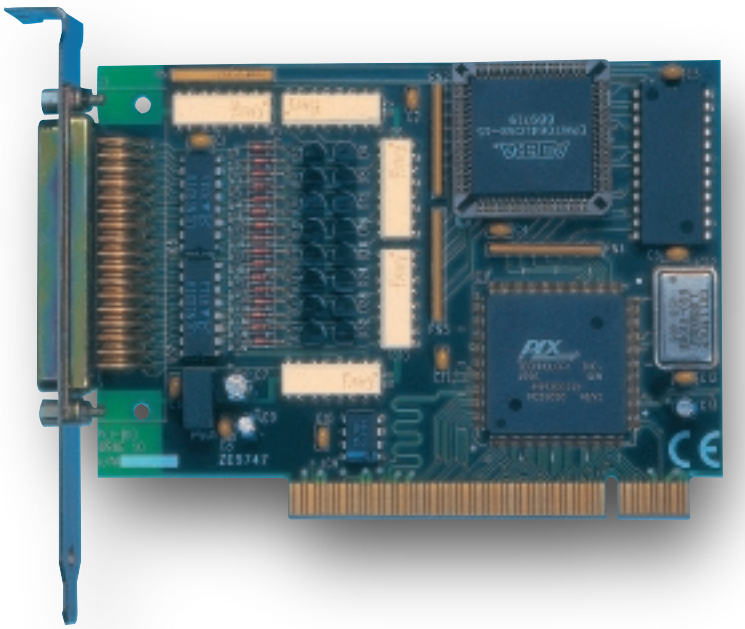
Blue Chip Technology

DATA ACQUISITION CARDS

PCI-DIO

32 Channel Isolated Digital Input/Output Card

The PCI-DIO is a PCI-compatible half-card which provides isolated digital inputs, outputs and counter/timers.



There are 16 galvanically isolated digital inputs available on the board, which will accept up to 35 volts DC or AC peak, and which switch at nominally 3.5 volts DC or AC peak.

There are 16 open collector digital outputs which are isolated from the digital inputs and the host PC but share a common ground connection.

There are also three programmable counter/timers, the enable and clock inputs being available, isolated externally, if required , and the outputs being accessible isolated, externally and as interrupt sources. A 4 MHz 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 five interrupt sources on the board, the interrupting source being readily identified by software interrogation of the on-board registers. The five interrupt sources are the three counter \timer outputs and a change of state detector on each byte of the digital inputs.

- Wide input voltage range suitable for industrial applications (0-36 V DC/AC)
- Individually opto-isolated inputs
- Opto-isolated outputs
- Individually opto-isolated counter timer inputs and outputs
- 3 on-board 16 bit Counter Timers (8254 compatible)
- Software configurable
- 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

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Technical Specification

Number Of Input Channels:	16
Maximum input voltage:	±50 Volt DC or AC peak
Input Threshold (Vth):	2.4 volts minimum. 4.4 volts maximum.
Input current:	1mA ±200mA for Vth < Vin < 50 V DC +5 mA (max) for -50 V DC < Vin < Vth.
Input Bandwidth:	10kHz.
Number of Output Channels:	16
Maximum ON state current:	500mA.
ON state voltage:	1.6 volts (max.) @ Iout = 350mA.
Max. board output dissipation:	2 watts for each group of 8 outputs (Outputs 1 to 8 and 9 to 16)
Maximum OFF state voltage:	80 volts DC
Output latency:	2.4 mS max.
Maximum Isolation Voltage:	350 volts DC or AC peak.

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 10 kHz.
On board Oscillator:	Frequency 4 MHz. Stability • 100ppm 0 - 70•C
Interrupt Sources:	Register selectable to 3 Counter/timer outputs, and 2 input change of state detection groups.
Interrupt Levels Supported:	All PCI interrupts
Address Overhead:	12 contiguous addresses in 12 byte block
Board Power Requirement:	+5 Volts, 1.0 W maximum
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

BS EN ISO 9001
Certificate No 33069

CE

3 YEAR WARRANTY

Blue Chip Technology

Chowley Oak, Tattenhall, Chester, Cheshire, CH 9EX, UK

Tel: +44 (0) 1829 772000
Facsimile: +44 (0) 1829 772001
E-mail: sales@bluechiptechnology.co.uk
Web: http://www.bluechiptechnology.co.uk