Infinity Series H.110 MC3 Multi-chassis Interconnect & Conference Board

INSTALLATION MANUAL

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2.0 Quick Start

This section describes the first steps you should perform to determine if your Infinity Series H.110 MC3 Multi-Chassis Interconnect & Conference Board is communicating correctly with your *Compac*tPCI system. You can perform this quick check without connecting any cables. The exact procedure will vary depending on which operating system you are running. For each operating systems, drivers are required to interface to the boards. The drivers supplied by Amtelco have tests built into them to verify communications with the boards. These drivers also come supplied with utility programs that allow the developer to test communications with the board. Please consult the appropriate documentation for the driver and operating system you are using.

Quick Start Procedure

1. With the chassis power off, insert the board into a slot.
2. Turn on the computer.
3. If the Amtelco driver is not already installed, install it now, following the instructions supplied with the driver.
4. Most Amtelco drivers will display a list of boards that are installed (see the documentation for the particular driver that you are using). If the H.110 MC3/Conference board is listed, skip to step 6.
5. If the board is not listed, there may be a problem with the board not being seated correctly in the backplane. There may also be a problem with a memory or interrupt conflict. Power down the chassis and check that the board is properly seated

in the connector and repeat steps 1-4. If this does not remedy the problem, try removing any other computer telephony boards in the system. If your PC is unable to find the board, consult the number at the end of this section.

6. Run the program “xdsutil” supplied with the driver. Send the message “IN” to the H.110 MC3/Conference board. The board should respond with the message “IA”.
7. Send the message “VC” to the board. Verify that the Receive Message reads: `VCxxxxvvvvH03` (where `xxxxvvvv` is a variable indicating the firmware version).
8. If the Communications screen shows the correct command responses, your H.110 MC3/Conference Board is communicating with the PC. You may now power down the computer and attach the necessary cables (see section 3.4)

For technical assistance, call Amtelco at 1-608-838-4194 ext.168.

3.0 Installation

This section describes how to install your Infinity Series H.110 MC3 Multi-Chassis Interconnect and Conference Board into your computer and how to set the switches, jumpers, and connectors. Before you begin the installation procedure, be sure to test the board as described in section 2.0 (Quick Start).

Figure 2: Location of Jumpers Headers, and Connectors

3.1 PCI Configuration

As Infinity Series boards conform to the PCI standards, there are no switches to set to configure the H.110 MC3/Conference Board's memory address, I/O addresses, or interrupt. The host processor's bios will automatically configure the board at boot time to avoid conflicts with other boards in the system.

3.2 Jumpers & Headers

The following is a complete list of all jumpers for the H.110 MC3/Conference Board:

JW1-1 Firmware Select. If firmware has been downloaded to the board, this jumper selects whether the downloaded firmware or the factory default firmware is used. When this jumper is installed, the factory default firmware is executed whenever the board is reset. When the jumper is not installed, the Downloaded firmware will be executed after a reset if it is present. If no downloaded firmware is present, the factory default firmware is executed after reset.

JW1-2 DSP Firmware Select. Two separate firmware programs are included in the EAROM, one for the board processor and one for the DSP. If JW1-2 is installed and downloaded DSP firmware is present, the factory DSP firmware is executed after reset. Otherwise, the downloaded firmware is executed if present. See JW1-1

JW1-3 Undefined, reserved for future use.

JW1-4 Undefined, reserved for future use..

JW3 This jumper is used for factory testing and should not have jumpers installed.

P3 Diagnostic port. Never install jumpers here.

P4 This header is used for programming internal logic and should never be jumpered.

3.3 Connectors: P5, P6 and J1

P5 Ring 0 RCV, Ring 1 XMT. This is one of the two fiber optic transceivers for the MC3 bus. In a normal counter rotating ring connection, the fibers from this transceiver are connected to **P6** in the next chassis in the ring. This connector is keyed to insure proper insertion.

P6 Ring 1 RCV, Ring 0 XMT. This is one of the two fiber optic transceivers for the MC3 bus. In a normal counter rotating ring connection, the fibers from this transceiver are connected to **P5** in the previous chassis in the ring. This connector is keyed to insure proper insertion.

J1 Analog port. This port can be used to connect a music source or other device analog port for music on hold. The connector is a standard 1/8" headphone jack. The music source should be at standard line levels.

J1A Analog input. This header is connected in parallel with J1. It will connect with the audio output of a PC CD-ROM drive.

3.4 Installation

To install the H.110 MC3/Conference Board in your system:
1. Follow the quick check procedures described in section 2.0 to verify the operation of the board.
2. If the quick check is successful, turn off the chassis power and remove the board from the chassis.
3. Install any necessary board jumpers. See section 3.2 for jumper configurations.

4. Insert the board into the chassis. Seat it properly in a slot in the chassis and secure it with the front panel handles.
5. Connect the fiber optic cables to P5 and P6. See section 6.4 for details on the various ring configurations.
6. If the analog port is to be used, connect the music source or other compatible device.
7. Power up the computer.

3.5 Hot Swapping a Board

The Infinity Series H.110 MC3/Conferencing Board can be “hot swapped,” that is it can be removed from a functioning system without turning the power off or interrupting applications. However, to be able to do this, the host processor must be equipped with suitable hot swap drivers as well as a hot swap manager which will alert applications when a board has been inserted or removed from the system so that resources can be properly managed. It is beyond the scope of this manual to describe the operation of either the hot swap driver or hot swap manager.

Each H.110 board is equipped with a switch linked to the lower ejector tab and a blue LED. This combination is used to coordinate the actions of an operator with the system software. When inserting a board, the board is pushed in part of the way until the blue LED is illuminated. The insertion may then be completed. When the connection process is complete, the LED will go out. To remove a board, the lower ejector handle is depressed until it is in the unlatched position. When the blue LED comes on, the board may be removed from the system.

To install the board in a system under power:
1. Insert the board with the ejector tabs spread apart until partially engaged.
2. Wait until the blue LED is illuminated.
3. Finish inserting the board by pushing the ejector tabs towards each other. The LED should then go out.

To remove the front board from a system under power:
1. Depress the lower ejector tab until it is in the unlatched position.
2. Wait until the blue LED is illuminated.
3. Finish removing the board by spreading the ejector tabs apart until the board is ejected.

Figure 3: Front Panel with Status and Hot Swap LEDs, MC3 Fiber Connectors, and Top and Bottom Ejector Handles