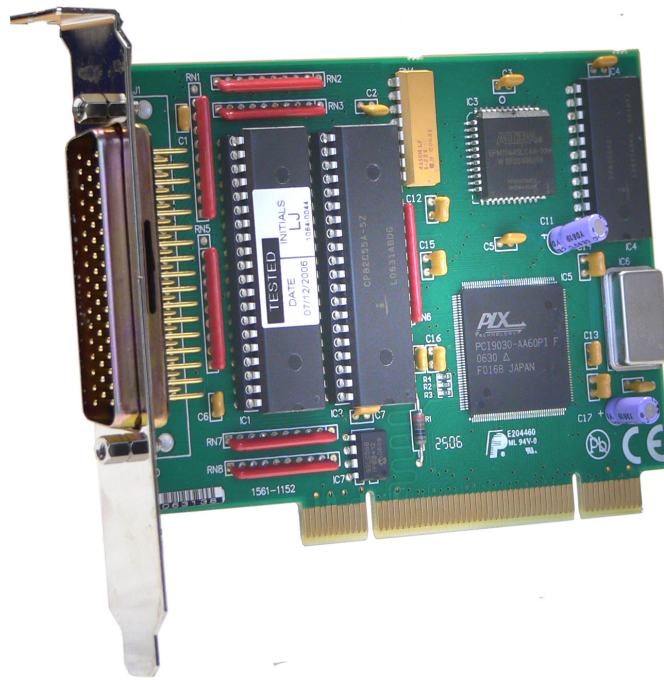




KEY FEATURES

- ▶ Wide input voltage range suitable for industrial applications up to 50VDC or peak AC
- ▶ 3 on-board 16 bit Counter Timers (8254 compatible)
- ▶ Individually current-limited, opto-isolated inputs
- ▶ Isolated normally open reed relay contacts
- ▶ Individually opto-isolated counter timer inputs and outputs
- ▶ Software configurable
- ▶ Supplied with demonstration



PCI-RLY DATA ACQUISITION CARD

The PCI-RLY is a PCI-compatible half-card which provides isolated digital inputs, outputs and counter/timers. There are 16 galvanically isolated, current-limited digital inputs available on the board, which will accept up to 50 volts DC or AC peak, and which switch at nominally 3.5 volts DC or AC peak. There are 8 normally open reed relay contact outputs, which are isolated from the digital inputs and the host PC. The contacts are isolated and protected by resettable fuses. 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 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 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.

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

Input Channels

- ▶ 16 input channels
- ▶ Maximum input voltage ± 50 Volt DC or AC peak
- ▶ Input Threshold (V_{th}) 2.4 volts minimum. 4.4 volts maximum
- ▶ Input current 2.4 ± 0.5 mA for $V_{th} < V_{in} < 50$ V DC, 5μ A (max) for -50 V DC $< V_{in} < V_{th}$
- ▶ Input bandwidth 10kHz

Output Channels

- ▶ 8 output channels
- ▶ Max output contact current - switch 0.5A, carry 1.2A
- ▶ Max output voltage - 50V
- ▶ Output latency 2.4 mS max
- ▶ Maximum Isolation Voltage 350 volts DC or AC peak

Address Overhead

- ▶ 12 contiguous addresses in 12 byte block

Counters and 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
- ▶ Onboard Oscillator Frequency : 4MHz. Stability ± 100 ppm 0 - 70°C
- ▶ Interrupt Sources are register selectable to 3 Counter/timer outputs and 2 input change state detection groups
- ▶ All PCI interrupts levels supported

Mechanicals

- ▶ Board Power Requirement +3.3 Volts, 0.5 W maximum, +5 Volts, 1.5 W maximum
- ▶ 125 (L) x 91 (H) board only, 135 (L) x 122 (H) x 22 (W) including bracket
- ▶ Signal Connections 1 x 50 way male 'D-type' plug