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Find the *National Instruments SH68-68-EP* at 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

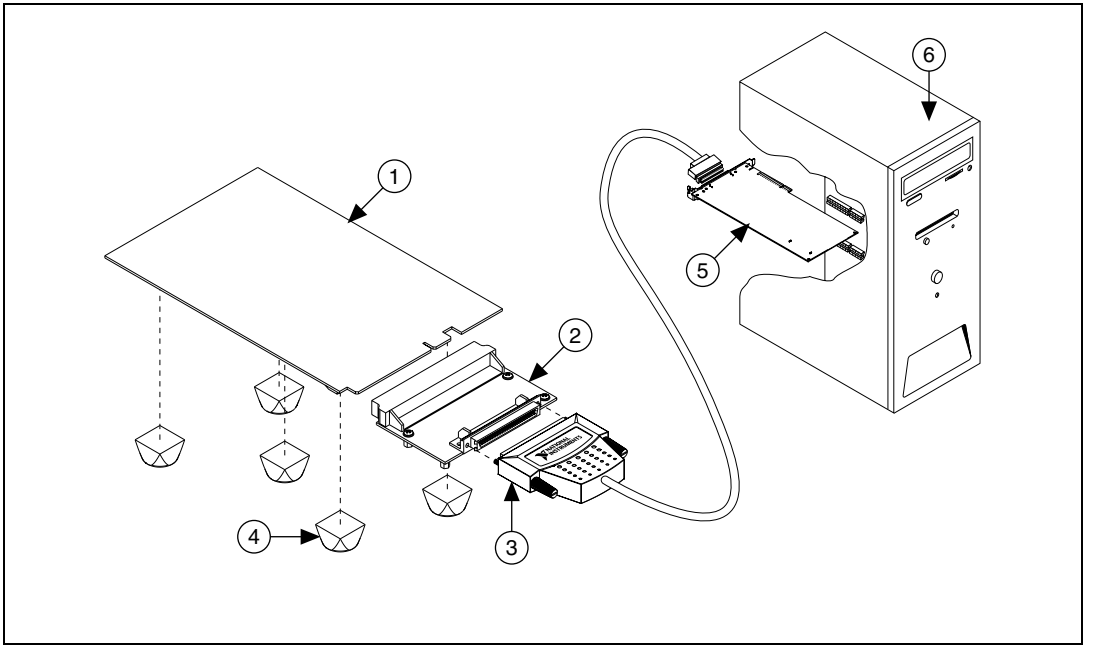
You can download NI documents from `ni.com/manuals`.

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

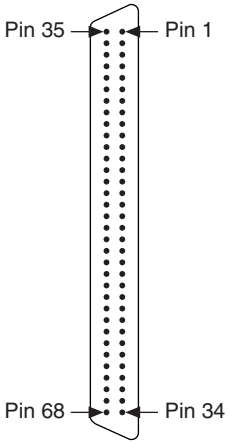
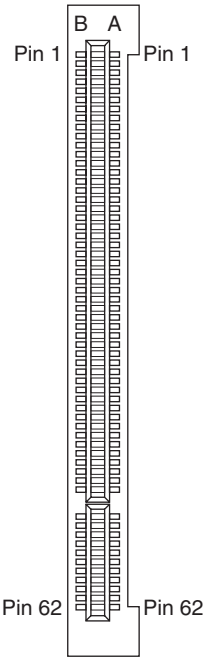
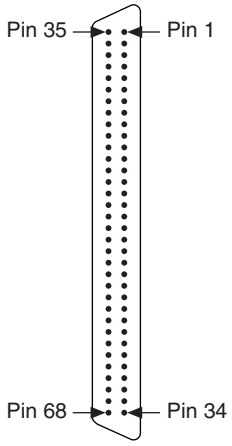
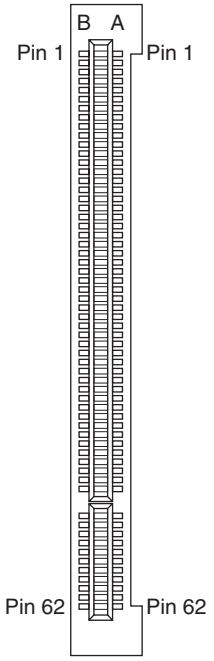
SCSI Connector	SCSI Pin Number	MIO Signal Name	PCI Pin Number	PCI Connector
	4, 7, 9, 12, 13, 15, 18, 35, 36, 39, 44, 50, 53	D GND	A6, A18, A23, A37, A55, A61, B3, B4, B5, B6, B18, B23, B37, B56, B61	
	24, 27, 29, 32, 56, 59, 64, 67	AI GND	A39, A44, B39, B44	
	16	P0.6	A7	
	19	P0.4	A8	
	49	P0.2	A9	
	52	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.

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