PCL-844+

8-port Intelligent RS-232/422 ISA Communication Card

8-port Intelligent RS-232/422 Card, with ISA bus



Features

- RISC Processor (TMS 320)
- 512 KB dual-port RAM
- Transmission speed up to 921.6 kbps with eight ports on-line
- Complete RS-232 modem control signals
- Maps to just 16 KB of system memory. Choose one of six addresses from C8000 to DC000.
- Many IRQ options: 2, 3, 4, 5, 7, 10, 11, 12 or 15
- Easy-to-use menu driven installation program
- LEDs on connection box let you monitor the TxD/RxD status of any port
- Links to peripherals up to 1200 m (4000 ft) from controller (RS-422)
- Surge protection: 2500 V_{ESD}, 2000 V_{EFT} (Optional)

Ordering Information

Introduction

The intelligent PCL-844+ was designed as a 8-port RS-232 or RS-422 interface card for lab and industrial applications where a PC needs to communicate with terminals, modems, or other instruments. RS-422 applications use the optional Opt-8F/8Z 8-port RS-232 to RS-422 converter, shown on the following page. You can install up to four PCL-844+ cards for a total of 32 ports in any AT/ISA bus-based PC.

The PCL-844+ card has an on-board RISC processor that takes over the communications load from the host PC. When you are processing large amounts of data from multiple ports, servicing the interrupts alone consumes a large percentage of the capacity of your computer's CPU. The PCL-844+ serves as a high speed, dedicated interrupt processor. Its CPU directly controls the board's CD180 RISC-based UART, guaranteeing 921.6 kbps performance of over eight high-speed data ports.

PCL-844+ is virtually a self contained computer in its own right. It contains 512 KB of dual-port RAM which you can use to store and run programs. The dual-port RAM maps into the host system's address space to give you the fastest possible data transfers between PCL-844+ and the PC memory.

When the PCL-844+ initializes, it downloads the driver software (which functions like a PC's BIOS) into on-board SRAM. This improves performance and makes version upgrading easy, with no hardware redundancy.

PCL-844+

Specifications

Board

Board			010.8	
 Number of Ports 	8	•	Opt8A	8-port RS-232 (DCE) connection box with female DB25 connectors
 Processor 	RISC, TI TMS320C203-57		Op8B	8-port RS-232 (DTE) connection box with male DB25
 Dual-ported RAM 	512 KB		0000	connectors
 SRAM 	16 KB		Opt8C	8-port RS-232 connection cable with male DB25
 UART 	RISC-based CD180		•	connectors
 Interrupt 	2, 3, 4, 5, 7, 10, 11, 12 or 15	•	Opt8H	8-port RS-232 connector cable with male DB9
 Maximum Ports in 	32			connector (1m length)
One System				
 Operating Temperature 	0 ~ 55° C (32 ~ 131° F)			
 Power Consumption 	+5 V @ 155 mA, +12 V @ 110 mA, -12 V @ 160 mA			
 Weight 	0.8 kg (1.8 lb)			
RS-232 Interface				
 Signals 	TxD, RxD, RTS, CTS, DTR, DSR, DCD and GND			
 Mode 	Asynchronous full duplex			
 Communication Speed 	50 bps ~ 921.6 kbps			
 Data Bits 	5, 6, 7, 8			
 Stop Bits 	1, 1.5, 2			
 Parity 	Even, odd or none			