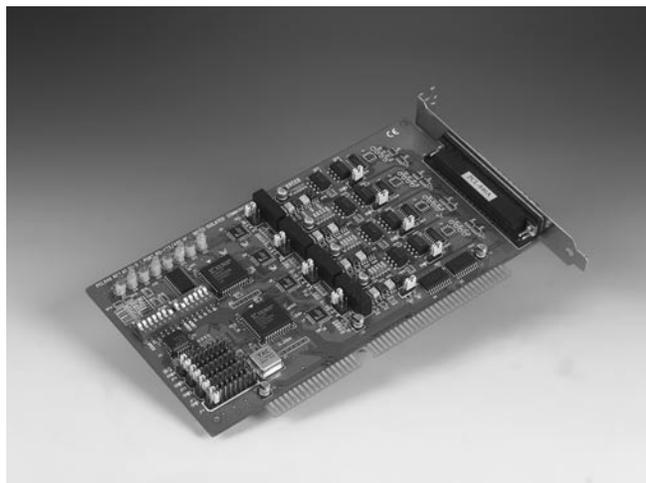


PCL-846

4-port High-speed RS-422/485 Communication Card



CE

Features

- Four independent RS-422/485 serial ports
- Transmission speeds up to 921.6 kbps
- Independent/shared IRQ settings between each of the 4 serial ports
- Wide IRQ selection: 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- Supports standard DOS COM1, COM2, COM3, and COM4
- Provides 1000 V_{DC} isolation
- Provides 2000 V_{DC} surge protection (PCL-846B only)
- Space reserved for termination resistors
- Supports 2 wire or 4 wire operation
- Supports Tx, Rx, RTS, and CTS signals
- Automatic RS-485 data flow control or RTS control
- Supports Windows® 98/2000/XP, Linux®
- Powerful and easy-to-use utility (ICOM Tools)

Introduction

PCL-846 provides four independent RS-422/485 serial ports on a card. Each port has a 16C550 UART with an on-chip 16-byte FIFO buffer for reliable, high-speed serial I/O. The UART buffers data into 16-byte packets before sending it to the bus. This drastically reduces the CPU load and avoids data loss when the system is busy and cannot process the interrupt quickly. The UART is especially useful for high speed serial I/O under Windows.

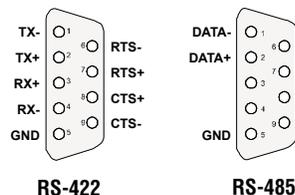
PCL-846 utilize on-board optical isolators to protect your PC and equipment against damage from ground loops, increasing system reliability in harsh environments. To further increase reliability, PCL-846B include surge protection technology, protecting your system from abrupt high voltage surges (up to 2000 V_{DC}) such as those caused by lightning during thunderstorms.

The RS-485 mode automatically senses the direction of incoming data and switches its transmission direction accordingly. This feature makes your network look and act just like an RS-232 network. Application software written for half duplex RS-232 can be used without modification. Moreover, you can simply and quickly build an RS-485 network with just two wires.

Specifications

- **Ports** 4
- **UART** 4 x 16C550 with 16-byte FIFO
- **Speed** 50 bps ~ 921.6 kbps
- **Parity** None, even and odd
- **Signal Support** TxD+, TxD-, RxD+, RxD-, CTS+, CTS-, RTS+ and RTS-
- **I/O Address** From 200H to 3F8H
- **IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- **Isolation Voltage** 1000 V_{DC}
- **Surge Protection** 2000 V_{DC} (PCL-846B only)
- **Power Consumption** +5 V @ 970 mA typical, 1.2 A max.
- **Cables** 30cm male DB37 to four male DB9 (DTE)
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temperature** -25 ~ 80°C (-13 ~ 176°F)
- **Dimensions** 185 x 100 mm (7.3" x 3.9")

Pin Assignments



Ordering Information

- **PCL-846A** 4-port RS-422/485 interface card w/isolation protection (30cm DB37 to 4 DB9 cable included)
- **PCL-846B** 4-port RS-422/485 interface card w/isolation and surge protection (30cm DB37 to 4 DB9 cable included)