



an Intel company

PBX Integration Boards

D/42JCT-U and D/82JCT-U

- Configuration
- Installation
- Connections
- Warranty Period
- RMA Process

05-1295-003

Copyright © 2001 Dialogic Corporation
All Rights Reserved

Read Me First

Protect Yourself from Electric Shock

To reduce the risk of electric shock:

- Switch off the power and remove power cords before opening the PC cover to install a PBX Integration board.
- Do not re-attach power cords and switch on power to the PC while the PC cover is removed.

Protect the Board from Static Electricity

Computer boards are static-sensitive and can be damaged by touching or handling them. To prevent damage from static electricity, do the following:

- Wear a grounded, static-dissipative wrist-strap for the entire hardware installation.
- Keep the board in its anti-static container when it is not being handled.
- Work at a static-safe work area (see Figure 1).

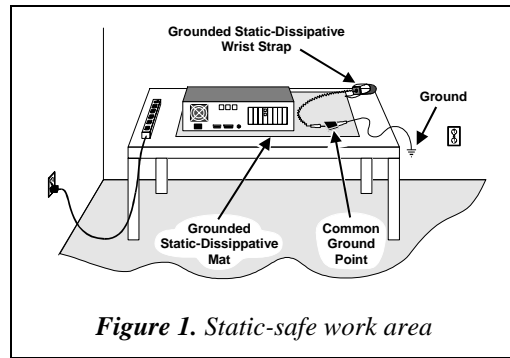


Figure 1. Static-safe work area

A static-safe work area consists of a grounded static-dissipative wrist strap and a work surface covered with or composed of a grounded static-dissipative material. The work surface drains electrical charges from conductive materials when the materials are placed on the surface. The grounded static-dissipative wrist strap drains static charge from the person wearing the strap. Both components ensure that static charges are drained at a rate and current level that are safe. Both must be used any time a person is handling any component.

Read Your Software Documentation

Your application software or Dialogic software release (hereinafter collectively called "voice software") may have special installation or configuration instructions or requirements. Be sure to read all software documentation for any such instructions or requirements.

Configure the Board

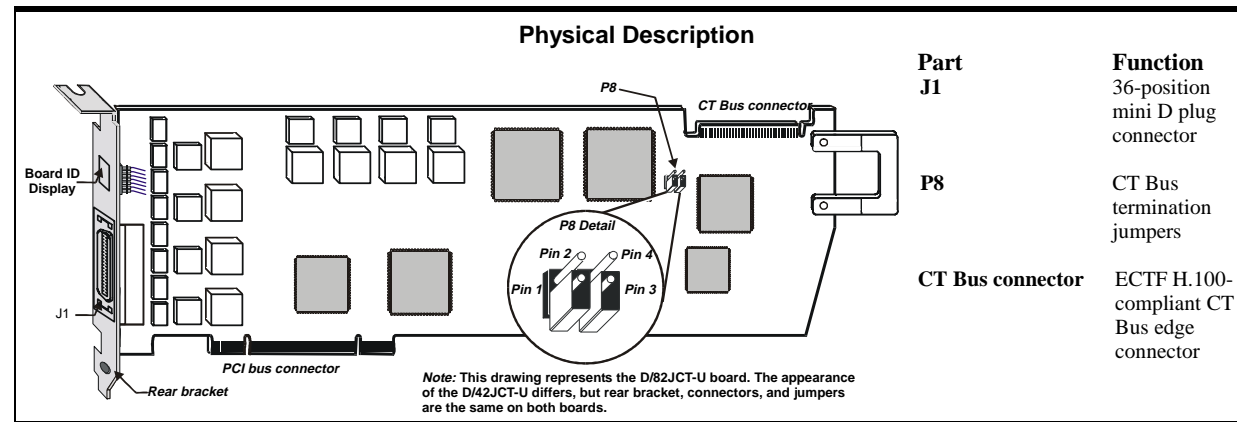
The PBX Integration boards are in the PCI form factor, using hardware auto-configuration for IRQ and memory address. It allows you to use the factory default hardware settings for quick installation and operation. However, Dialogic recommends that you review the following information and select options as desired.

NOTE: As shown in board diagram, PBX boards have dual slots on the PCI connector, allowing them to be used in either a 3.3 or 5 volt computer.

Board Numbering

When you start Dialogic boards, each board is assigned a Board ID number for identification and use by the application program.

All Dialogic PCI boards with a rotary switch can share the factory default switch setting and Board ID of 0.



To give a PCI board with a rotary switch a Board ID other than 0, the rotary switch is set to the desired number. Because the PBX Integration boards have no rotary switch, the Dialogic Configuration Manager (DCM) software that is provided with the board automatically assigns Board IDs, beginning with 0, unless there are other PCI boards with a rotary switch settings of 0, 1, 2, etc. In that case, DCM would assign the first available Board ID not in use.

Unlike boards with rotary switches, the Board ID cannot be changed from the automatic setting on the PBX Integration hardware: it must be changed using DCM. See DCM help files for more information about changing Board IDs.

Note: If you add PCI boards with rotary switches to your system after PBX Integration boards have been assigned, boards may share the same ID, depending on the rotary switch settings of the new boards. For instance, if DCM has assigned Board IDs 01, 02, and 03 to existing PBX Integration boards, and then the rotary switches on three new boards are set to 1, 2, and 3, the PBX Integration and new boards will share Board IDs 01, 02, and 03.

The PBX Integration Board ID appears on the 2-character LED display on the rear bracket of the board, along with error codes, when appropriate.

Display	Meaning
00-xx	Board ID (in hexadecimal numbers)
88	PCI Bus reset active
D0	Front-end download or initialization failed
E1-E8	Error on PBX port 0-7 (channel 1-8)

Following download, the Board ID is displayed on the LED until a communications error is experienced on

one or more of the PBX ports. When errors are present, they are displayed for two seconds, alternating with the Board ID for two seconds.

P8 CT Bus Termination

Jumpers are used to terminate signals on the CT Bus. These settings apply to boards located at physical ends of the bus. For SCbus, both CT_C8_(A&B) and CT_FRAME_(A&B) are terminated using pins 1 and 2 of the P8 termination jumpers. For MVIP, C-2 and C-4* are terminated using pins 3 and 4 of the P8 termination jumpers.

Shunt	Terminates	Standard
P8, Pins 1 and 2	CT_FRAME_(A&B) CT_C8_(A&B)	SCbus
P8, Pins 3 and 4	C-2 and C-4*	MVIP

NOTE: Only the boards at the ends of the ribbon cable must have their terminations enabled. All other boards must not have the jumper clips installed.

Install the Board

Install each board in the PC chassis using adjacent PCI slots according to the following instructions.

1. Turn off all power to the system, and disconnect the system's power cords from electrical outlets.
2. Remove the PC cover.
3. Select an empty PCI expansion bus slot, and remove the slot's retaining screw and access coverplate.

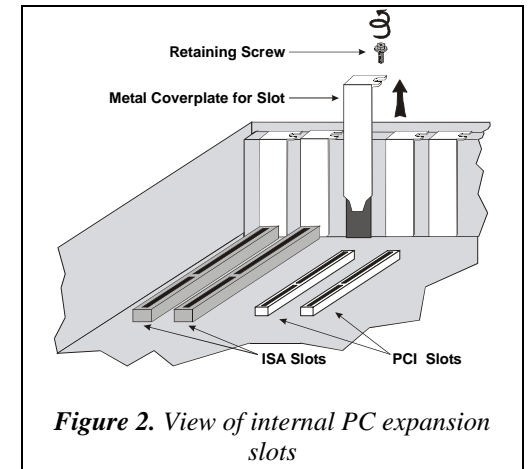


Figure 2. View of internal PC expansion slots

Note: If the PC is designed for PCI boards only, remove the slot retainer bracket from the end of the board before installing the board. The slot retainer bracket allows you to install the board in a PC chassis that contains both ISA and PCI slots (where the PCI slots use the ISA form-factor).

4. Insert the board's edge connector into the bus slot. Apply pressure only to the top edge of the board, and gently rock the board forward and backward to seat the edge connector into the slot.

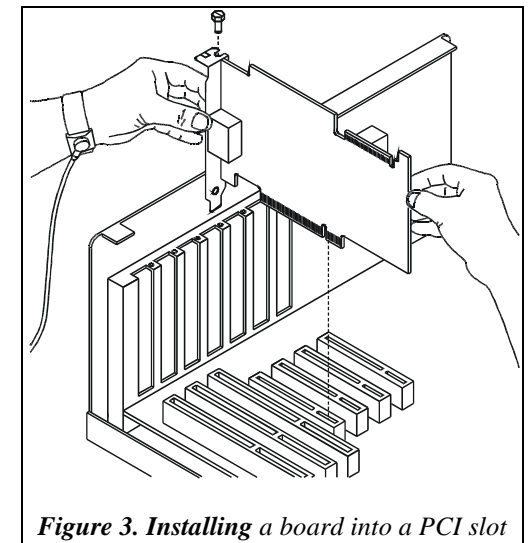


Figure 3. Installing a board into a PCI slot

5. Install the retaining screw.

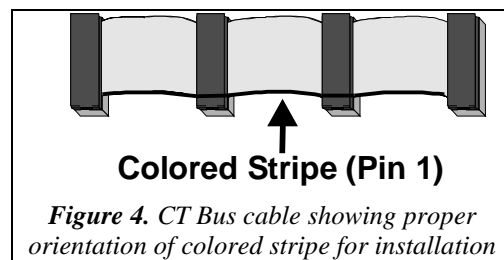
Note: If the screw is not installed and you attach a CT Bus cable, it can unseat the board from the slot.

Connect CT Bus Ribbon Cable

The CT Bus cable (not included) connects Dialogic boards to the H.100-compliant Computer Telephony bus (CT Bus).

Follow the instructions in this section depending upon whether the board will be connected to the CT Bus or used in “stand-alone” mode (without the CT Bus).

- **Stand-Alone Mode (CT Bus Cable Not Needed):** Skip the instructions in this section if the Dialogic boards are used in “stand-alone” mode (where the application does not use time-slot routing).
- **CT Bus Mode (CT Bus Cable Needed):** Attach the CT Bus cable to the Dialogic boards as shown in *Figure 5* and described in the following instructions if the boards use the CT Bus (the application program controls resources on the boards through time-slot routing).



- Figure 4. CT Bus cable showing proper orientation of colored stripe for installation**
1. Attach the end connector on the ribbon cable to the CT Bus edge connector on the top edge of the first board. The connectors are designed to fit together one way only. If the connector does not seat fully on the board, turn the cable around and try again. Make sure that the colored stripe on the cable faces toward the rear bracket. (The stripe should be adjacent to pin 1 on the board connector.)
 2. Attach the ribbon cable to the next board until all boards are connected by the cable.

Note: To connect the CT Bus to an SCbus, attach a Dialogic CT Bus/SCbus Adapter (part number 99-2446-001, not included) to one of the boards and connect the SCbus cable to this adapter. See the hardware installation instructions for the CT Bus/SCbus Adapter for more information.

3. After installing and connecting all the boards, replace the PC cover, cables, and cords.

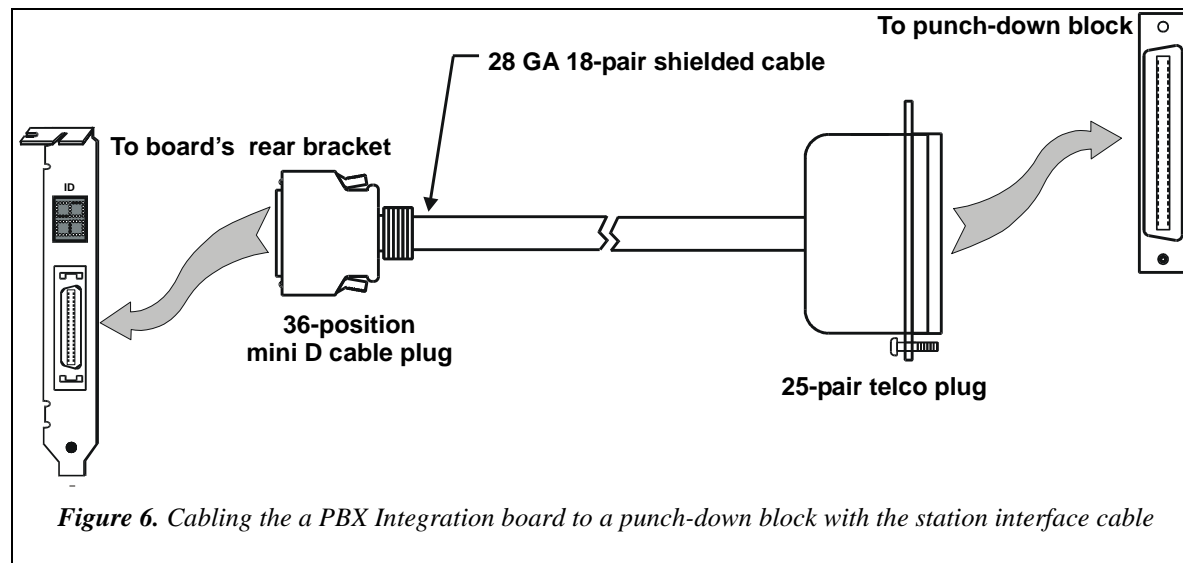


Figure 6. Cabling the a PBX Integration board to a punch-down block with the station interface cable

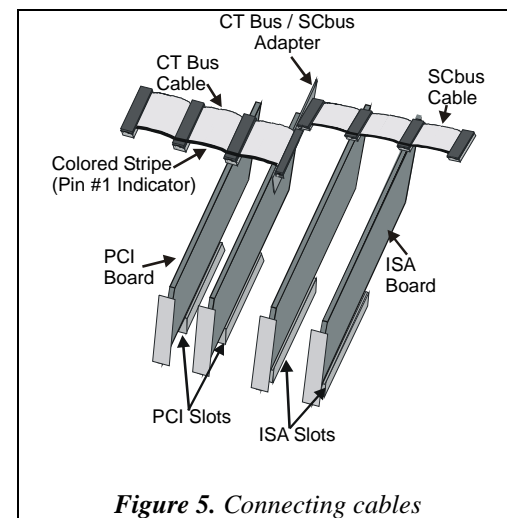


Figure 5. Connecting cables

Connect External Cable

- A PBX Integration-specific, station interface cable (available as a separate sales item, part number 86-0155-001) is used to connect a D/42JCT-U or D/82JCT-U board to a punch-down block (see *Figure 6*).
- As shown in *Figure 7*, the station interface cable terminates at the punch-down block end with a 25-pair, v 57-series Amphenol plug to allow available type-66 punch-down blocks to be used

to terminate the PBX station wiring. The mini-D cable that connects to the D/42JCT-U or D/82JCT-U has a 36-position connector.

- The Telco plug cable connector tabulation is arranged so that the four conductors of one station set circuit are adjacent on a standard, type-66 punch-down block. The pattern shown in *Figure 8* continues down the connector so as to encompass, for a D/82JCT-U, all eight channels with two pairs of conductors per channel, for a total of 16 twisted-pair conductors.

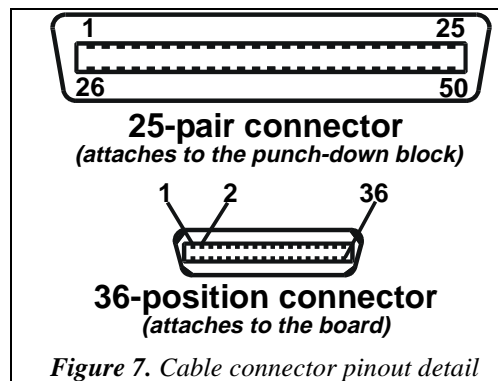


Figure 7. Cable connector pinout detail

To connect your board to a punch-down block, follow the instructions below:

1. Connect your station interface cable’s 36-position mini D cable plug to the connector on the rear bracket of the board.
2. Connect your station interface cable’s 25-pin telco plug to the connector on the punch-down block.

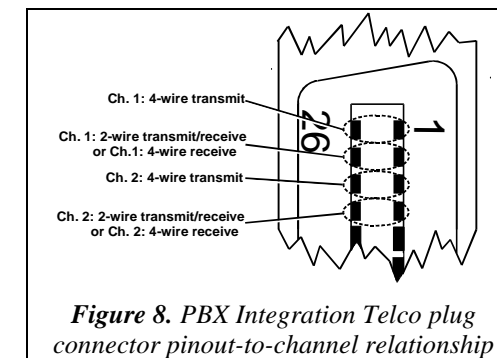


Figure 8. PBX Integration Telco plug connector pinout-to-channel relationship

Hardware installation is now complete.

After Installation

- Run the firmware download utility that came with your voice software to download the firmware to the PBX Integration board.
- NOTE:** Your new PBX Integration board cannot be used with earlier Dialogic system releases (SR 5.01 or earlier), although the previous version of the D/82JCT-U board will work with the latest release.
- Test the PBX Integration board with a Dialogic demonstration program such as the Multi-threaded Voice demo.
- For specifications, product information, or technical support, refer to the Dialogic FirstCall™ Info Server at: <http://support.dialogic.com>

Warranty Period

The PBX Integration boards have a 3-year warranty. See the *Regulatory Notices* booklet for coverage details.

RMA Process

Repair of Merchandise Authorization (RMA) Process

1. Before completing the RMA process, verify that the problem is not due to a mistake or oversight in the installation process. Choose one of the following methods:
 - On the Web, go to the Dialogic FirstCall Info Server at <http://support.dialogic.com> and browse through the various topics.
 - If you have a Dialogic Support Plan, contact one of our Technical Support Departments and they will troubleshoot the problem over the phone.

2. After you have determined that you have a problem board, do one of the following:
 - For Dialogic products purchased outside the United States or Canada, contact your local Dialogic Sales Office for RMA procedures.
 - For Dialogic products purchased from a distributor, the distributor owns the warranty and you MUST go through them if you do not want to be charged for the repair.

NOTE: You may return the board to Dialogic for repair, even if you did not purchase your board through the Dialogic Corporate Sales. However, if the repairs are not authorized by your local distributor or local sales office, the board is considered “out of warranty” and a fee is charged for repair services.

- Go to the Dialogic Technical Support website at <http://support.dialogic.com/rma>, and fill out the Repair of Merchandise Authorization form.
 - 1) To complete the RMA form, you will need the serial number of the board. This information must be provided or the request cannot be processed.
 - 2) Observe correct static-safe handling procedures. Disconnect power cables and remove the board from the chassis.
 - 3) Record the serial number (two letters followed by numeric digits, and located on a label on the board).
 - 4) Include your Call Tracking Number given to you by a Technical Support representative, if appropriate.
 - 5) E-mail the RMA form to the RMA Department.

3. After you receive an RMA number from Dialogic, return the problem board to Dialogic as outlined in the steps below:
 - a. Pack the board(s) in their original anti-static packaging and protected packaging.
 - b. Clearly display the RMA number on the package. If this number is not on your package, it will be treated as an unauthorized return.

NOTE: Dialogic is not responsible for risk of loss or damage in transit.

- c. Ship the board to the address listed below:

Dialogic
1515 Route 10
Parsippany, NJ 07054 USA
ATTN: RMA#