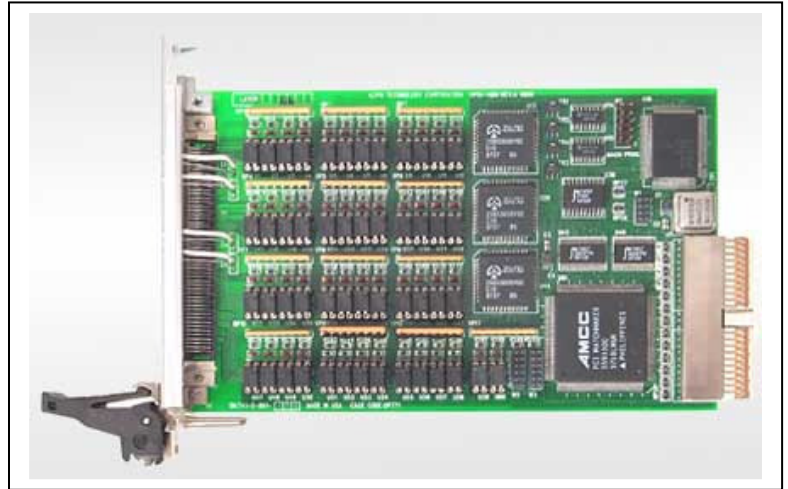


CPCI 48 Input I/O Card with Zilog Z8536 I/O Controller

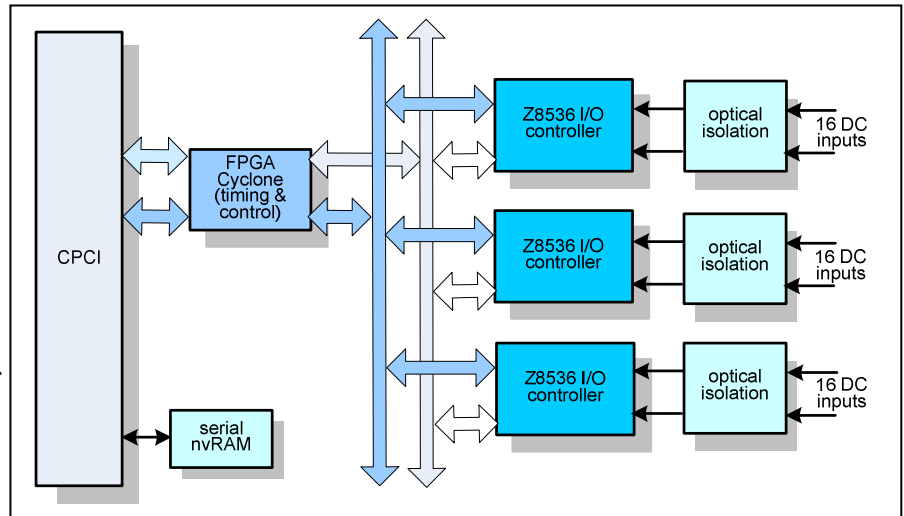
Features

- Based on three Zilog Z8536 I/O controllers for input monitoring
- compactPCI module
- Front panel I/O
- 48 inputs optically isolated
- Isolated to 2500V
- Input resistance at 2.5KΩ@1/4W
- Input options:5/12/24/30/48
- Logic 0 -3V Max, Logic 1-5V and above
- Less then 100µs Opto Isolator response
- Interrupt on: level low to high, high to low transitions
- Patterns match interrupt
- MTBF >200000 Hours



Block Diagram Overview

The input board consists of three Zilog Z8536 controllers for DC input control. An FPGA provides the timing and control. Each input has its own optical isolation, and supports a hardware adjustable resistor/opto-diode combination for various input voltage ranges. An AMCC PCI controller provides the interface to the host computer. All I/O is accessible from the front panel.



Available Software Drivers and Software Tools:

- C library dll's
- Windows and Linux drivers available

Applications:

Used in industrial applications where there is a need to control devices such as LED's, lamps, relays, contactors, etc. Full output system isolation is provided up to 2500V/channel.

Z8536 Features

- Two independent 8-bit, double-buffered bidirectional I/O ports
- I/O ports feature programmable polarity
- Programmable direction at the bit level
- Flexible pattern-recognition logic; programmable as a 16-bit vector interrupt controller
- Three independent 16-bit counter/timers with up to four external access lines per counter/timer
- Four handshake modes
- All internal registers are readable and writable
- All registers have own unique address so that they can be accessed directly

PCI Bus Controller Features:

- PLX 9056 33/66MHz 32-bit, PCI r2.2 compliant
- Motorola PowerQUICC and generic 32-bit, 66MHz local bus modes
- 3.3V I/O, 5V tolerant bus interfaces
- PICMG 2.1 r2.0 hot swap
- Zero wait state burst operation, with PCI bus bursts to 264 MB/sec and local bus bursts to 264 MB/sec
- 2 DMA channels
- Direct master data transfers
- Direct slave data transfers

I/O Specifications:

- 48 input pins, front panel accessible
- SCSI style front panel connector
- Input current and the input threshold are a function of the hardware adjustable resistor and the input voltage range
 - 4.7K 4V to 30V input 3V threshold
 - 10K 7.5V to 44V input 5.4V threshold
 - 20K 14V to 60V input 9.8V threshold
- Optically isolated to 2500 VDC

Operating Environment:

- Operating temperature
 - Commercial: 0 to +70 °C
 - Optional: -40°C to +85 °C
- Non-operating: -50 °C to +90 °C
- Airflow requirement – 5 CFM
- Humidity – 5 to 90% (non-cond)
- Altitude – 0 to 10,000 feet

Mechanical Environment:

- Size – 3U CPCI module
100mm x 160mm
- Power – 1.5 watt
- Vibration – 0.5G, 20-2000 Hz rand
- Shock – 20G, 11 msec, ½ sine
- Weight – 4 ounces
- MTBF – >250,000 hours



Ordering Information:

CPCI-48IN-1	48 channel input; optically isolated; 4-30V input range
CPCI-48IN-2	48 channel input; optically isolated; 7.5-44V input range
CPCI-48IN-3	48 channel input; optically isolated; 14-60V input range

Optional Accessories

TB-100	Terminal block and cable
CBL-100	100 pin cable only