Installing the Dialogic® Brooktrout® TR1034 DID/DID & Loop Start PCI Fax Board

Part Number: 931-127-05

The Dialogic® Brooktrout® TR1034 Analog Loop Start (ALS), Analog Direct Inward Dialing (DID), or combination ALS/DID PCI Fax Board ("TR1034" or TR1034 fax board(s)") is a half-sized, single-slot, PCI-bus compatible fax board. This board provides the following:

- On-board analog connections
- V.34 (33.6 Kbps) fax transmission speeds
- Up to four fax or voice channels per board

This installation guide provides information about:

- Safety Compliance Statements
- System Requirements (including telephone services)
- Setting the Module Number
- Installing the Dialogic® Brooktrout® Fax Board
- Recognizing PCI Slots
- Connecting the Phone Service
- Understanding LED Signals
- Using the TR1034 DID/DID & Loop Start Board
- Getting Help

Safety Compliance Statements

- Install this board only in UL Listed equipment that has instructions stating that the user may install and remove accessory boards.
- Disconnect any TNV circuit connectors (telephone line cords) from this board before removing the cover of the equipment.
- Models of this board that contain DID interfaces are for use only in equipment that has a permanent connection to protective earth and is installed in a restricted access location.

System Requirements

This board must be installed in an enclosure that meets the following specifications:

- A Pentium or later host processor
- An available 33 or 66 MHz, 32- or 64-bit PCI bus slot. See ***Recognizing PCI Slots*** for more information.

  The TR1034 ALS/DID PCI Series boards can be used in either 3.3V or 5V signaling PCI slots.
- Temperature: 0° C - 50° C
- Humidity: 10% - 95% (non-condensing)
- Power Requirements:

Board	+5V	+3.3 V	Total Power
Combination 2 ALS and 2 DID Channels	1.5A	1.0A	10.8 W
4 DID Channels	3.0A	1.0A	18.3 W

One or both of the following telephone services are also required:

- Analog loop start interface
- Analog direct inward dialing interface

Setting the Module Number

Set each board to a unique module number to easily identify the resources associated with a specific board in a multi-board system.

Use the SW-1 rotary switch to set a unique module number for each board. See Figure 4 for the switch location. Select a number from 2 - F on the rotary switch. Settings 0 and 1 are reserved and cannot be used.

Installing the Dialogic® Brooktrout® Fax Board

To install your fax board:

1. Turn off your PC and remove the cover.

> Caution: A small amount of static electricity can destroy the sensitive components on your fax board. To prevent static damage, always connect yourself to ground using a ground strap before touching a circuit board. Handle boards only by the edges or metal mounting brackets and transport boards in an anti-static bag.

2. Locate a free PCI bus slot, and remove the slot cover.
3. Carefully align the board with the slot and firmly seat the board into the slot.
4. Tighten the mounting bracket screw to secure the board to the chassis.

> Warning: When installing the board, be sure that the mounting bracket is securely fastened to the chassis and the chassis is plugged into a grounded three prong plug. Improper chassis or bracket grounding can result in harmful or fatal electrical shock as well as component damage.

5. Replace the cover.
6. Turn on your computer.

Note: Dialogic® Brooktrout® fax boards should not be present in the computer during the installation of any operating system. The operating system might misinterpret the board as being some other device, with unpredictable consequences.

Recognizing PCI Slots

The PCI slots in the computer chassis usually appear as white slots. Your Dialogic® Brooktrout® fax board can be inserted into any of the PCI slots shown in Figure 1.

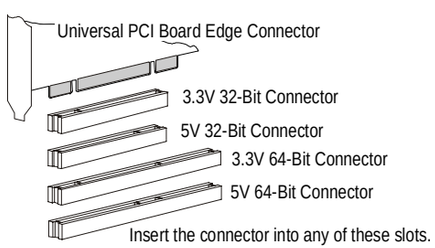


Figure 1. PCI Slots

Connecting the Phone Service

The appropriate telephone service and hookups must be installed at your site in order to connect to telephone service.

Table 1 shows the relationship between channel and connector for each board configuration.

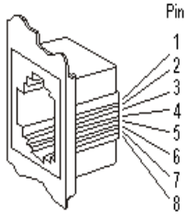
Table 1: Channel and Connector Relationship

Channel Number	RJ-45 Connector	Type of Service
TR1034+uP4C-R (Two ALS and Two DID Channel Configuration)		
0	A	ALS
1	A	ALS
2	B	DID
3	B	DID
TR1034+uP4D-R (Four DID Channel Configuration)		
0	A	DID
1	A	DID
2	B	DID
3	B	DID
TR1034+uP2C-R (One ALS and One DID Channel Configuration)		
0	A	ALS
1	B	DID
TR1034-P2-2L (Two ALS Channel Configuration)		
0	A	ALS
1	A	ALS
TR1034+uP2D-R (Two DID Channel Configuration)		
0	A	DID
1	A	DID

Use the cable supplied with the board. See Figure 2 for pinout details for your board.

Use the following instructions to connect your board to ALS or DID service.

1. Plug one end of the cable into the A or B RJ-45 telephone connector on the board (see Figure 3 and Figure 4 to locate connectors).
2. Plug the other end into the wall connector for your telephone service.



Pin	Port A	Port B
1	No connection	No connection
2	No connection	No connection
3	Tip 1	Tip 3
4	Ring 0	Ring 2
5	Tip 0	Tip 2
6	Ring 1	Ring 3
7	No connection	No connection
8	No connection	No connection

Port A = ALS or DID Port B = DID only

Figure 2. ALS and DID Connector Pinouts

Understanding LED Signals

LEDs on the Mounting Bracket

The LEDs on the mounting bracket provide information about the status of the different systems on the board. To identify and locate these LEDs, see Figure 3.

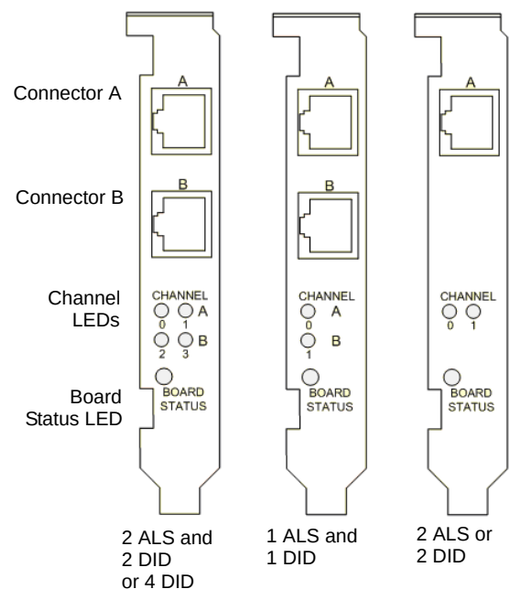


Figure 3. End Panel Connector and LEDs

Table 2 and Table 3 describe how the end panel LEDs provide information.

Table 2: Channel LEDs

Channel LEDs	Meaning
Off	Channel is on hook (inactive).
Flashing at 0.5 second rate	Channel is off hook (active).
Flashing at Ring Cadence (varies by country)	Incoming ring signal (ALS only).

Table 3: Board Status LED

Board Status LED	Meaning
Flashing yellow (1.5 second rate)	Board has successfully powered up and is ready for firmware.
Solid red	Board has failed power up tests.
Flashing yellow and green	Application is downloading firmware to the board.
Flashing green (1 second rate)	Firmware is downloaded, and the board is in service.
Off	Board is not powered up.

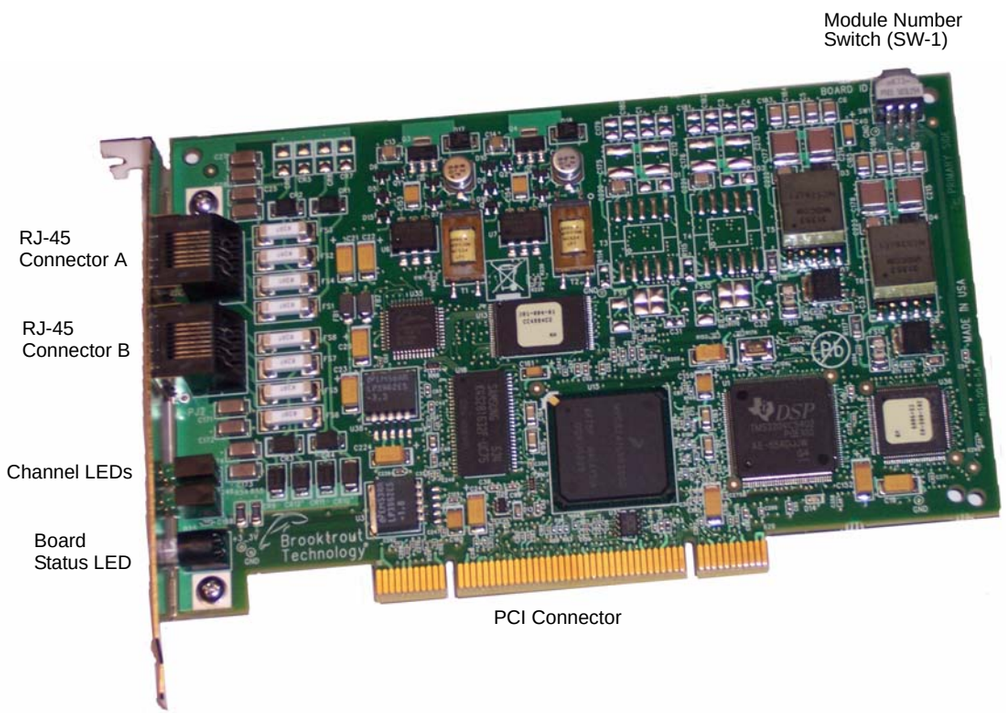


Figure 4. Dialogic® Brooktrout® TR1034 DID/DID & Loop Start PCI Fax Board

Using the TR1034 DID/DID & Loop Start Board

Once you have installed your TR1034 Fax Board, install and configure your fax or voice software application according to instructions included with the software.

Getting Help

Dialogic provides technical support for customers who have purchased hardware or software products from Dialogic. If you purchased products from a reseller, please contact that reseller for technical support. This equipment contains no user serviceable parts and is not intended for repair by unauthorized personnel. If you experience problems with your board, please use web site below for repair or warranty information. If the equipment is causing harm to the telephone network, the telephone company might request that you disconnect the equipment until the problem is resolved. www.dialogic.com/support

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