

## RJ-45 to DB-25 Straight-Through Cable Legs

Digi has available two lengths of RJ-45 to DB-25 straight-through (DTE) cable legs.

| Connector Type | 24 inches | 48 inches |
|----------------|-----------|-----------|
| DB-25 Male DTE | 76000129  | 76000195  |

## Additional Cabling Information

For additional cabling information, consult the Digi International web site at [www.digi.com](http://www.digi.com).

## Diagnostics and Loopback Plugs

To verify that the ClassicBoard EIA-232 adapter and ports are functional, use the appropriate DB-25 or RJ-45 loopback plug with the ClassicBoard EIA-232 PCI diagnostic program. Loopback plugs are typically shipped with the product. The PCI diagnostic program and instructions can be found on the diagnostic diskette included with the adapter.

## What Next?

After installing the hardware, you must install the software driver for your operating system. Refer to the appropriate ClassicBoard PCI driver installation instructions that came with your adapter.

## Specifications

### Power Requirements

| ClassicBoard 4 and 8 EIA-232 and EIA-422 |                   |                   |
|--|-------------------|-------------------|
| 350mA typical +5V                        | 40mA typical +12V | 40mA typical -12V |

### Environmental Requirements

| Temperature                  | Relative Humidity         |
|------------------------------|---------------------------|
| 10° to 55° C (50° to 131° F) | 5% to 90%, non-condensing |

| Altitude                       | Air Movement  |
|--------------------------------|---------------|
| 0 to 3,600 m (0 to 12,000 ft.) | 30 CFM forced |

## Regulatory Notices

### Radio Frequency Interference (FCC 15.105)

This device has been tested and found to comply with the limits for Class B digital devices pursuant to Part 15 Subpart B, of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Labeling Requirements (FCC 15.19)

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Modifications (FCC 15.21)

Changes or modifications to this equipment not expressly approved by Digi may void the user's authority to operate this equipment.

### Cables (FCC 15.27)

Shielded cables must be used to remain within the Class B limitations.

### Declaration Of Conformity

(In accordance with FCC Dockets 96-208 and 95-19)

|                                    |  |
|------------------------------------|--|
| <b>Manufacturer's Name:</b>        | Digi International                               |
| <b>Corporate Headquarters:</b>     | 11001 Bren Road East<br>Minnetonka MN 55343      |
| <b>Manufacturing Headquarters:</b> | 10000 West 76th Street,<br>Eden Prairie MN 55344 |

Digi International declares, that the product:

|                       |   |   |
|-----------------------|---|---|
| <b>Product Name:</b>  | <b>Digi ClassicBoard PCI 4</b>            | <b>Digi ClassicBoard PCI 8</b>            |
| <b>Model Numbers:</b> | 50001136-02<br>50001136-04<br>50001136-06 | 50001136-01<br>50001136-03<br>50001136-05 |

to which this declaration relates, meets the requirements specified by the Federal Communications Commission as detailed in the following specifications:

Part 15, Subpart B, for Class B Equipment  
FCC Docket 96-208 as it applies to class B  
personal Computers and Peripherals

The product listed above has been tested at an External Test Laboratory certified per FCC rules and has been found to meet the FCC, Part 15, Class B, Emission Limits. Documentation is on file and available from the Digi International Homologation Department.

The ClassicBoard PCI 4 and ClassicBoard PCI 8 adapters are certified to meet the following emissions, safety and immunity standards:

- FCC Part 15, Subpart B, for Class B Equipment
- EN 55022 Class B
- VCCI Class II
- ICES-003 Class B
- UL 1950
- CSA C22.2 No. 950
- EN 60950
- EN 50082-2
- AS3260
- AS3548

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Connectware™

## ClassicBoard 4 and 8 Port

PCI Host Adapter  
EIA-232  
EIA-422

## Hardware Installation and Cable Guide

## Introduction

The ClassicBoard PCI adapters easily expand the number of EIA-232 or EIA-422 ports available on a computer, allowing you to directly add additional peripheral devices such as point-of-sale peripherals, terminals or serial printers.

## Resources

The hardware resources for the ClassicBoard PCI adapter are dynamically assigned by the operating system each time the system boots.

## Installing the ClassicBoard Adapter

### Before Installing the Adapter

- Be sure that you have the correct cables for the interface used with the ClassicBoard.
- Record the adapter serial number (located under the part number label). This will enable Digi to provide you with better service, should the need arise.
- Unplug power from the computer.
- Put a ground strap on to ground yourself. If one is not available, ground yourself by touching an unpainted metal surface, such as the computer chassis.

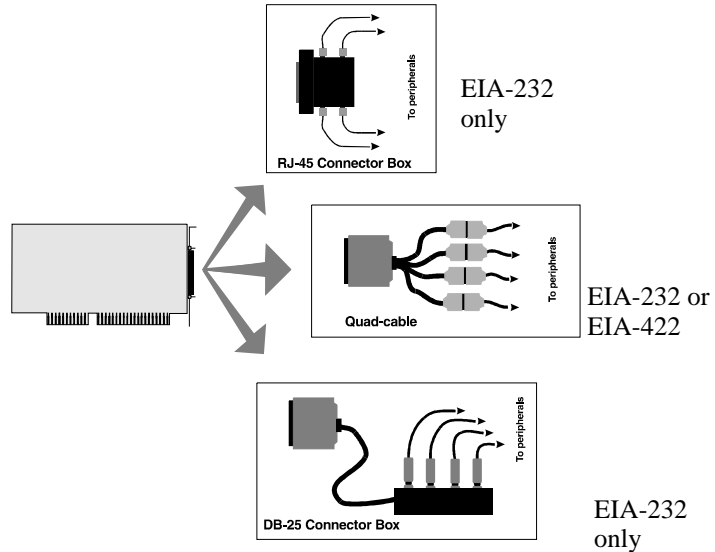
### Installation Procedure

1. Remove the computer cover.
2. Locate an available PCI slot in your computer and remove the slot plate.
3. Insert the board into the slot and screw the endplate to the computer chassis. The endplate must be screwed into the computer chassis to remain in compliance with Part 15 of FCC rules.
4. Replace the computer cover.
5. Connect the 78-pin connector assembly to the adapter.

## Digi Connector Options

There are three different connector assembly options available to use with a ClassicBoard adapter; an RJ-45 Connector Box, a DB-25 Connector Box, and a DB-25 Cable Assembly.

Example: ClassicBoard 4 Adapter and Connector Assemblies



### DB-25 Connectors

DB-25 connectors are available in two styles; a quad or octa cable assembly, or a quad or octa connector box assembly. Either style is available with male or female connectors and as DTE or DCE cables

### DB-25 Connector Cables and Part Numbers

| Connector Type for EIA-232 | DTE 4-Port | DCE 4-Port | DTE 8-Port | DCE 8-Port |
|----------------------------|------------|------------|------------|------------|
| DB-25 Male                 | 76000008   | 76000007   | 76000021   | 76000020   |
| DB-25 Female               | 76000006   | 76000005   | 76000019   | 76000018   |

### DB-25 Connector Cable Part Numbers

| Connector Type for EIA-422 | 4-Port   | 8-Port   |
|----------------------------|----------|----------|
| DB-25 Male                 | 76000178 | 76000179 |

### DB-25 Connector Boxes and Part Numbers

| Connector Type for EIA-232 | DTE 4-Port | DCE 4-Port | DTE 8-Port | DCE 8-Port |
|----------------------------|------------|------------|------------|------------|
| DB-25 Male                 | 76000030   | N/A        | 76000031   | 76000029   |
| DB-25 Female               | 76000026   | 76000024   | 76000027   | 76000025   |

### RJ-45 Connectors

The RJ-45 Connector Boxes are only available as straight-through (DTE).

### RJ-45 Connector Options and Part Numbers

| Connector Type for EIA-232 | 4-Port   | 8-Port   |
|----------------------------|----------|----------|
| RJ-45                      | 76000038 | 76000033 |

### Peripheral Cabling

The ClassicBoard PCI adapter can connect to point-of-sale peripherals, terminals, serial printers or any other standard EIA-232 device can be connected to a ClassicBoard PCI adapter. These devices can be located some distance from the adapter. It is important that cables be properly constructed. To achieve the greatest reliability over distance, cables should be:

- Shielded, low capacitance, and preferably designed specifically for serial data transmission.
- Grounded at both ends of the cable.
- Routed away from noise sources such as generators, motors and fluorescent lights.

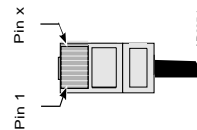
## Pinouts

### Pin Numbers and EIA-232 Signals

| RJ-11 |       | RJ-45 |        | EIA-232 Signal | DB-25 |
|-------|-------|-------|--------|----------------|-------|
| 4 Pin | 6 Pin | 8 Pin | 10 Pin |                |       |
| N/A   | N/A   | N/A   | 1      | RI             | 22    |
| N/A   | N/A   | 1     | 2      | DSR            | 6     |
| N/A   | 1     | 2     | 3      | RTS            | 4     |
| 1     | 2     | 3     | 4      | GND*           | 1     |
| 2     | 3     | 4     | 5      | TxD            | 2     |
| 3     | 4     | 5     | 6      | RxD            | 3     |
| 4     | 5     | 6     | 7      | SG**           | 7     |
| N/A   | 6     | 7     | 8      | CTS            | 5     |
| N/A   | N/A   | 8     | 9      | DTR            | 20    |
| N/A   | N/A   | N/A   | 10     | DCD            | 8     |

\* Frame Ground \*\* Signal Ground

When making RJ-45 cables, it is important to know that pin 1 is on the left side of the connector as you hold the cable upright (as shown in the figure), with the clip facing away from you.



To avoid cabling problems with terminals and printers, Digi recommends

that you use cables with the pinouts described in the following table.

**Note:** For Okidata printers, you may need to wire CTS from the ClassicBoard connector to pin 11 (SSD) on the printer side.

### Recommended Printer/Terminal Cable

| ClassicBoard Connector |       | Tie these signals/pins together |    |         | Terminal/Printer DB-25 |
|------------------------|-------|---------------------------------|----|---------|------------------------|
| RJ45 8-pin             | DB-25 |                                 |    |         |                        |
| 3                      | 1     | GND                             | to | GND     | 1                      |
| 4                      | 2     | TxD                             | to | RxD     | 3                      |
| 5                      | 3     | RxD                             | to | TxD     | 2                      |
| 6                      | 7     | SG                              | to | SG      | 7                      |
| 7                      | 5     | CTS                             | to | DTR     | 20                     |
|                        |       |                                 |    | RTS/CTS | 4 to 5*                |

\* RTS and CTS are tied together on the Terminal/Printer connector.

### Recommended Straight-through Cable

| ClassicBoard  |              |       | EIA-232 Signal | Device |
|---------------|--------------|-------|----------------|--------|
| RJ-45 8-pin   | RJ-45 10-pin | DB-25 |                | DB-25  |
| Not Available | 1            | 22    | RI             | 22     |
| 1             | 2            | 6     | DSR            | 6      |
| 2             | 3            | 4     | RTS            | 4      |
| 3             | 4            | 1     | GND            | 1      |
| 4             | 5            | 2     | TxD            | 2      |
| 5             | 6            | 3     | RxD            | 3      |
| 6             | 7            | 7     | SG             | 7      |
| 7             | 8            | 5     | CTS            | 5      |
| 8             | 9            | 20    | DTR            | 20     |
| Not Available | 10           | 8     | DCD            | 8      |

### Pin Numbers and EIA-422 Signals

| Signal | DB-25 Pin | Description          |
|--------|-----------|----------------------|
| TxD+   | 2         | Transmit Data High   |
| RxD+   | 3         | Receive Data High    |
| RTS+   | 4         | Request to Send High |
| CTS+   | 5         | Clear to Send High   |
| CTS-   | 13        | Clear to Send Low    |
| TxD-   | 14        | Transmit Data Low    |
| RxD-   | 16        | Receive Data Low     |
| RTS-   | 19        | Request to Send Low  |