

# USER'S REFERENCE MANUAL

## **ISA10416**

16 Bit ISA to PC/104 Bus Adapter

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Model No. 100-7559

Doc. No. M7559      Rev: 1.1      6/20/06



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Testing and other quality control techniques are utilized to the extent SCIDYNE deems necessary to support this warranty. Specific testing of all parameters is not necessarily performed, except those mandated by government requirements.

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SCIDYNE offers a no-risk trial for initial, low quantity, evaluation purchases. Items purchased for evaluation can be returned within 30 days for a full refund less shipping charges. The Buyer must obtain a Return Material Authorization (RMA) number before returning any products. The entire package, including hardware, software, documentation, discount coupons and any other accessories supplied must be returned intact and in new and working condition. This policy


will not be honored for packages that are not returned complete and intact. The Buyer shall prepay shipping and insurance charges to SCIDYNE. To expedite the return process, the RMA number must be clearly visible on the shipping container. SCIDYNE will cancel the invoice, refund by check or issue credit to your credit card within 10 days after receipt of returned merchandise.


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Certain applications may involve the risks of death, personal injury or severe property or environmental damage (“Critical Applications”).

SCIDYNE products are not designed, intended, authorized or warranted to be suitable for use in life-support applications, devices or systems or other critical applications without the express written approval of the president of SCIDYNE.

### **SAFETY AND USAGE CONVENTIONS**

 **NOTE:** *Contains important information and useful tips that will assist in the understanding and operation of the product.*

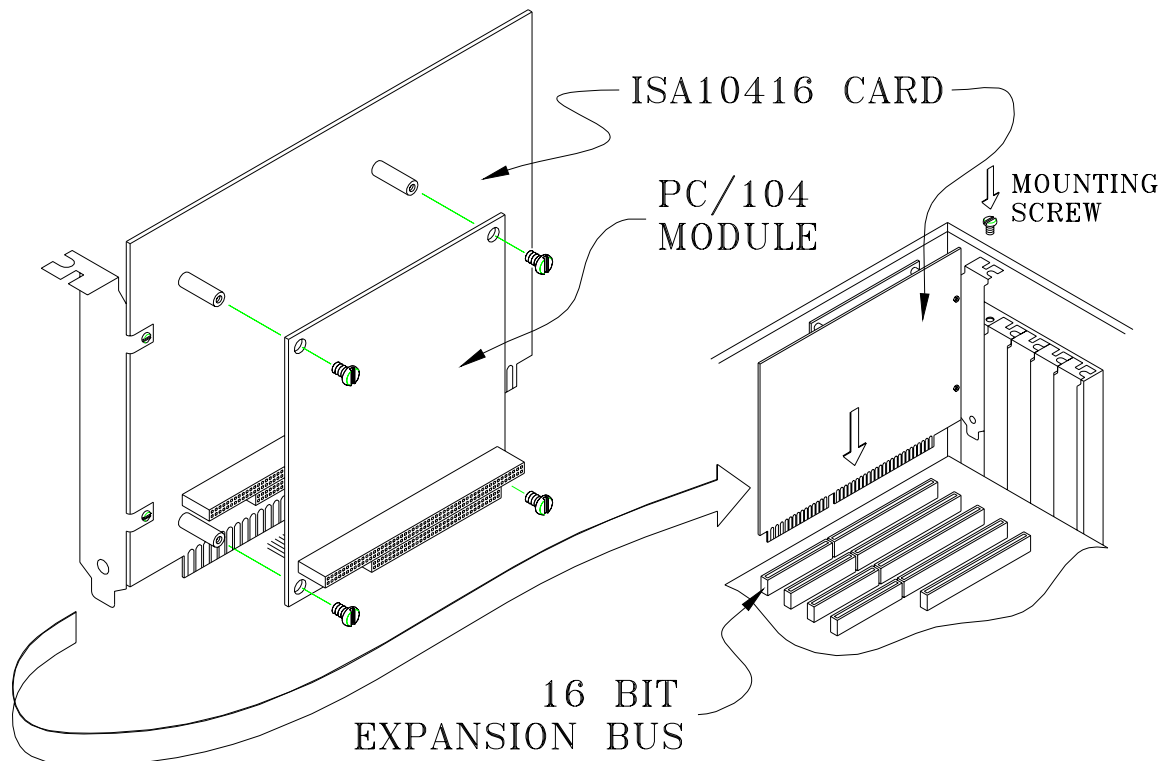
 **CAUTION:** *Calls attention to a procedure, practice or condition that could possibly cause personal injury or damage to equipment.*

 **WARNING:** *Calls attention to a procedure, practice or condition that could possibly cause severe bodily injury, death or extensive equipment damage.*

# Introduction

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.

The hosted PC/104 module mounts “piggyback” to the backside of the ISA10416 card. Care should be taken not to accidentally bend one of the PC/104 module connector leads during installation. The resulting stack will be wider than a normal ISA card. For this reason the slot where the ISA10416 will reside should have adequate room around it so that the PC/104 module will not interfere with any adjacent cards or other objects. 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.



**Figure 1 - ISA10416 Installation**