PCL-841

Features

- Operates two separate CAN networks at the same time
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Takes 4 KB of address space, 40 base address adjustable in steps from C800H to EF00H
- Optical isolation protection of 1000 V_{DC} ensures system reliability
- Wide IRQ selection for each port: IRQ 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- LEDs indicate Transmit/Receive status on each port
- Direct memory mapping enables very fast access to the CAN controllers
- C library and examples included
- DOS Library, Utility and Win 3.1/NT DeviceNet DLL drivers included

Introduction

The PCL-841 is a special purpose communication card which offers the connectivity of the Controller Area Network to your PC. With its built-in CAN controllers, the PCL-841 provides bus arbitration and error detection with an automatic transmission repeat function. This drastically reduces the chance of data loss and ensures system reliability. The on-board CAN controllers are located at different positions in the memory. You can run both CAN controllers independently, at the same time. The PCL-841 operates at baud rates up to 1 Mbps and can be installed in a PC expansion slot.

Controller Area Network

The CAN (Controller Area Network) is a serial bus system especially suited for networking "intelligent" I/O devices as well as sensors and actuators within a machine or plant. Characterized by its multi-master protocol, real-time capability, error correction, high noise immunity, and the existence of many different silicon components, the CAN serial bus system, originally developed by Bosch for use in automobiles, is increasingly being used in industrial automation.

Direct memory mapping enables direct access to the CAN controller

The PCL-841 is assigned a memory address. This is the simplest method of integrating a board in a PC and provides the quickest access since the board is treated by the PC as being standard RAM.
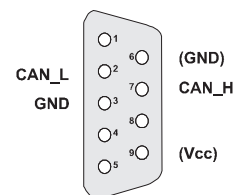
Optical Isolation Protection

On-board optical isolators protect your PC and equipment against damage from ground loops, increasing system reliability in harsh environments.

Specifications

- **Ports**: 2
- **CAN controller**: SJA-1000
- **CAN transceiver**: SJA-1000
- **Signal support**: CAN_H, CAN_L
- **Memory segment base address**: From C800H to EF00H
- **IRQ**: 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- **Isolation voltage**: 1000 V_{DC}
- **Power consumption**: +5 V @ 400 mA typical, 950 mA max.
- **Connectors**: Dual DB-9 male connectors
- **Operating temperature**: 0 to 50° C (32 to 122° F)
- **Dimensions**: 185 mm x 100 mm (7.3" x 3.9")
- **Shipping weight**: 0.6 kg (1.3 lbs)

Pin Assignments

Control Area Network

Ordering Information

❑ **PCL-841**:
 Dual-port isolated CAN serial interface card