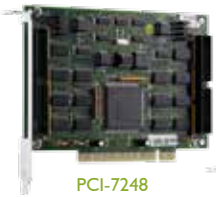
PCI/PCIe-7296/7248, PCI-7224

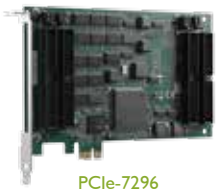
96/48/24-CH Opto-22 Compatible DIO Cards

PCI EXPRESS®


PCI-7224


PCI-7296


PCI-7248


PCIe-7296


PCIe-7248

Features

- **Supports a 32-Bit 5 V PCI bus (PCI-7224/7248/7296)**
- **x1 PCI Express® interface (PCIe-7248/7296)**
- **96-CH digital TTL/DTL inputs/outputs (PCI/PCIe-7296)**
- **48-CH digital TTL/DTL inputs/outputs (PCI/PCIe-7248)**
- **24-CH digital TTL/DTL inputs/outputs (PCI-7224)**
- **Emulates 4/2/1 industry standard 8255 PPI (mode 0)**
- **Direct interface with OPTO-22 compatible I/O modules**
- **Output status read back**
- **Onboard 8254 timer/counter chip**
- **One 32-Bit timer for timed interrupt generation**
- **One 16-Bit event counter to generate event interrupt**
- **Programmable interrupt sources**
- **+12 V and +5 V power available on OPTO-22 connectors**
- **Onboard resettable fuses for power output protection**
- **Compact, half-size PCB**

Supported Operating System

- Windows 2008 R2, 7/8 x64/x86, Linux

Driver and SDK

- LabVIEW, MATLAB, C/C++, Visual Basic, Visual Studio.NET

Software Utility

- AD-Logger

Specifications

Digital I/O

- Number of channels
  - 96 inputs/outputs (PCI/PCIe-7296)
  - 48 inputs/outputs (PCI/PCIe-7248)
  - 24 inputs/outputs (PCI-7224)
- Compatibility: 5 V/TTL
- Digital logic levels
  - Input high voltage: 2-5.25 V
  - Input low voltage: 0-0.8 V
  - Output high voltage: 2.4 V minimum
  - Output low voltage: 0.5 V maximum
- Output driving capacity
  - Source current: 2.6 mA for port A & B, and 15 mA for port C.
  - Sink current: 24 mA
- Data transfers: programmed I/O

General Specifications

- I/O connector
  - 50-pin ribbon male x 1 (PCI-7224)
  - 50-pin ribbon male x 2 (PCI/PCIe-7248)
  - 50-pin ribbon male x 4 (PCI/PCIe-7296)
- Operating temperature: 0°C to 60°C (32°F to 140°F)
- Storage temperature: -20°C to 80°C (-4°F to 176°F)
- Relative humidity: 5% to 95%, non-condensing
- Power requirements

Device	Power Consumption
PCI-7296	860 mA @ 5 VDC Typical
PCI-7248	500 mA @ 5 VDC Typical
PCI-7224	330 mA @ 5 VDC Typical
PCIe-7248	350 mA @ 12 VDC Typical
	280 mA @ 3.3 VDC Typical
PCIe-7296	590 mA @ 12 VDC Typical
	280 mA @ 3.3 VDC Typical

- Dimensions (not including connectors)
  - 148 mm x 102 mm (5.77" x 3.97") (PCI-7248 and PCI-7224)
  - 166 mm x 102 mm (6.55" x 3.97") (PCI-7296)
  - 168 mm x 112 mm (6.55" x 4.36") (PCIe-7248/7296)

Terminal Boards

- TB-24R-01*
  Terminal Board with 24-CH Relay Outputs
- TB-24P-01*
  Terminal Board with 24-CH Isolated Digital Inputs
- TB-16P8R-01*
  Terminal Board with 16-CH Isolated DI & 8-CH Relay Outputs
- DIN-24R-01*
  Terminal Board with 24-CH Relay Outputs
- DIN-24P-01*
  Terminal Board with 24-CH Isolated Digital Inputs and DIN-Rail Mounting

* **For more information on mating cables, please refer to P3-48/49.**

Ordering Information

- **PCI-7296**
  96-CH Opto-22 Compatible DIO Card
- **PCI-7248**
  48-CH Opto-22 Compatible DIO Card
- **PCI-7224**
  24-CH Opto-22 Compatible DIO Card
- **PCIe-7248**
  48-CH Opto-22 Compliant PCIe DIO Card
- **PCIe-7296**
  96-CH Opto-22 Compliant PCIe DIO Card

Note:
The PCI-7224 is the 24-CH version of the PCI-7248. The software drivers of the PCI-7224 are exactly the same as those of the PCI-7248

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