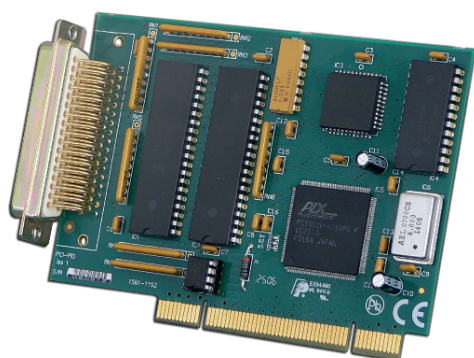


Datasheet: PCI-PIO 48 Channel Programmable Input/Output Card



Blue Chip Technology

www.bluechiptechnology.co.uk



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. The outputs are 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.

Options



1 metre cable with IDC and D type connector (P/N 1371 0071)



50 way screw terminal adapter (P/N 1981-0004)



Windows® 98/2000, NT® and XP® drivers

Key Features

- 8255 compatible, inputs & outputs
- 3 on-board 16 bit Counter Timers (8254 compatible)
- Facility to fit pull up/down resistors on inputs
- Supplied with demonstration software examples
- Fully Universal PCI and Plug -and-play compliant (compatible with 3.3V and 5V buses)

Technical Specification

Number Of I/O Channels	48 arranged as 2 x 3 x 8 I/O bits
Signal Levels	5 Volt TTL Logic Levels
Outputs	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 µA (Logic High) Vout = 3.5 Volts
Input Loading	-10 µA (Logic Low), +10 µA (Logic High)
Counters/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.
Onboard Oscillator	Frequency 4MHz. Stability ± 100ppm 0 - 70°C
Interrupt Sources	Register selectable to 3 Counter/timer outputs, and 4 PIO handshake control lines.
Interrupt Levels Supported	All PCI interrupts
Address Overhead	16 contiguous addresses in 16 byte block
Board Power Requirement	+3.3 Volts, 0.5 W maximum, +5 Volts, 0.6 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



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