

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Acces 104-IDI-48A* at our website: *Click HERE*

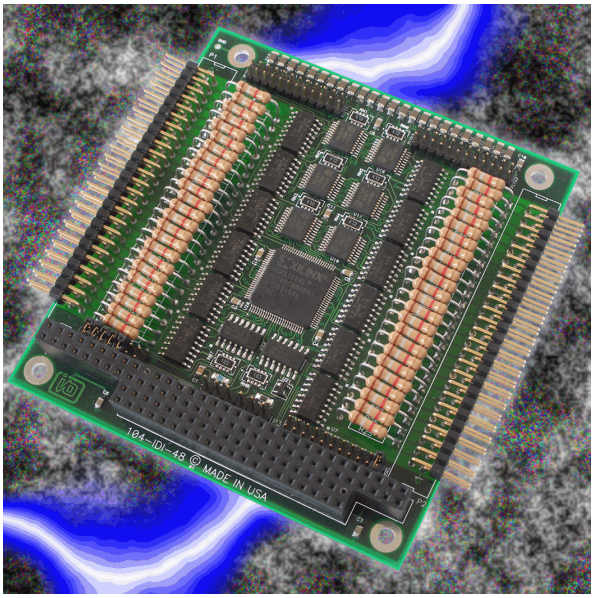
104-IDI-48

PC/104 Isolated Digital Inputs

FEATURES

Inputs:

- 48 Inputs optically isolated channel to channel and channel to ground
- Polarity-Insensitive AC/DC inputs accept up to 60 VDC or AC rms
- Switchable Slow/Fast Filter



FACTORY OPTIONS

- Change-of-state detection (COS IRQ) on selected inputs
- Higher input ranges
- 0 to 70°C and -40 to +85°C versions
- Vertical I/O connectors
- Conformal coating for harsh environments
- Latching I/O connectors

FUNCTIONAL DESCRIPTION

The 104-IDI-48 family boards are 48-channel PC/104 utility boards which feature 48 individually optically isolated digital inputs. They are ideal for use in control and instrumentation applications where high voltage protection is required. Individual channel-to-channel isolation allows every channel to be physically and electrically separated from the others.

Enabled inputs feature a change-of-state detection capability (denoted by a "C" at the end of the model number) which provides a means to automatically interrupt the host computer in real time. When one or more input bits change state, an interrupt is generated to automatically wake up your application. This can greatly simplify your application program and eliminate the need to continuously poll inputs. Each input is rectified by photo-coupler diodes, and is therefore polarity-insensitive - positive, negative, and AC voltage inputs are all acceptable. Zero crossings and glitches are eliminated by input filters. The input range is up to 60 VDC or AC rms at frequencies of 40 Hz to 10 kHz.

Model	No. of Bits	Max Input Voltage	Change-of-State Interrupt Capability	AC Filter
104-IDI-48A	48	31V	No	Yes
104-IDI-48AC	48	31V	Yes	Yes
104-IDI-48B	48	60V	No	Yes
104-IDI-48BC	48	60V	Yes	Yes

ACCESSORIES

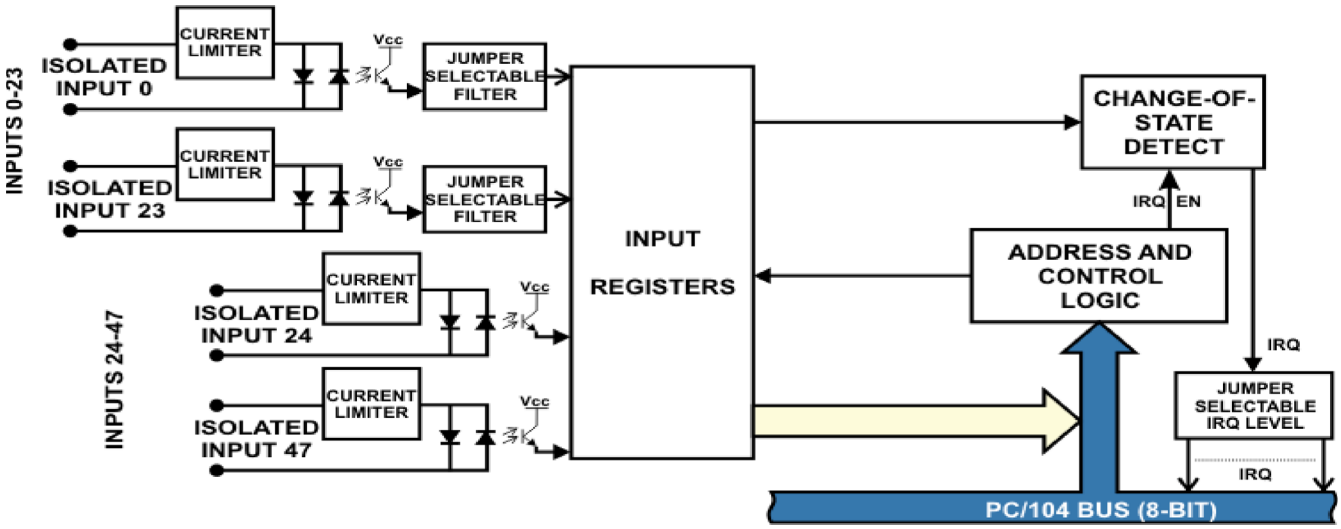
Available accessories include flat ribbon cables and DIN-rail mountable screw terminal boards.

SOFTWARE

This board is supported for use in most operating systems and includes a free Linux and Windows 2000/XP/2003 compatible software package. This package contains sample programs and source code in Visual Basic, Delphi and Visual C++ for Windows. Also incorporated is a graphical setup program in Windows. Third party support includes a Windows standard DLL interface usable from the most popular application programs and includes example LabView VIs. Embedded OS support includes Windows XPe.

10623 Roselle Street, San Diego, CA 92121 • (858) 550-9559 • Fax (858) 550-7322 • contactus@accesio.com • www.accesio.com

September 9th, 2009



BLOCK DIAGRAM

SPECIFICATIONS

ISOLATED DIGITAL INPUTS

Channels: 48
Type: Non-polarized, optically isolated from each other and from the computer. (CMOS compatible)

Voltage Range:
* 48A:
  Logic Low: 0 to 1.5 VDC or AC rms (40 to 10,000 Hz)
  Logic High: 3 to 31 VDC or AC rms (40 to 10,000 Hz)
* 48B:
  Logic Low: 0 to 5 VDC or AC rms (40 to 10,000 Hz)
  Logic High: 11 to 60 VDC or AC rms (40 to 10,000 Hz)

Isolation: 500V* (see manual) channel-to-ground or channel-to channel

Input Resistance:
* 48A: 1.8k Ohms in series with opto coupler
* 48B: 15k Ohms in series with opto coupler

Non-Filter Response Times:
* Rise Time: 10 uS
* Fall Time: 30 uS

Filtered Response Times:
* 4.7 mS (Rise / Fall)

Interrupts: Software controlled with jumper IRQ selection ("C" models only)

Connector: 50-pin right angle headers with 0.1mm spacing

Power Required
* +5VDC @ 300mA typical

Environmental

* Operating Temp: 0◦ to +70◦C, (-40 to +85◦C Optional)
* Storage Temp: -55 to +150◦C
* Humidity: 5% to 95% RH, without condensation
* Board Dimension: PC/104 format, 3.550" by 3.775"

ORDERING INFORMATION

Part Number
104-IDI-48AC
104-IDI-48A
104-IDI-48BC
104-IDI-48B

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP