

# Blue Chip Technology



DATA

ACQUISITION CARDS

## PCI-PIO

### 48 Channel Programmable Input/Output Card

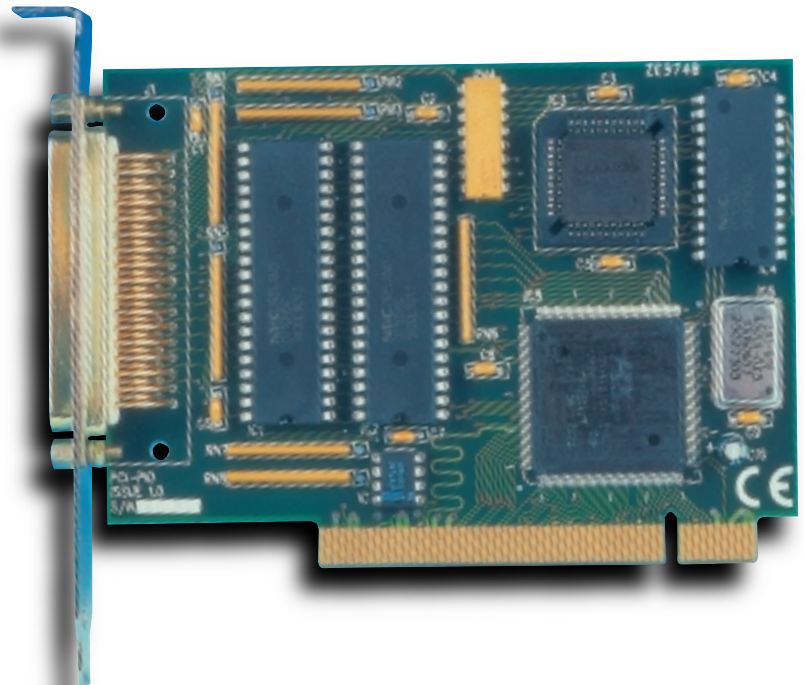
The PCI-PIO is a PCI-compatible half-card which provides digital input/outputs and counter/timers.

There are 48 TTL-compatible programmable digital input/outputs available from the board. If the controlling devices are used in handshake mode, the handshake lines are available as interrupt sources.

There are also three programmable counter/timers, the enable and clock inputs being available externally, if required, and the outputs being accessible externally or as interrupt sources. A 4MHz crystal oscillator is available on board to allow the counter/timers to act as accurate timebases.

All input/output lines are available at an industry standard 50 way D-type plug connector.

One PCI interrupt line may be selectively driven by the seven interrupt sources on the board, the interrupting source being readily identified by the board.



- 8255 compatible, inputs & outputs
- 3 on-board 16 bit Counter Timers (8254 compatible)
- Facility to fit pull up/down resistors on inputs
- Fully PCI and Plug -and-play compliant
- All connections via 1 x 50 way male D type connector
- Supplied with demonstration software examples
- Drivers for Windows® 2000 and Windows NT® available separately



### Technical Specification

Number Of I/O Channels:	48 arranged as 2 x 3 x 8 I/O bits	On board Oscillator:	Frequency 4MHz. Stability $\pm 100\text{ppm}$ 0 - 70°C
Signal Levels:	5 Volt TTL Logic Levels	Interrupt Sources:	Register selectable to 3 Counter/timer outputs, and 4 PIO handshake control lines.
Outputs:		Interrupt Levels Supported:	All PCI interrupts
Logic Low Level:	0 Volts (min.) - 0.4 Volts (max.) @ IOL = 2.5mA		
Logic High Level:	3.5 Volts (min.) - 5 Volts (max.) @ IOH = -400mA		
Drive Current:	2.5 mA. (Logic Low) Vout = 0.4 Volts -400 $\mu\text{A}$ (Logic High) Vout = 3.5 Volts	Address Overhead:	16 contiguous addresses in 16 byte block
Input Loading:	-10 $\mu\text{A}$ (Logic Low) +10 $\mu\text{A}$ (Logic High)	Board Power Requirement:	+5 Volts, 1.2 W maximum
Counter/timers:	3 x 16 Bit. Counter/timers 0,1 and 2 may be cascaded to provide a single 48 bit Counter/timer. All Counter/timers may be clocked externally at a maximum rate of 4 MHz.	Signal Connections:	1 x 50 way male 'D-type' plug
		Dimensions:	125 (L) x 91 (H) board only 135 (L) x 122 (H) x 22 (W) including bracket

### Options

- 50 way screw terminal adapter
- 1 metre cable with IDC and D type connector
- Windows NT® driver
- Windows® 98/2000 driver



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