FEATURES

- High speed PC/104 to ISA Bus link
- Direct Bus-to-Bus interface, no software required
- Data transfer at system clock speeds with no Wait States
- Provides access to ISA Bus I/O cards
- No configuration switches to set
- Voltage supplied to ISA backplane through data cable
- 16-bit PC/104 stackthrough connector

The PCM-ISA is a low cost adapter that links the PC/104 bus to ISA bus boards. The adapter contains the PC/104 Bus interface module, a 2-slot 16-bit ISA Bus backplane and connecting cables. This product is easy-to-use and allows products from the two bus architectures to be used together.

FUNCTIONAL CAPABILITY

Bus Architecture - The PC/104 Bus is a compact, embedded version of the ISA bus. PC/104 specifies two module versions, 8-bit and 16-bit, which corresponds to the PC and PC/AT bus implementations respectively. It offers full architecture, hardware and software compatibility with the PC Bus with 4 key differences:

- Extremely small form factor
- Unique, self-stacking bus
- Pin-and-socket bus connectors
- Lower bus drive requirements.

One card is installed in the PC/104 card stack and is connected to the ISA backplane by four, 50-pin ribbon cables. This direct Bus-to-Bus link operates at full system speed and does not require software modification or Wait States to communicate.

PC/104 Bus Interface Board - This module stacks anywhere in a 16-bit PC/104 stack. It is a two layer board that includes signal termination for the cables. It also has polarized headers to prevent the cables from being plugged in backwards.

ISA Bus Backplane - A 2-slot, two layer passive backplane accommodates 8 or 16-bit PC Bus cards. The 2 connectors are separated by 0.75 inches. Four corner mounting holes permit easy mounting of the backplane.

Data Cables - Four 50-pin flat cables link the PC/104 module and ISA backplane. They are #28 AWG ribbon cables that are each 18 inches in length. Each cable end has a polarized, female 50-pin connector. The data and control signals are separated by alternating ground lines to reduce noise and cross-talk. DC power is also provided through the cable to the ISA backplane.

Software - No special routines are needed to address and communicate with the PC/104 modules from the PC-XT/AT. The PCM-ISA Adapter is the direct hardware link.

SPECIFICATIONS

Electrical
PC/104 Bus: 16-bit, stackthrough
ISA Bus: 2 slot backplane

Environmental
Operational Temperature: -40°C to +85°C
Non-condensing relative humidity: 5% to 95%

ORDERING INFORMATION

PCM-ISA-16 PC/104 Bus to ISA Bus adapter with four 50-pin cables