

# MSI/PCI-Global Boards

## Quick Install Card

- MSI/80PCI-GBL
- MSI/160PCI-GBL

- SI/80PCI-GBL



Part number 05-1366-001  
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an Intel company

### Before You Begin Electrostatic Discharge

#### CAUTION

All computer boards are electrostatic sensitive. Handle all static sensitive components, boards and computers at a static- safeguarded work area.

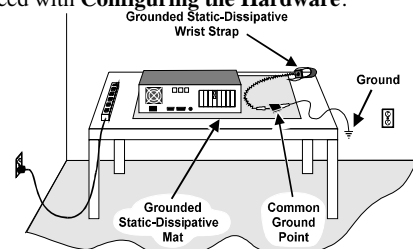
**IMPORTANT:** The following items ensure that static charges are drained to a safe level, removing potentially harmful differences between you or your work surface and your board. Always observe these practices to maintain a static-safe environment throughout the entire installation.

A static-safe work area consists of:

- A grounded, static-dissipative wrist strap (drains static charge from the person wearing the strap).
- A work surface covered with or composed of a grounded, static-dissipative material (drains electrical charges from materials placed on its surface).

#### Prior to Installation

- Use the wrist strap to ground yourself to the static-safe work area.
- Remove the board from the shipping carton and anti-static bag at the static-safe work area.
- Lay the board on the static-dissipative work surface.
- Proceed with **Configuring the Hardware**.



**WARNING:** To prevent hardware damage to the MSI board, make sure that the external power supply is connected to the MSI and fully powered prior to powering up the system. Failure to do so may damage the board.

## Configuring the Hardware

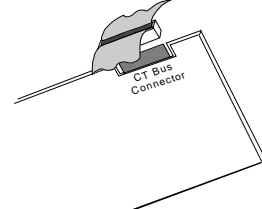
### Set the Hardware Switches (Optional)

These Dialogic boards use Plug and Play technology, including hardware auto-configuration for IRQ and memory address. These boards allow 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.

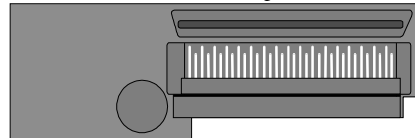
**IMPORTANT:** More than one PCI board may be set to ID 0. For more information, contact Dialogic Support at <http://support.dialogic.com/tnotes/tnbyos/winnt/tn187.htm>.

### Connecting the CT Bus Cable (P3)

Use the CT Bus cable to connect the MSI/PCI-Global board with the other boards in the system.

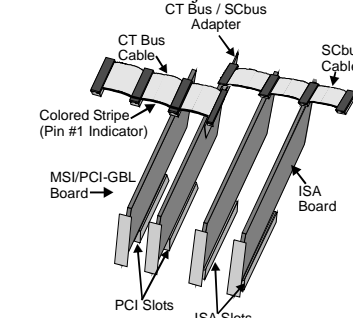


Plug the CT Bus cable into the P3 connector. To connect the SCbus, use the CT Bus to SCbus adapter (P/N 99-2446-001).



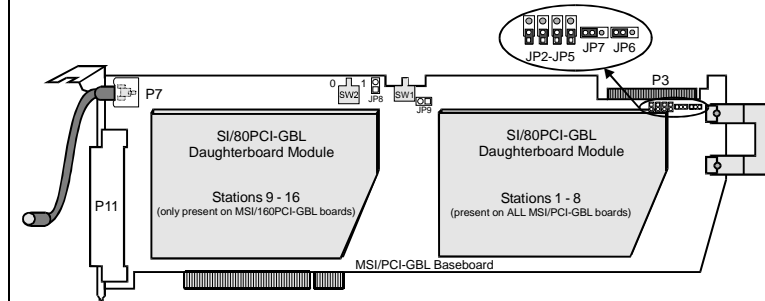
### CT Bus to SCbus Adapter

Before installing the CT Bus to SCbus Adapter, the Dialogic boards in your chassis must be positioned in the correct order. The board on which the adapter will be installed must be inserted in the first PCI slot adjacent to the ISA slot.



### Install the CT Bus/SCbus Adapter

## Physical Description



**Note:** JP2 through JP7 are for future use and must be in the positions shown above.

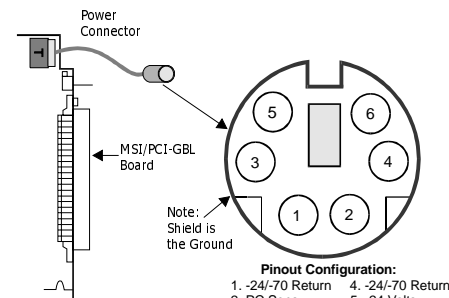
Part	Function
P3	Connector for the CT Bus
P7	External Power Connector
P11	37 Pin D-Sub Station Interface Connector
SW1, SW2	Switches to set board ID #
JP8, JP9	Station 1 Dry Audio Option
MSI/80PCI-GBL	MSI/PCI baseboard with one daughterboard (stations 1-8)
MSI/160PCI-GBL	MSI/PCI baseboard with two daughterboards (stations 1-16)
SI/80PCI-GBL	8 station daughterboard module

Align pin 1 of the adapter with pin 1 of the edge connector on the board. **NOTE:** Edge connector is not labeled. Press the CT Bus/SCbus Adapter to the board.

Connect the CT Bus and SCbus cables as per the installation instructions for your Dialogic board(s).

### Connecting to the Off-Board Power Supply

The Power Module generates -24 volts to power the MSI/PCI-Global station interface loop and -70 volts for ringing. One Power Module is required per MSI/PCI-Global baseboard when station modules are used. The Power Module connects to a pre-wired power cable attached to the MSI/PCI-Global board.



### Pin Configuration and Pinout for the Off-Board Power Connector Dry Audio Option (JP8, JP9)

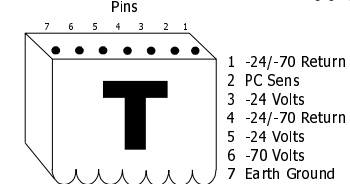
Channel 1 loop current can be blocked by removing both JP8 and JP9. This allows an audio signal to be sent without the presence of any DC Voltage.

**NOTE:** Ringing must not be allowed when setting the dry option. Damage to sensitive devices attached to this channel may occur.

**IMPORTANT:** When the Dry Audio feature of the MSI-Global is used, it is the responsibility of the customer to assure FCC Part 68 and Industry Canada CS-03 compliance of the total system. Dialogic assumes no responsibility for, or claims compliance to, Part 68 or CS-03 of the Dry Audio Feature when it is used.

The signal power levels of the dry audio input are not controlled by the MSI. It is therefore possible to cause other network interface cards in the system to exceed maximum signal levels allowed by the Part 68 and CS-03 rules. The customer should assure, at the system level, that the audio input source attached to the MSI dry audio input cannot cause non-compliant network power levels by testing and registering the audio source with the system.

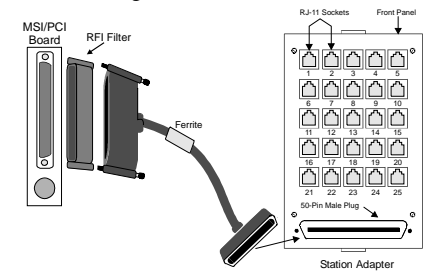
### Pinout for the External Power Supply (P7)



### Connections to the External Power Supply

The following parts were used to pass European Class B regulations. Dialogic does not claim compliance if these (or equivalent) parts are not used.

- Station Adapter Cable (split): Steward 28A2024-0A0
- Power Supply: Fair Rite 264354002
- RFI Filter: Dialogic Part Number 89-3070-xxx



### Connection to the Station Adapter via the Station Adapter Cable

#### System Design Considerations for Proper REN Loading

Each station set has a Ringer Equivalence Number (REN) which is the amount of power that is required to ring that telephone. This REN is usually shown on the bottom of the station set. The MSI/PCI-Global has a REN limitation of 2 REN maximum per station set.

#### Caution

- Using a higher system REN rating will cause permanent damage to the ring generator
- The external power supply must be connected prior to powering on the PC
- When multiple station sets are connected to one station using a splitter, the REN rating for that station is the sum of all station sets connected to it (two 0.5 REN phone sets on station 1 yields a 1.0 REN rating for that station).

For additional specifications, see the Dialogic website at [http://www.dialogic.com/products/d\\_sheets/4549web.htm](http://www.dialogic.com/products/d_sheets/4549web.htm).

## Installing the Hardware

1. With the computer on the static-safe work area and your static-dissipative wrist strap connected to you and work area, ensure that the power is OFF and disconnect all power cords from the electrical outlets.

2. Remove the cover. Select an empty PCI bus slot and remove the slot's retaining screw and cover plate.

*Steps 3 and 4 apply to installing the SI/80PCI-GBL daughterboard onto the MSI/PCI-GBL baseboard.*

3. Place the daughterboard socket connector (P1) over the J2 connector on the baseboard and press the daughterboard firmly into place. Use the four lock nuts (supplied in the SI/80PCI-GBL kit) to secure the SI/80PCI-GBL board in place.

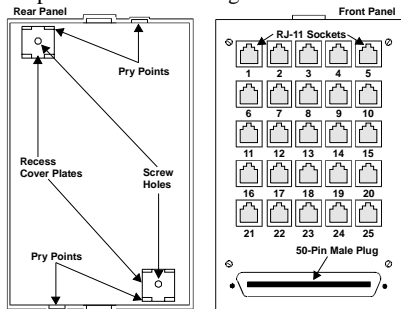
Be certain not to over-tighten the lock nuts to prevent damaging the daughterboard.

4. Install the board into the chassis. Press firmly until the board is securely seated in the slot.
5. Replace and tighten the retaining screw to secure the board.
6. Use the CT Bus cable to connect the board you are installing to other CT Bus boards in the system. To connect to the SCbus, use the CT Bus to SCbus adapter.
7. When all boards are installed and cabled, replace the computer cover and reconnect the power cords.

**NOTE:** SI/80PCI-GBL daughterboards containing 8 station interfaces are available for the MSI80/PCI-GBL board. Contact your Dialogic sales representative for ordering information.

## Connecting the Hardware to the Station Adapter

1. Open the back of the SA/240 station adapter and remove the adhesive pads from the housing.



2. Mount the back of the station adapter to the desired location in one of two ways:
  - Apply double-sided tape to the side of the rear panel that touches the mounting surface and press the tape against the mounting surface.
  - Hold the rear panel against the mounting surface. Insert screws through the screw holes and fasten the panel to the surface.
3. Insert the front panel into the back panel.
4. Connect the station adapter to the MSI/PCI-Global board with the station adapter cable (37 pin to 50 pin station adapter cable). The pinout is provided for those who wish to build their own station adapter cable.

For the MSI/160PCI-GBL, only pins 1 through 16 and pins 26 through 41 are used.

## Pinout for the 50 Pin Receptacle Connector

SIGNAL	PIN #	SIGNAL	
Ring 1	1	26	Tip 1
Ring 2	2	27	Tip 2
Ring 3	3	28	Tip 3
Ring 4	4	29	Tip 4
Ring 5	5	30	Tip 5
Ring 6	6	31	Tip 6
Ring 7	7	32	Tip 7
Ring 8	8	33	Tip 8
Ring 9	9	34	Tip 9
Ring 10	10	35	Tip 10
Ring 11	11	36	Tip 11
Ring 12	12	37	Tip 12
Ring 13	13	38	Tip 13
Ring 14	14	39	Tip 14
Ring 15	15	40	Tip 15
Ring 16	16	41	Tip 16
Unused	17	42	Unused
Unused	18	43	Unused
Unused	19	44	Unused
Unused	20	45	Unused
Unused	21	46	Unused
Unused	22	47	Unused
Unused	23	48	Unused
Unused	24	49	Unused
Unused	25	50	Unused

## Removing the Hardware

The following steps apply to the removal of the SI/80PCI-GBL daughterboard module.

1. With the computer on the static-safe work area and your static-dissipative wrist strap connected to you and work area, ensure that the power is OFF and disconnect all power cords from the electrical outlets.
2. Remove the cover from the PC. Locate the MSI/PCI-Global board in your PC and remove the board's retaining screw.
3. Remove the MSI/PCI-Global board from your system.
4. Remove the lock nuts holding the SI/80PCI-GBL (daughterboard) in place. The lock nuts can be reused if needed.
5. Remove the SI/80PCI-GBL daughterboard module from the MSI/PCI-Global board.

## After Installing the Hardware

Install the software as described in the installation instructions included with the Dialogic system software. For technical specifications and product information, see the Dialogic WorldView website at <http://www.dialogic.com>, or use the Dialogic On-Line Information Retrieval System (fax-on-demand), 800-755-5599 or 973-993-1063. MSI/PCI-Global boards come with a 3-year warranty. See the Hardware Limited Warranty information for coverage details.

## Return Material Authorization (RMA) Process

Before completing the RMA Process, verify that the problem is not is due to a mistake or oversight in the installation process. Choose one of the following methods:

- On the Web, go to the Dialogic eSupport Service at <http://support.dialogic.com>.
- If you have a Dialogic Support Plan, contact one of our Technical Support Departments listed below and they will troubleshoot the problem over the phone.

### The Americas

973-993-1443

### Continental Europe, Middle East, Africa

+32-2-712-4321

### Southeast Asia, West Asia, and Australia/New Zealand

+65-339-9833

- For more information about these Technical Support sites, go to: <http://www.dialogic.com/support/tech.htm>
- If you purchased your Dialogic product outside the United States or Canada, contact your local Dialogic Sales Office for RMA procedures.
- If you purchased your Dialogic product from a distributor, they own the warranty and you **MUST** go through them if you do not want to be charged for the repair.

After you have determined that you have a problem board, go to Dialogic's Technical Support website at <http://support.dialogic.com/rma/index.htm>, fill out **Dialogic's Repair Authorization Request Form** and e-mail the Return Authorization Department.

**NOTE:** *You may return the board to Dialogic for repair as outlined in the steps below, even if you did not purchase your board through the Dialogic Corporate Sales Office. However, if the repairs are not authorized by your local distributor or local Dialogic Sales office, the board is considered "out of warranty" and a fee is charged for repair services.*

1. Observe correct static-safe handling procedures. Disconnect power, cables, remove the board from the chassis, repack the board in an anti-static bag and then place it in a shipping carton, using appropriate packing material. While the board is out, make a note of the serial number (beginning with two letters and located on a label attached to the board).
2. Include your Call Tracking Number given to you by a technical support representative, if appropriate.
3. Clearly display the Return Authorization Number on the package. If this number is not on your package it will be treated as an unauthorized return.

4. Pack the board(s) in their original anti-static packaging and protected packaging.

**NOTE:** *The Serial Numbers for our products are in alpha/numeric format - alpha followed by numeric digits.*

*This information must be given at the time of the return or the request cannot be processed.*

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

5. Ship the board to the Dialogic address listed below:

### Dialogic Corporation

1515 Route 10

Parsippany, NJ 07054 USA

## Regulatory Notices

### United States

### Federal Communications Commission (FCC)

#### FCC Part 15 Rules

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### FCC Part 68 Rules

The MSI/SC-Global is registered with the Federal Communications Commission under Part 68 as a component device for use with other SCSA or CT Bus compatible equipment. In order for FCC registration of this product to be retained, all other products used in conjunction with SCSA and/or PEB hosts. All Dialogic PEB and SCSA resource and network devices which are FCC registered are compatible and approved for use with each other.

Some non-Dialogic devices may be compatible and approved for use with SCSA and PEB devices. In determining if your particular component device is appropriately approved, look for the FCC Registration number on all components and ensure that the classification code "CE" or "CN" is part of the number.

**NOTE:** The non-Dialogic host or resource equipment used in conjunction with this product may bear an FCC Registration number with other than the "CE" or "CN" classification code.

Classification code "CN" is for devices that provide a network interface and code "CE" is for devices that do not have a network interface.

Therefore, it is recommended that only other Dialogic FCC Part 68 registered devices or other FCC Part 68 registered devices bearing the "CE" or "CN" Classification be used in providing your telephony function. If any of these components are not registered, you are required to seek FCC Part 68 registration of the assembled equipment prior to connection to the telephone network. Part 68 registration specifies that you are required to maintain this approval and as such become responsible for the following:

- Any component device added to your equipment, whether it bears component registration or not, will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and

make a modification filing to the FCC before that new component can be used;

- Any modification/update made by a manufacturer to any component device within your equipment will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and make a modification filing to the FCC before the new component can be used;
- If you continue to assemble additional quantities of this compound equipment, you are required to comply with the FCC's Continuing Compliance requirements.

This equipment complies with Part 68 of the FCC rules. On the mounting bracket (or circuit board) of this equipment is a label that contains, among other information, the FCC Registration Number for this equipment.

If requested, the FCC Registration Number must be provided to the telephone company.

The telephone company may make changes that affect the use of this equipment. The telephone company is required to give you advance notice. If you experience any trouble with the telephone line during or after installing this equipment, disconnect the equipment from the telephone line to determine if the equipment is causing difficulties. Once the equipment has been disconnected, by either you or the telephone company, do not reconnect it until the problem has been corrected or the Dialogic equipment has been repaired by Dialogic Corporation as defined in the following paragraph. Any repairs to this equipment must be carried out by Dialogic Corporation or our designated agent. This stipulation is required by the FCC and applies during and after the warranty period. If you suspect the equipment is malfunctioning, check the appropriate part of the manual to see that all installation procedures have been followed correctly. If checking the installation procedures does not locate the problem, contact your field service representative or our home office. The home office address is:

### Dialogic Corporation

1515 Route 10

Parsippany, NJ 07054 USA

(973) 993-3000

### Canada

### Industry Canada ICES-003, Issue 2

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel bruiteur du Canada.

### Europe

#### CE Compliance

The MSI/PCI-Global Board meets the following European Directives:

89/336/EEC

EMC Directive

73/23/EEC

Low Voltage Directive

To achieve CE compliance, be sure to select a host that already meets the EMC and Low Voltage Directives before the addition of any optional board.

In order to meet European Class B EMI requirements, the ferrite clamp (shipped with the MSI/PCI-GBL Station Adapter cable) and the RFI Filter must both be used.

The MSI/PCI-Global board conforms to European Class B Regulations when configured and installed using the Dialogic approved power supply and station adapter Kit. Dialogic does not claim Class B compliance if the approved parts are not used.