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Part #	$US
PCI-DIO-24H	$149
PCI-DIO-24H-S01	$159
PCI-DIO-24H-S02	$169
PCI-DIO-24H-S03	$179
PCI-DIO-24D	$149
PCI-DIO-24D-S01	$159
PCI-DIO-24D-S02	$169
PCI-DIO-24D-S03	$179
PDIO24H	$164
PDIO24HS01	$174
PDIO24HS02	$184
PDIO24HS03	$194

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PCI-DIO-24H ACCESSORIES

A16A
A24A
CAB50F-6
CAB50F-XX
ROB-24H
ROB-8A
STA-112
STA-50
STB-50
T-BOX

PCI-DIO-24D ACCESSORIES

A16A
A24A
CAB50F-6
CAB50F-XX
ROB-24H
ROB-8A
STA-112
STA-50
STB-50
T-BOX

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PCI-DIO-24H/24D
PCI Bus Digital Input/Output Cards

FEATURES

Specifications

- Universal PCI, PCI-X, 3.3V and 5V compatible
- 24 bits of digital I/O
- Four and eight bit ports independently selectable for I/O
- All 24 I/O lines buffered by transceivers on the card
- I/O buffers can be enabled/disabled under program control
- Pull-ups on I/O lines
- Resettable fused +5 VDC output available
- 'H' version compatible with industry-standard I/O racks from Western Reserve Controls, Gordos, OPTO22, Potter & Brumfield, etc.
- Optional 1 MHZ counters
- Automatically detected under Windows 95/98/NT/XP
- No base address or IRQ switches to set
- RoHS compliant versions available

FUNCTIONAL DESCRIPTION

These cards are 24-bit parallel, digital input/output cards designed for use in PCI-Bus computers. The difference between the models is that I/O connections to PCI-DIO24D are via a standard 37-pin D-sub connector while I/O connections to PCI-DIO24H are via a 50-pin connector. The cards are 4.80 inches long (122 mm) and may be installed in any 5V PCI-bus slot in IBM and compatible personal computers.

These cards contain a type 8255-5 Programmable Peripheral Interface (PPI) chip. They can be programmed to accept inputs or to provide outputs on three 8-bit ports: designated Ports A, B, and C. Port C can be further divided into two 4-bit nibbles.

Each I/O line is buffered by a type 74LS245 tristate buffer transceiver capable of sourcing 15 mA. or sinking 24 mA. (64 mA. on request (74F245)). The buffers are configured under program control for input or output use according to direction control signals from the control register inside the PPI. Pull-ups (to +5 VDC) on the card assure that there are no erroneous outputs at power-up until the card is initialized by system software. Further, jumpers on the card provide a choice to either permanently enable the buffers or to tri-state them under program control.

Input/Output wiring connections for the PCI-DIO24D are via a 37-pin D-sub connector on the card mounting bracket. Either a 37-pin D-sub solder cup mating connector or an insulation-displacement ribbon cable can be used for I/O connections. Fused +5 VDC power is available at the I/O connector. A resettable on-board fuse is rated at 0.5A and can be reset by cycling computer power.

Input/Output wiring connections for PCI-DIO24H are via a 50-pin connector on the card mounting bracket. Insulation displacement ribbon cables can be used for I/O connections to termination panels such as ACCES' model STA-50 Screw Terminal card. The pin connections are also compatible with ACCES A24A , OPTO22, Gordos, Potter & Brumfield, etc opto-isolated module mounting racks. If needed for external circuits, fused +5VDC power is available at the I/O connector. The resettable 0.5A fuse can be reset by cycling computer power.

COUNTER/TIMERS

Optionally you can have one, two, or three 48-bit down counters configured as Event Counters. (See the Block Diagram which shows one 48-bit counter.) and can also be used as a Frequency source. To designate that you wish these counters, add -S01, -S02, and -S03 respectively to the model number. For example, a 24-bit digital input/output card with a 50-pin connector and one 48-bit counter is model PCI-DIO24H-S01.

The fused +5V output is available on all versions of the PCI-DIO-24D and H with the exception of the PCI-DIO-24D-S03. The -S03 on this card does not have +5V on the connector due to the limited number of pins on the DB37.

Specifications

Digital Inputs (TTL Compatible)

- Logic High: 2.0 to 5.0 VDC.
- Logic Low: -0.5 to +0.8 VDC.
- Input Load (Hi): 20 uA.
- Input Load (Lo): -200 uA.

Digital Outputs

- Logic High: 2.0 VDC min., source 32 mA.
- Logic Low: 0.55 VDC max., sink 64 mA

Counter/Timers (Optional)

- Type: 82C54-5 programmable interval counters
- Output Drive: 2.2 mA at 0.45 VDC (5 LSTTL loads
- Input Gate: TTL/CMOS compatible
- Clock: On-board, 1 MHz crystal-controlled clock
- Active Count Edge: Negative Edge
- Minimum Clock Pulse Width: 30 nS high, 50 nS low
- Timer Range: 48 bits

Environmental

- Operating Temperature Range: 0° to 50° C.
- Storage Temperature Range: -40° to +65.6° C.
- Humidity: Maximum 90% RH, without condensation.

Auxiliary Power Output

- +5 VDC from the computer bus. Resettable fuse at 0.5A.

Power Required

- Basic Unit: +5 VDC at 170 ma., if no current is drawn from the auxiliary fused +5 VDC output.
- With One Counter: +5 VDC at 190 ma.
- With Two Counters: +5 VDC at 210 ma.
- With Three Counters: +5 VDC at 230 ma.

Regulatory Compliance CE

Declaration of Conformity, and Test Reports are on file. Users must use appropriate shielded cables.

Part Number	Price(USD)
PCI-DIO-24H	149.00
PCI-DIO-24H-S01	159.00
PCI-DIO-24H-S02	169.00
PCI-DIO-24H-S03	179.00
PCI-DIO-24D	149.00
PCI-DIO-24D-S01	159.00
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