



Product Bulletin

16 Bit ISA to PC/104 Bus Adapter Card

PB7559

ISA10416

FEATURES

- Allows ISA bus computers to use PC/104 modules
- Directly converts ISA bus to PC/104 bus
- Compact half-size card
- Supports 8 and 16 bit PC/104 modules
- Onboard prototyping area

APPLICATIONS

- Software development
- PC/104 module testing
- Expansion of ISA bus computer capabilities through use of PC/104 modules.



PRODUCT DESCRIPTION

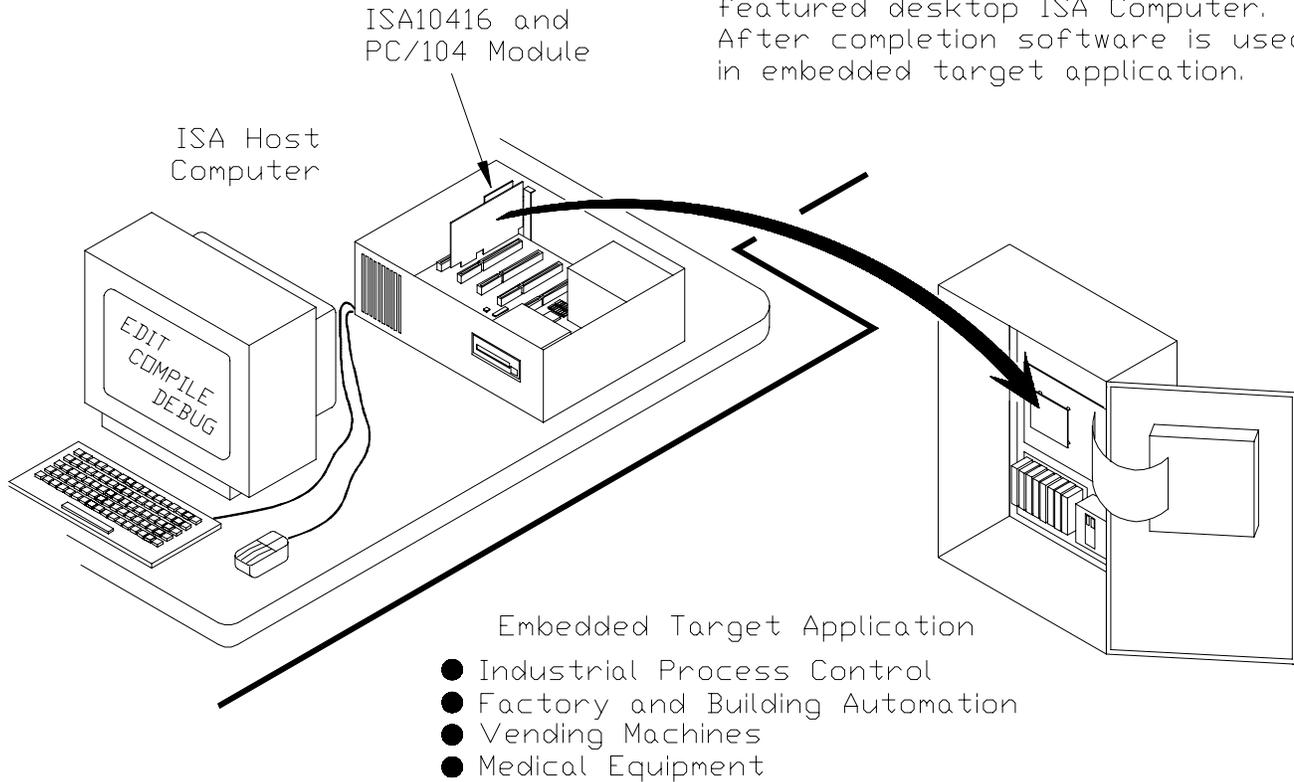
The ISA10416 is a half-size ISA card that allows 8 and 16 bit PC/104 modules to be used in ISA bus computers. The main purpose is to allow PC/104 modules to be developed, tested and used within a standard ISA platform. In operation, a PC/104 module is installed on the ISA10416 card and the card is then inserted into one 16 bit slot within the PC ISA host. No special “drivers” or other considerations are necessary for the users’ programs to access and operate the installed PC/104 module. The ISA10416 transparently performs a direct bus-to-bus conversion and operates at the full speed of the PC ISA host. All the facilities of the host computer are available to the PC/104 module including memory and I/O operations, DMA and interrupts. A prototyping area is provided for the construction of experimental and application specific circuitry.

BENEFITS

Software development generally consists of repeated sessions of editing, compiling and debugging. A programmer typically goes through many iterations of this cycle before the software is considered complete. To improve productivity a “High Powered” computer is often desired to reduce the time required for each iteration. Although a “High Powered” PC/104 computer could be constructed for development purposes, the cost of the required components including CPU, hard disk and video display can add up quickly. The expense might be difficult to justify since the resulting computer often doesn’t represent the “simple” target platform where the PC/104 module and application software will actually be used. The ISA10416 has been developed to allow a full featured desk-top ISA computer to “emulate” the target PC/104 bus computer. The programmer is free to use all the facilities and development tools available on a PC ISA system while eliminating the need and expense of a “High Powered” PC/104 computer. The on-board prototyping area is useful for constructing user’s peripheral circuitry associated with the PC/104 module being used.

Simplified Development Process

Software is developed using full featured desktop ISA Computer. After completion software is used in embedded target application.



SPECIFICATIONS

- Bus interface:** All ISA card edge signals are routed to their corresponding PC/104 J1 and J2 connector counterparts. The self-stacking nature of the PC/104 bus allows multiple modules to be used at the same time, limited only by the space available within the host computer.
- Mechanical:** 4.50"H x 7.00"L
- Environmental:** Operating temperature: -40°C to 85°C
Non-condensing relative humidity: 5% to 95%
- Ordering Information:** 100-7559, ISA10416, 16 Bit ISA to PC/104 Bus Adapter Card

