



Introduction

The PCL-747+/PCI-1630 is an expandable intelligent multi-serial communication controller available in 8, 16, 24 and 32-port configurations. With its 40 MHz RISC processor, 512 KB of RAM, and a suite of software drivers/tools for Advantech multiport boards, the intelligent PCL-747+/PCI-1630 acts as a front end I/O processor, relieving the workload of the host computer. Four PCL-747+/PCI-1630 multiport controllers can be installed in a single host computer, providing up to 128 serial communication channels. The PCL-747+ complies with ISA specifications. The PCI-1630 complies with PCI specification.

Control Board

The PCL-747+/PCI-1630 control board resides in the host computer with an on-board RISC processor managing I/O traffic. The control board and external multi-port modules communicate with each other via a high speed RS-422 synchronous interface over a standard 2-meter cable.

CPU Module

The CPU module also has its own RISC processor which works with the control board to reduce host CPU overhead. This double CPU architecture can raise performance to the highest degree. The CPU module features power-on and self-test LED's which allow you to monitor individual port activity for easy diagnostics.

UART Module

To improve overall performance, each UART module is equipped with an efficient serial communication controller that allows transfer rates of 460.8 Kbps per port. The UART module is available with an RS-232 or an RS-422 interface and male or female DB-25 connectors

Software Features

For optimum system performance, an intelligent board needs smart firmware. This relieves the host CPU of all device interrupt handling, performs "cooked" data processing and handles all hardware and software flow control. The PCL-747+/PCI-1630 supports all popular operating systems such as Windows 3.x, Windows 95/98, Windows NT/2000, Linux and DOS. All drivers are shipped with easy Windows-style installation.

Specifications

Control Board

- 40 MHz TMS-320C52 RISC processor
- 512 KB dual-port RAM with 16 KB memory window
- IRQ: 2, 3, 4, 5, 7, 10, 11, 12, 15
- Max. 4 Control Boards per system
- Operating temp.: 0 ~ 55° C (32 ~ 131° F)
- FCC Class A

CPU Module

- 40 MHz TMS-320C52 RISC processor
- 16 KB ROM
- 32 KB RAM
- LEDs and 2 seven segment displays
- FCC Class A

UART Module

- High-speed TI550C UART with 16-byte FIFO and on-chip hardware flow control
- 8 serial ports
- Optional RS-232 or RS-422 interface
- RS-232 (Female or Male connectors): TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND (full modem control)
- RS-422 (Female connectors): TxD+, TxD-, RxD+, RxD-, RTS+, RTS-, CTS+, CTS-, GND
- FCC Class A

CPU Module (Desktop)

- 40 MHz TMS-320C52 RISC processor
- 16 KB ROM
- 32 KB RAM
- LEDs and 2 seven segment displays
- FCC Class A

UART Module (Desktop)

- High-speed TI550C UART with 16-byte FIFO and on-chip hardware flow control
- 8 serial ports
- Optional RS-232 or RS-422 interface
- RS-232 (Female or Male connectors): TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND (full modem control)
- RS-422 (Female connectors): TxD+, TxD-, RxD+, RxD-, RTS+, RTS-, CTS+, CTS-, GND
- FCC Class A

Ordering Information

- PCL-747+/232**
ISA bus, Multiport control board, with CPU module, 2-meter DB-25 to DB-25 cable, 8-port RS-232 UART module
- PCI-1630/232**
PCI bus, Multiport control board, with CPU module, 2-meter DB-25 to DB-25 cable, 8-port RS-232 UART module
- PCL-747+/422**
ISA bus, Multiport control board, with CPU module, 2-meter DB-25 to DB-25 cable, 8-port RS-422 UART module
- PCI-1630/422**
PCI bus, Multiport control board, with CPU module, 2-meter DB-25 to DB-25 cable, 8-port RS-422 UART module
- Opt-8E+/232**
Additional 8-port RS-232 UART module
- Opt-8E+/422**
Additional 8-port RS-422 UART module
- PCL-PA2**
Power adapter for CPU module, only required when CPU-to-card distance is greater than 6.5 feet (2m)

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IPPC &
AWS 2

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FPM 4

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