

Sensoray ISA-to-STDbus Adapter, Model 422

Description

Sensoray's model 422 is a two-board, bus-to-bus adapter system that extends the ISA bus of a PC onto a card rack of STDbus I/O boards, thereby enabling the PC to directly interact with the STDbus I/O boards. It has three parts: an ISA board (Model 402), an STDbus board (Model 7402), and a set of two flat cables to connect the two boards. The ISA board includes a 2-pin terminal block that may optionally be connected across the PC's reset pushbutton to enable an STDbus watchdog timer to reset the PC. Two standard cables supplied with the unit, both one meter long. One cable has 26-pin connectors at both ends, and the other cable has 34-pin connectors at both ends.

Operation

The ISA board decodes the high byte of the 16-bit ISA I/O address bus, while the low address byte is passed through to the STDbus. All STDbus I/O boards are mapped into a 256-address window in the ISA I/O space. The standard address range for this window is 0x0100 to 0x01FF, though the address window may be customized by reprogramming a PLD on the ISA card.

Installation

1. Route both flat cables through the ISA board's bracket opening and plug them into the matching headers on the board.
2. Install the Model 402 ISA board into an ISA slot on the PC so that the two cables emerge from the back of the PC through the opening in the board's bracket.
3. Install the Model 7402 STDbus board into a slot in the STDbus rack. Note that the Model 7402 board must be the only bus master in the STDbus rack.
4. Connect the free ends of both cables into the matching headers at the top edge of the Model 7402 STDbus board.
5. Optional: Connect a wire from the ISA board, TB1 pin 1 (square pad), to the switched side of the PC's reset pushbutton. This enables an STDbus watchdog timer to reset the PC.