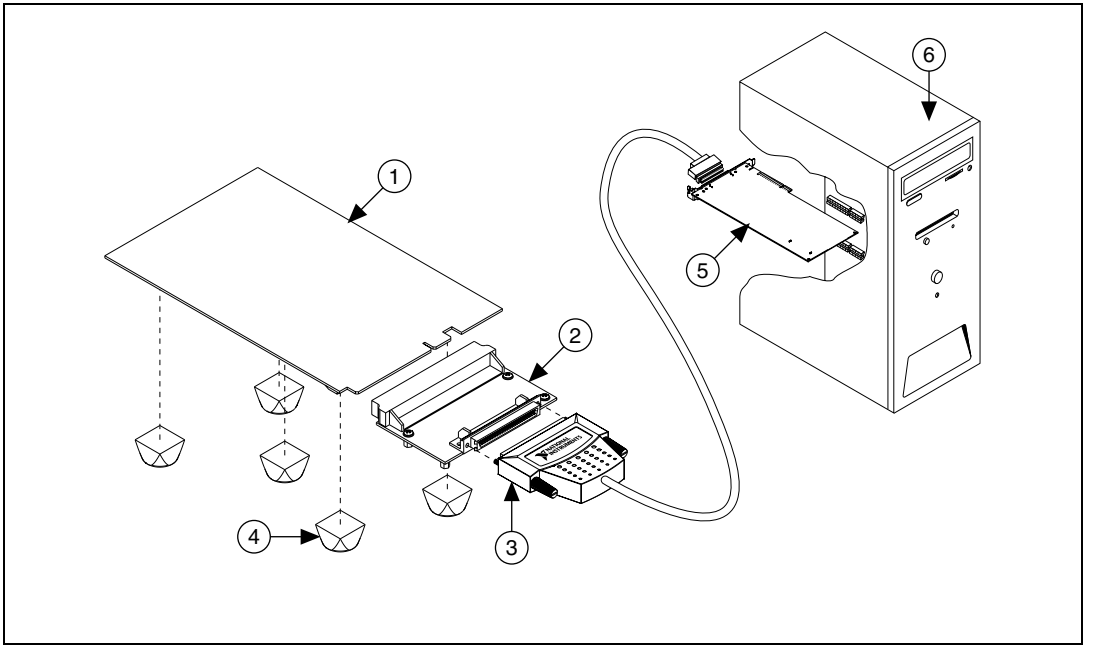
You can download NI documents from `ni.com/manuals`.

NATIONAL INSTRUMENTS™

# Installing the DAQ Adapter

To install the DAQ Adapter, refer to Figure 1 while completing the following steps:

1. Remove the adhesive backing from each of the five rubber feet.
2. Place one rubber foot near each of the four corners of your evaluation board and apply pressure to adhere the rubber foot to the board.
3. Place the fifth rubber foot near the center of your evaluation board and apply pressure to adhere the rubber foot to the board.
4. Connect the DAQ Adapter to your evaluation board.
5. Connect one end of the 68-pin cable to the DAQ Adapter.
6. Connect the other end of the 68-pin cable to the E/M Series DAQ device.




| | | | | | |
|---|---|---|---|---|---|
| 1 | Evaluation Board | 4 | Rubber Feet (5) | 5 | E/M Series DAQ Device |
| 2 | DAQ Adapter | 3 | 68-Pin Cable | 6 | Computer |

**Figure 1.** DAQ Adapter Installation Diagram

# Pinout Signal Information

Use the information in Table 1 to determine the correct signal connections for your application.

**Table 1.** SCSI/PCI Connector Pinouts and Corresponding Signal Names

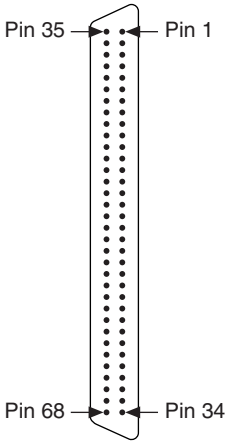
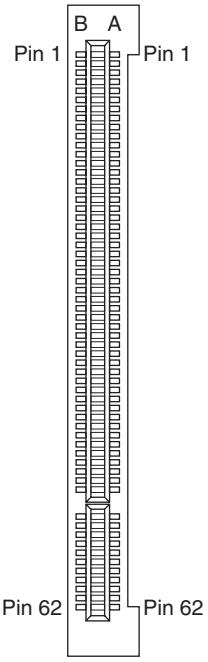
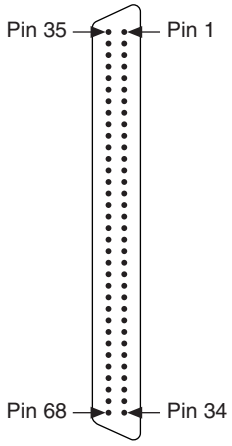
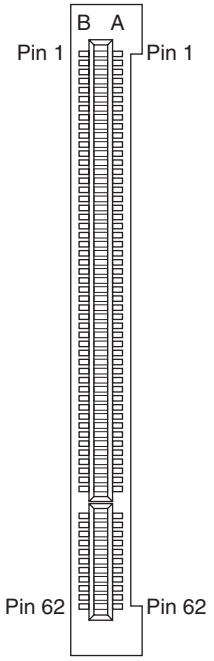
| SCSI Connector | SCSI Pin Number | MIO Signal Name | PCI Pin Number | PCI Connector |
|---|---|---|---|---|
|  | 4, 7, 9, 12, 13, 15, 18, 35, 36, 39, 44, 50, 53 | D GND | A6, A18, A23, A37, A55, A61, B3, B4, B5, B6, B18, B23, B37, B56, B61 |  |
| | 24, 27, 29, 32, 56, 59, 64, 67 | AI GND | A39, A44, B39, B44 | |
| | 16 | P0.6 | A7 | |
| | 19 | P0.4 | A8 | |
| | 49 | P0.2 | A9 | |
| | 52 | P0.0 | A10 | |
| | 6 | PFI 5 | A30 | |
| | 43 | PFI 2 | A31 | |
| | 46 | SCAN CLK | A32 | |
| | 11 | PFI 0 | A33 | |
| | 41 | CTR1_GATE | A34 | |
| | 37 | CTR0_SOURCE | A35 | |
| | 2 | CTR0_OUT | A36 | |
| | 60 | AI 5 | A42 | |
| | 28 | AI 4 | A43 | |
| | 30 | AI 3 | A45 | |
| | 65 | AI 2 | A46 | |
| | 33 | AI 1 | A47 | |
| | 68 | AI 0 | A48 | |
| | 62 | AI SENSE | A49 | |
| | 22 | DAC 0 | A60 | |
| | 48 | P0.7 | B7 | |

**Table 1.** SCSI/PCI Connector Pinouts and Corresponding Signal Names (Continued)

| SCSI Connector | SCSI Pin Number | MIO Signal Name | PCI Pin Number | PCI Connector |
|---|---|---|---|---|
|  | 51 | P0.5 | B8 |  |
| | 47 | P0.3 | B9 | |
| | 17 | P0.1 | B10 | |
| | 5 | PFI 6 | B29 | |
| | 38 | PFI 7 | B30 | |
| | 45 | EXT STROBE | B31 | |
| | 10 | PFI 1 | B32 | |
| | 42 | CTR1_SOURCE | B33 | |
| | 40 | CTR1_OUT | B34 | |
| | 3 | CTR0_GATE | B35 | |
| | 1 | FREQ_OUT | B36 | |
| | 26 | AI 13 | B42 | |
| | 61 | AI 12 | B43 | |
| | 63 | AI 11 | B45 | |
| | 31 | AI 10 | B46 | |
| | 66 | AI 9 | B47 | |
| | 34 | AI 8 | B48 | |
| | 8, 14 | +5V | B55 | |
| | 21 | DAC 1 | B60 | |





**Note**: PCI locations A50, A51, B50, and B51 have no pins due to the locating keyway. All other PCI pins not listed are unused.

National Instruments, NI, ni.com, and LabVIEW are trademarks of National Instruments Corporation. Refer to the *Terms of Use* section on `ni.com/legal` for more information about National Instruments trademarks. Other product and company names mentioned herein are trademarks or trade names of their respective companies. For patents covering National Instruments products, refer to the appropriate location: **Help»Patents** in your software, the `patents.txt` file on your CD, or `ni.com/patents`.

© 2005 National Instruments Corporation. All rights reserved.

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP