Dialogic

Dialogic® D/4PCIU4S and D/4PCIUF Media Boards
Installation Guide

1. Product Description

The Dialogic® D/4PCIU4S and D/4PCIUF Media Boards ("D/4PCIU4S and D/4PCIUF" or "boards") are combined media analog boards with four-port voice, fax, and speech in a half-length PCI Express form factor. The D/4PCIUF Board has four ports of voice and fax, while the D/4PCIU4S Board has four ports of voice and speech.

The D/4PCIU4S and D/4PCIUF include the following components, shown in the Physical Layout illustration:

J1-J4 jacks: Four RJ-11 jacks to connect to PBX or telephone network (Central Office) lines.

SW30: Rotary switch used when setting board ID.

SW4: Slide switch used to set hook state at startup.

PCI Express connector: Host bus connector. Compatible with x1 or larger PCI Express Link connectors.

Additional Information

Additional information about the D/4PCIU4S and D/4PCIUF is available from a number of sources, such as via the product data sheet, which is accessible at http://www.dialogic.com/products. The product data sheet provides a functional description of the D/4PCIU4S and D/4PCIUF, as well as information about their applications, configurations, features, and technical specifications.
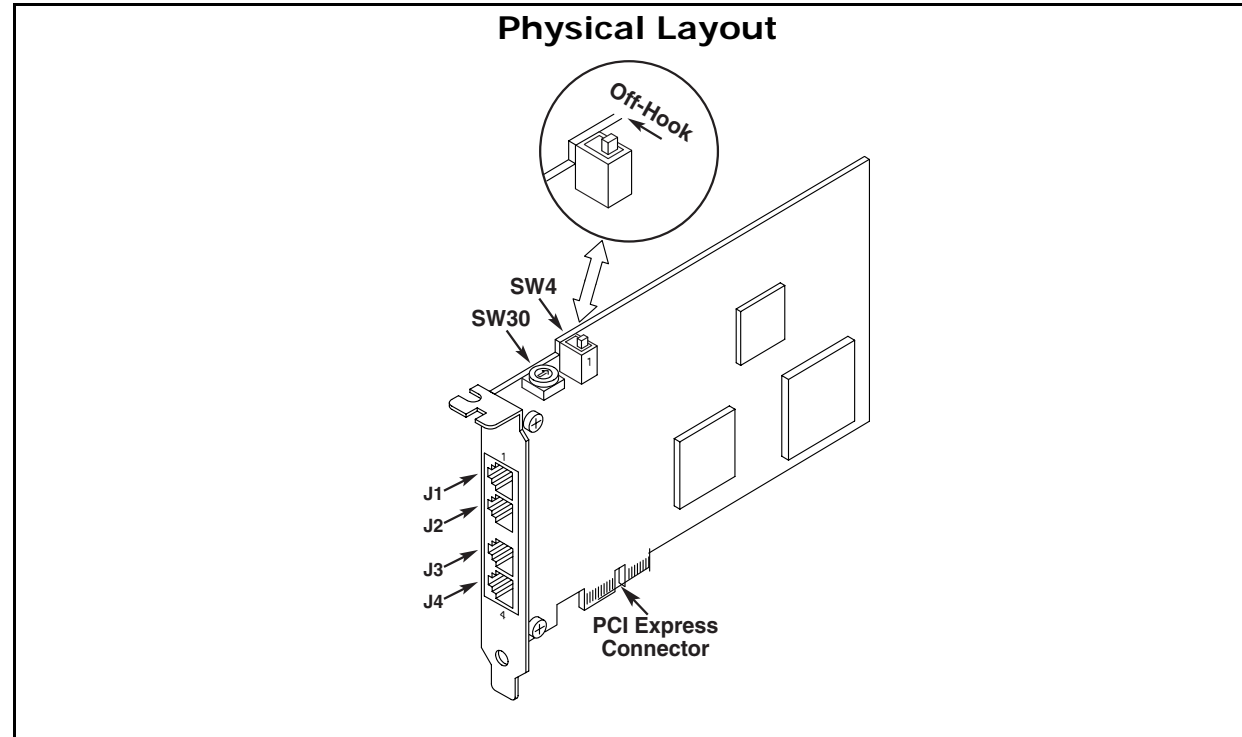
Refer to the Release Guide and the online Release Update for your Dialogic® Software release to verify that the D/4PCIU4S and D/4PCIUF are supported in the release, and for information on any new features or issues that may relate to them.

The Regulatory Notices document that is packed with each D/4PCIU4S and D/4PCIUF contains safety warnings and national requirements for proper operation of telecommunications equipment.

2. Before You Begin

Protecting the Board from Damage

CAUTION: All computer boards are sensitive to electrostatic discharge ("ESD"). Handle all static-sensitive boards and components at a static-safe work area, and observe anti-static precautions at all times.

If you are not familiar with ESD safety precautions, visit http://www.dialogic.com/support/hwinstall to learn more.

Unpacking the Board

Unpack the board according to the following steps:

1. Prepare a static-safeguarded work area.
2. Carefully remove the board from the shipping carton and anti-static packaging. Handle the board by the edges and avoid touching the board's components.
3. Lay the board on the static-dissipative work surface.

Note: Place board in static-shielding bag when carrying board from station to station.

CAUTION: Do not remove the board from the anti-static packaging until you are ready to install it. Observe proper anti-static precautions at all times.

3. Configuring the Board

The D/4PCIU4S and D/4PCIUF use Plug and Play technology to simplify installation. No user configuration is required for IRQ or memory address.

Physical Layout

The D/4PCIU4S and D/4PCIUF have the following manually configurable options:

- Board ID
- Initial hook state

Setting the Board ID

When the system is started, each Dialogic® board is assigned a board instance ID number that programs can use to identify individual boards in a multi-board system. The setting of SW30 controls the generation of the instance numbers.

Windows Systems: In a Windows system, leave SW30 set to the "0" position (the factory default setting) on all Dialogic® boards. This setting causes the system software to assign instance numbers geographically, based on the bus and slot numbers. Note that there is no way to know what the instance numbers will be until the system is started and configured, and the instance number for any given board is likely to change when there is any change in the number or arrangement of boards in the system.

As an alternative, you may set SW30 on each board to a different position (0-9 or A-F) to explicitly assign specific ID numbers to the boards. Note that each board must be set to a different ID number.

In either case, you can read the ID numbers assigned to the boards in the Dialogic®

Configuration Manager (DCM) tool after you start the system.

Linux Systems: In a Linux system, you must explicitly specify the board ID numbers by setting SW30 on each board to a different position (0-9 or A-F). Refer to the Configuration Guide for Springware architecture products in your Dialogic® Software documentation for further information about the board ID numbers.

Setting the Initial Hook State

The position of slide switch SW4 determines how the board responds to an incoming call when the chassis power is on but the board is not initialized. Refer to the Physical Layout section. Set the SW4 slide switch as follows:

- SW4 = on-hook (default): Callers hear ringing.
- SW4 = off-hook: Callers hear a busy signal.

Note: If the chassis power is off, callers hear ringing (on-hook).

4. Choosing a Slot

The D/4PCIU4S and D/4PCIUF implement a PCI Express x1 lane configuration, allowing them to be used in any half-length PCI Express slot that fully meets PCI Express Card Electromechanical Specification Revision 1.0a or higher.
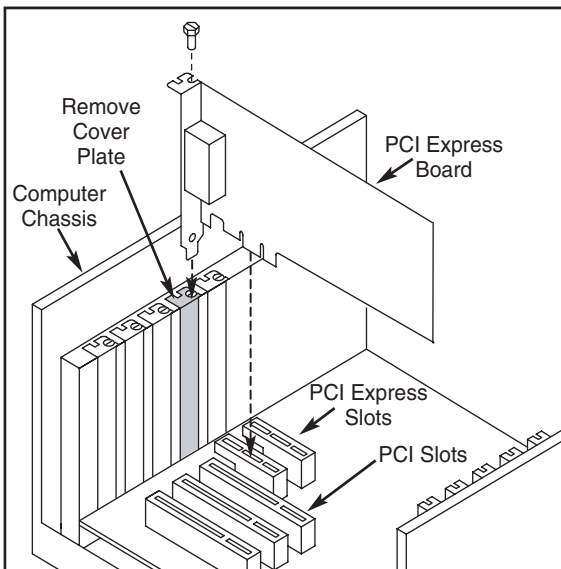
5. Installing the Board

WARNING! Unplug the equipment before performing the procedures described here. Failure to disconnect the power before you open the chassis can result in personal injury. Ensure that the system is disconnected from its power source and from all telecommunications links, networks, or modem lines whenever the chassis cover is removed. Do not operate the system with the cover removed.

CAUTION: To avoid possible damage to the board, remove power from the computer before beginning installation. Observe proper anti-static precautions at all times while handling and installing the board.

To install the D/4PCIU4S or D/4PCIUF, perform the following steps:

1. Turn off all power to the system and disconnect the system's power cords.
2. Remove the computer's cover.
3. Choose an empty PCI Express expansion slot and remove that slot's retaining screw and access cover plate.
4. Insert the board's edge connector into the bus slot, and apply firm pressure to the top edge of the board until the board is fully seated in the edge connector.
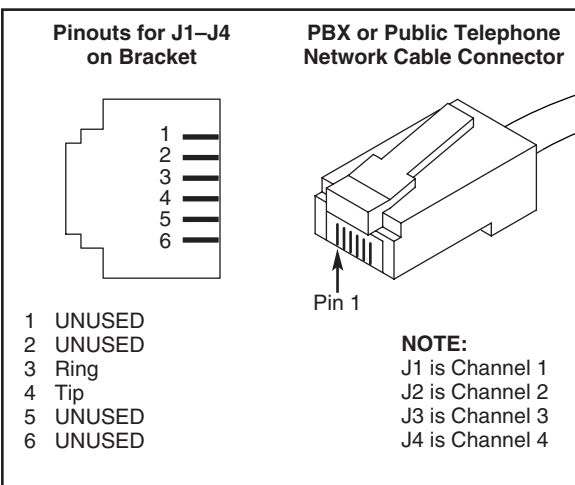
5. Reinstall the retaining screw.
6. Repeat Step 3 through Step 5 for any additional boards you are installing.
7. Replace the computer's cover.
8. Reconnect the computer's power cord.

6. Connecting to External Equipment

Each RJ-11 jack on the rear bracket of the D/4PCIU4S and D/4PCIUF supports a single channel. Use RJ-11 connectors and telephone cable to connect each channel jack to a PBX station port or to the telephone network Central Office.

Note: A standard telephone will not function when directly connected to the board.

Pinouts for J1–J4 on Bracket	PBX or Public Telephone Network Cable Connector

1	UNUSED
2	UNUSED
3	Ring
4	Tip
5	UNUSED
6	UNUSED

NOTE:
J1 is Channel 1
J2 is Channel 2
J3 is Channel 3
J4 is Channel 4

7. After Installing the Board

The D/4PCIU4S and D/4PCIUF require the use of a Dialogic® Software version that specifically supports them.[1]

If this is the first Dialogic® board you have installed in your system, you will need to install an appropriate version of the Dialogic® Software and configure the software for the specific board(s) you are using. Refer to the installation and configuration documentation that accompanies the release for instructions.

Note: In a Windows system, when configuring your system using DCM, the correct menu selection to choose is "D/4PCI-U" regardless of whether you are using a D/4PCIU4S or D/4PCIUF. Both boards share the same product family name in DCM.

If you are installing the D/4PCIU4S or D/4PCIUF in a system that already has the Dialogic® Software installed, you should verify that your installed software version supports the board. If not, you will need to obtain and install a Service Update that does support the D/4PCIU4S and D/4PCIUF before configuring the system for the newly installed board(s).

Please refer to the Release Update document for your release version (on the Dialogic Telecom Support Resources web page) for up-to-date information about support for PCI Express boards and any known issues relating to their use.

For technical specifications and product information go to: http://www.dialogic.com/products.htm.

8. Removing the Board

Removal of the D/4PCIU4S or D/4PCIUF is essentially the reverse of the installation procedure, as summarized in Step 1 through Step 6 below:

1. Observe anti-static precautions.
2. Disconnect the telephony cables.
3. Remove the computer's power cord.
4. Remove the computer's cover.
5. Remove and set aside the board's retaining screw.
6. Remove the board and place it in static-protective packaging.

9. Warranty and Return Information

Warranty Period

For specific warranty information for this board, refer to the Warranty section of the Products page, located at this URL: http://www.dialogic.com/warranties/.

Contacting Technical Support

Dialogic provides technical support for its products through a network of value added distributors who are trained to answer technical questions on installing and configuring Dialogic® products. If you are unsure how to contact your support channel, please call

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1. Required Dialogic® System Release Software: Dialogic® System Release 6.0 PCI for Windows Service Update 131 or higher; Dialogic® System Release 6.1 for Linux Service Update 232 or higher.

Dialogic in the United States at 973-967-6600 (9am-5pm EST) and we will assist in obtaining the appropriate support channel.

Outside the United States please refer to http://www.dialogic.com/support/contact to obtain local contact information. Dialogic also provides direct support via Dialogic® Pro™ Services agreements. For more details of direct support from Dialogic please refer to: http://www.dialogic.com/support/DialogicPro

Returning a Product

To return a board for warranty repair or any other returns, please refer to the following: http://www.dialogic.com/support/hwfaults.

10. Sales Assistance

If you have a sales question, please contact your local Sales Representative or the Regional Sales Office for your area. Address, telephone and fax numbers, are available at the Dialogic website located at: http://www.dialogic.com/contact.htm.

To purchase Dialogic® products, please refer to the following website to locate the appropriate supplier: http://www.dialogic.com/purchase.htm.