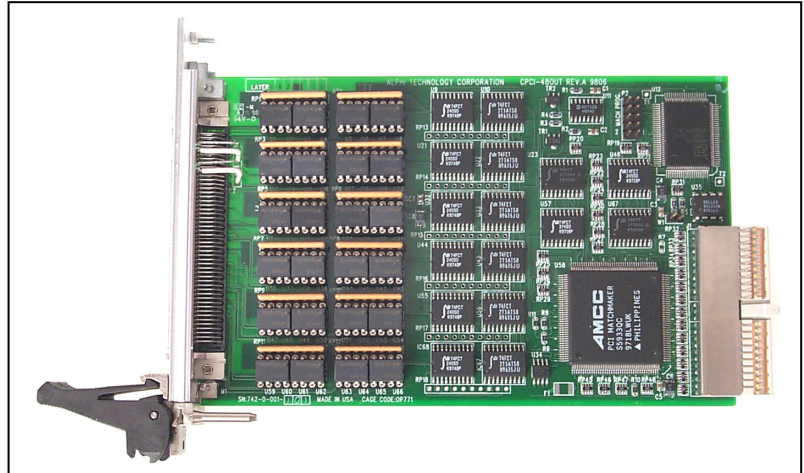


CPCI 48 Optically Isolated Outputs Card

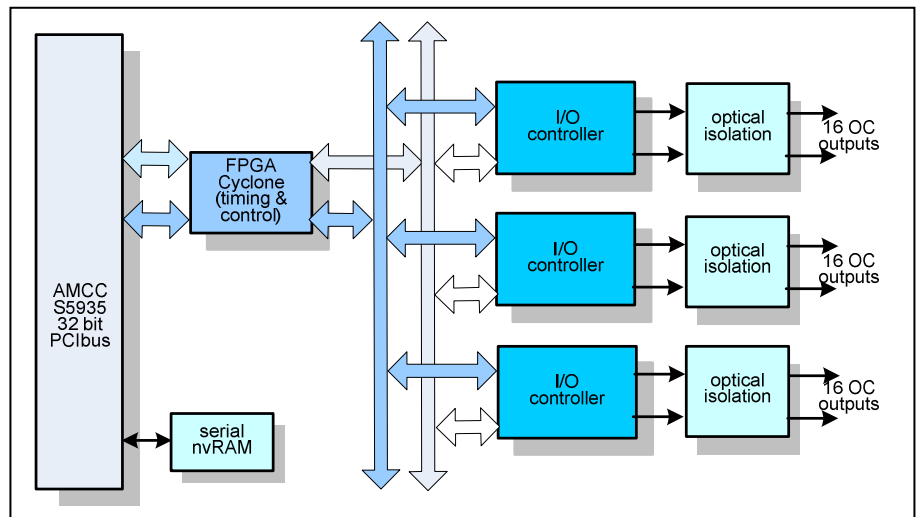
Features

- Based on FPGA Logic I/O controllers
- CompactPCI 3U module
- Front panel I/O
- 48 outputs optically isolated
- Isolated up to 2500V
- Open collector outputs with 100 mA continuous current sink support
- Pin Programmable with Read back feature
- 0 -30V operation range
- Up to 70V overvoltage protection provided
- Less than 100 μ s opto isolator
- MTBF <200000



Block Diagram Overview

The output board consists of FPGA controllers for DC output control. An FPGA provides the timing and control. Each output has its own optical isolation, and supports an open collector output. An 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:

The CPCI-48OUT is the compliment to the CPCI-48IN. The CPCI-48OUT offers 48 channels of optically isolated output connections.

FPGA 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 output pins, front panel accessible
- SCSI style front panel connector
- Output supports continuous 100 mA DC load
- Optically isolated to 2500 VDC
- Output saturation of +0.3 VDC under 100 mA load

Operating Environment:

- Operating temperature
 Commercial: 0 to +70 °C
 Optional: -40 °C to +80 °C
- Non-operating: -55 °C to +95 °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
- Vibration – 0.5G, 20-2000 Hz rand
- Shock – 20G, 11 msec, ½ sine
- Weight – 4 ounces
- MTBF – >250,000 hours



Ordering Information:

CPCI-48OUT	48 channel output; optically isolated
Optional Accessories	
TB-100	Terminal block and cable
CBL-100	100 pin cable only