
How do I verify that my instrument is OPC upgradeable?

[Actions and Methods](#)

The following section outlines the materials, tools, and tasks required for an instrument upgrade verification.

1.1 Tool List

Medium sized needle nose pliers
Items to record information (pencil/paper)

1.2 Task List

Remove the instrument display panel by unscrewing the fastener at the bottom of the front display panel. Carefully remove the panel from the instrument enclosure to expose the internal boards.

WARNING

The display panel is attached to the interface board with a short ribbon cable. Do not pull on this cable while removing the display panel. Do not disconnect this cable at the interface board until instrument power has been removed.

Figure 1 shows the instrument with the front panel removed but still connected.

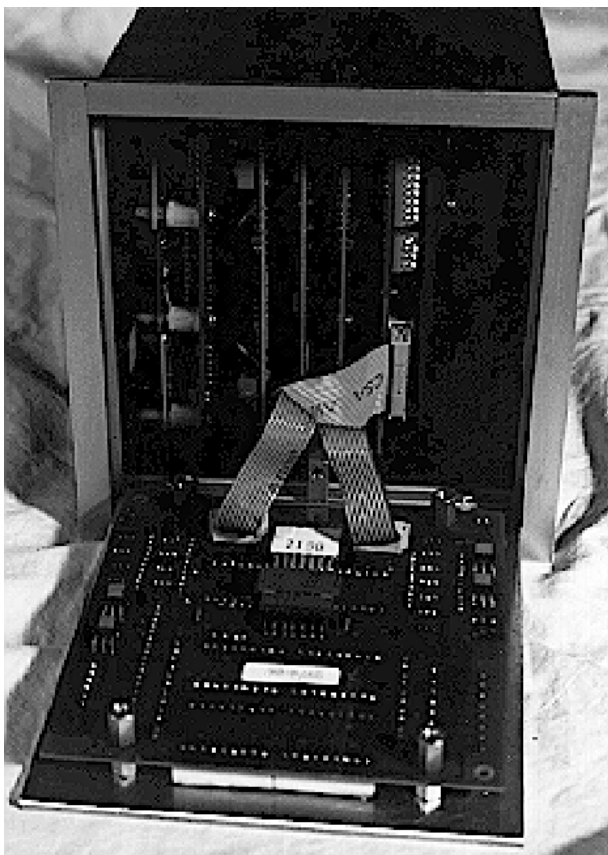


Figure 1 Instrument with front panel removed

The other instrument boards that are plugged into the front of the instrument are identified from right to left as;

A810074	Triac Board
A810073	Interface Board
A810069	CPU Board
A810070	Communications Board
A810072	Analog Output Board
A810071	Analog Input Board

Turn off the instrument power (if applied) at the toggle switch on the Triac Board. The toggle switch will be in the down position when power is off. This condition removes power to all the circuit boards to the left of the Triac board.

WARNING

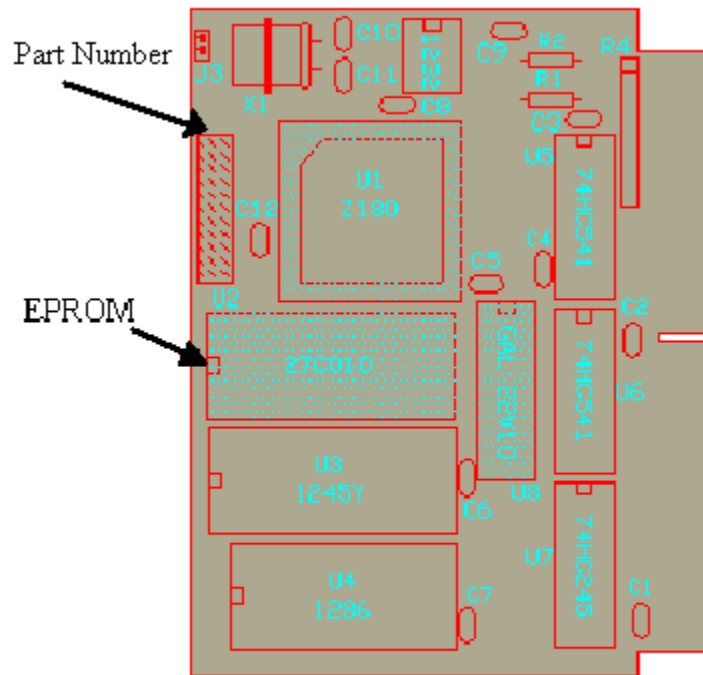
Do not remove the Triac board from the instrument chassis if any AC voltage is still applied at the rear terminals of the instrument. This warning also applies to the Event Power and Alarm Power connections since these terminals can be attached to other AC power sources besides the instrument power source.

1.2.1 CPU Board

Unplug the front panel from the Interface board. Remove the CPU board from the instrument (third from the right). (Note WARNING below) Verify the part number is Turbo CPU board #810153. This number is printed next to the J3 jumper at the top left hand side of the board. If the CPU board number is not #810153, record the number that is shown. If the CPU board is an #810153, record the EPROM number printed on the silver sticker of the EPROM chip displaying the version.

WARNING

Be careful when removing the CPU board. This is a static sensitive board. Keep bare skin in contact with a ground point while removing or handling this board. The metal tie point for the front panel display is a good ground.



Insert the CPU board back into the instrument. Do not force the board into the slot. (See Note on page 6).

1.2.2 Communications Board

Remove the Communications board (third slot from the left) and verify the version level of the GAL chip on the board. See Figure 2 for the location of the chip. The required revision level is AGAMCOMF \cong or “FGAMCOM”.

Verify the Communications board is part number 810201 (Communications Board with Isolation), if not, record the part number.

Insert the Communications board back into the instrument.

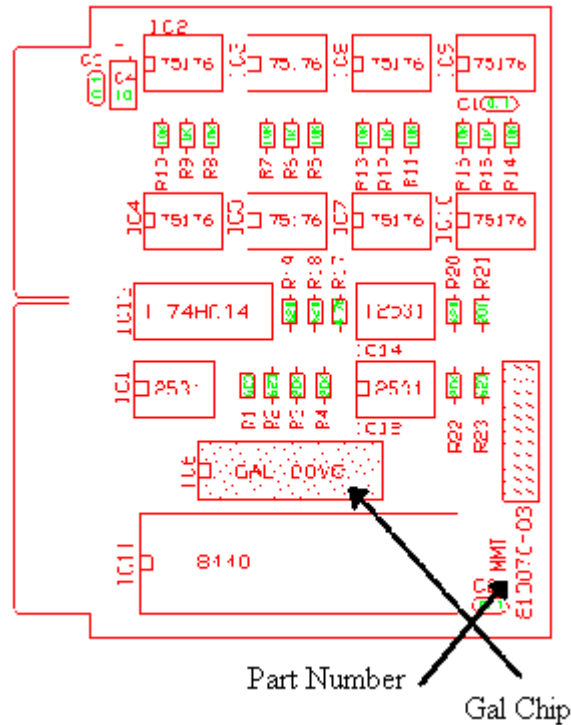


Figure 2 Communication Board A810070

1.2.3 Analog Output board (No Drawing shown)

Remove the Analog Output board. Locate the part number of the Analog Output on the bottom edge of the board. Verify this part number is 810151. If not, record the part number. The part number may also be located on the reverse side of the board.

Insert the Analog Output board back into the instrument.

1.2.4 Analog Input board

Remove the Analog Input board. This board has three “daughter” boards plugged into it. With the gold connection fingers at the left the daughter board at the top is board A, the middle board is B, and the bottom board is C. The main Input board is under the three “daughter” boards.

Refer to Figure 3. If the main Input board looks like this figure return the Input board to its original slot.

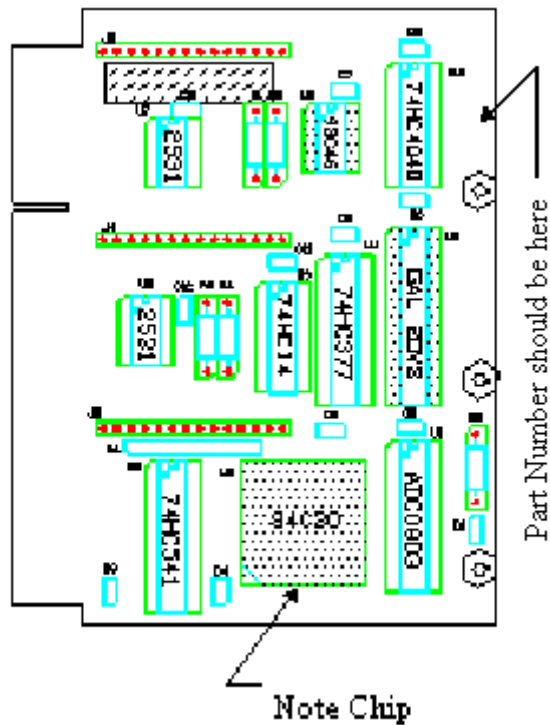


Figure 3 Fast Analog Input Board

If the Analog Input board does not have the large square chip that is shown in the above figure then it must be replaced with the Fast Analog Input board A810071 Revision 07.

Insert the Analog Input board back into the instrument.

1.2.5 Dualpro Display Assembly

Replace the original display assembly. Plug the assembly ribbon cable into the socket on the Interface board. This connection is keyed.

1.2.6 Final Inspection

Insure that all circuit boards are fully seated into the card edge connectors on the Mother Board. Insure that all slots have been plugged.

Note

Each circuit board is keyed to plugged into the correct slot. If a board does not fit into the slot insure that it should go into that position. Also, boards located to the right of center have their components facing to the right. Boards located to the left of center have their components facing left.

Turn the power switch on the Triac board to the on position (up) if power has to be restored to the instrument.

Return the Display Assembly to its position at the front of the instrument chassis and tighten the front panel fastener.