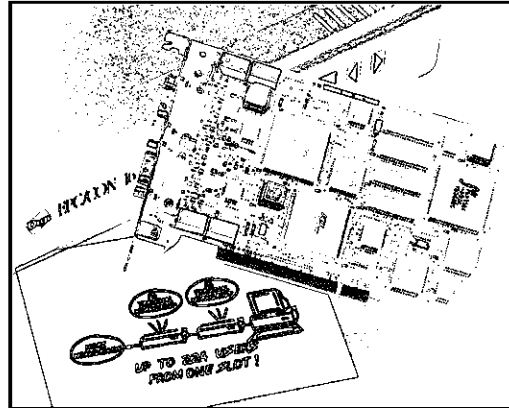


# Digi EPC/X Family

## The Industry's Highest Performing Cluster Systems



▣ **Expandable, high performance system for large-scale remote access and multi-user applications**

▣ **Provides up to 224 ports from a single slot, a thousand-plus ports from a single host PC**

▣ **Accommodates extensive dial-in/dial-out connections for remote access**

▣ **Supports serial ports just about anywhere—throughout a building, across town or around the world**

▣ **Available for PCI, ISA, EISA, Micro Channel and SBus platforms**

Offering the highest performing serial I/O expansion, the Digi EPC/X Family provides the freedom to configure workgroups that serve more ports—in more locations—than any other solution. Available for PCI, ISA, EISA, Micro Channel and SBus platforms, the EPC/X Family supports up to 224 ports per slot and a thousand-plus ports per host system.

The EPC/X Family consists of two systems that support the remote access and multiuser environments. Each system includes an intelligent RISC-based host adapter card, plus one or more EPC/CON-16 Concentrators that can be daisy-chained at considerable distances from the host or remotely connected via several cabling options. Connections from the concentrators to the EIA-232 serial devices deliver peak speeds up to 115.2 Kbps—all the speed you need to easily support heavy concurrent traffic on large V.34 modem banks.

Besides supporting a wide range of platforms, the EPC/X Family is engineered to work in concert with a broad range of network and multi-user operating environments. The AccelePort EPC/X System supplies broad-based server solutions for remote access environments and supports Novell NetWare and Microsoft Windows NT. The Digi EPC/X System is packaged for multiuser applications and supports SCO UNIX, Solaris and UNIX SVR4.

So if you're looking for a cost-effective, scalable serial connectivity solution that doesn't compromise on performance, take a closer look at the Digi EPC/X Family. You'll see that it's an ingenious connectivity solution that you may never outgrow.



# Only Digi Brings You the World's Fastest Cluster Technology Plus Worldwide Service for Thousands of Users.

## Fastest Transmission Speeds on Thousands of Ports

The Digi EPC/X Family features advanced RISC-based processing on the host adapter and the EPC/CON-16 Concentrator to give you unmatched power and speed. Two full duplex EIA-422 channels link the 16-port concentrators to the host adapter and to each other at bi-directional speeds of 10 Mbps. Connections from the concentrators to the EIA-232 serial devices run at peak serial speeds of 115.2 Kbps. Each adapter resides in a single expansion slot and supports up to 14 concentrators or PORTS Modules for a total of 224 ports. The Digi EPC/X System delivers unrivaled serial speeds to all of these ports.

## Longer Distances for Local and Remote Connections

In standard EPC/X configurations, EIA-422 cables link the first concentrator to the host and connect the concentrators to each other. This configuration easily delivers pace-setting performance between your host and/or the concentrators at distances up to 1,000 feet (300 meters).

By selecting the Digi FL (Fiber Link) option and replacing EIA-422 links with industry-standard multimode fiber optic cabling, you can

significantly stretch cable connections up to 1.25 miles (2 km) between the host and/or concentrators—with no loss of performance.

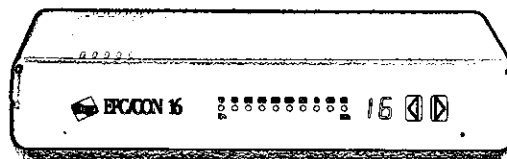
For remote connections, the Digi EPC/X Family supports high-speed EIA-232 and EIA-422 synchronous modems without converters. By connecting a synchronous modem to an EIA-422 port on the host adapter, an EPC/CON-16 Concentrator can be placed at a remote location and attached to another sync modem. Now you can replace costly and slower multiplexers with economical synchronous modems, CSUs/ DSUs, Frame Relay access devices, ISDN terminal adapters or high-speed fractional T1 modems. As a result, you can configure your remote concentrators as seamless extensions of a Digi EPC/X – delivering “local” performance for each remote user.

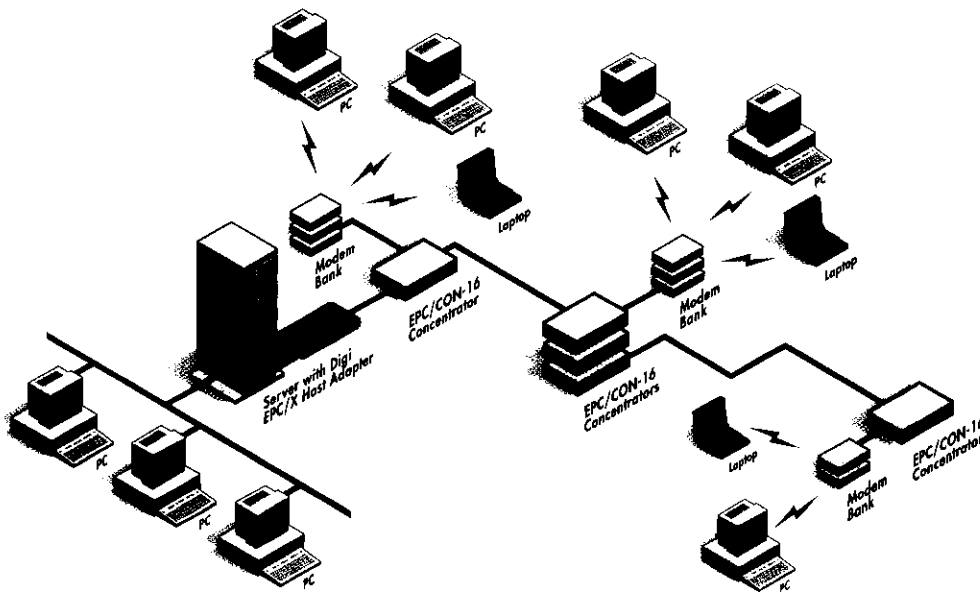
## Low Cost Port Expansion

Without adding concentrators, you can add more low-cost ports to an EPC/X by daisy-chaining up to three economical Digi PORTS Modules from the Digi Xem Family. This configuration enables a single EPC/CON-16 Concentrator to support up to 48 additional users (64 users total, including the 16 on the concentrator) at an extremely low-cost per port.

## Digi EPC/CON-16 Concentrator

- Two LEDs provide input and output flow control information for any port you select
- Eight LEDs provide critical information on data and line status
- Reporting capabilities include Activity Display, Line Utilization, Processor Utilization, Packet Count and Error Count
- Performs diagnostics and monitors individual port activity at the workgroup level





### Diagnostic Functions

The EPC/CON-16 Concentrator allows you to conveniently monitor modem and port activity and perform diagnostics at the workgroup level. By accessing a concentrator's front panel display, a system administrator can test, debug and monitor performance for all local and remote connections.

### Surge Protection

At Digi, high performance and reliability go hand in hand. All EIA-232 and EIA-422 signals passing through the EPC/X adapter and concentrators are safeguarded by built-in, multi-strike surge protection with pass through fault tolerance. No more costly downtime due to electrical interference or surges.

### Remote Access Solution Digi AccelePort EPC/X System

Packaged with remote access drivers, the AccelePort EPC/X System is a cost-effective, fast and reliable means for connecting 16 or more high-speed asynchronous modems to a network file or communication server. This unique Digi solution allows you to configure an entire corporate hub for remote access communications, giving your workgroups the capability to exchange

large amounts of information worldwide—even tap into the Internet—using existing telephone lines. Offering Digi's highest serial I/O performance with the lowest host CPU utilization, the AccelePort EPC/X System offers unmatched access to modem banks without a distance limit.

### Multuser Solution Digi EPC/X System

The Digi EPC/X System delivers uncompromising workgroup performance and expansion in a host of multiuser operating environments. Ideal for multi-point data acquisition—including cash registers and card scanners—as well as office automation and distributed workgroups, the EPC/X's scalable architecture keeps pace with user and system expansion needs.

### Rack Mount Option

For even greater installation flexibility, Digi offers low cost 19" rack chassis that convert standard standalone concentrators to rack systems. Now you can deliver the world's best cluster technology to all of your users, no matter where they are located. This provides an ideal solution for accessing rack mounted modem banks.

### Digi EPC/X Host Adapter Card

- 10 Mbps transmission rate from host adapter card to concentrators
- Supports up to 14 Digi EPC/CON Concentrators or PORTS Modules per slot for a total of 224 ports with the lowest CPU utilization in the country
- Compatible with EIA-232 or EIA-422 sync modems.
- DSUs/CSUs, Frame Relay access devices, Fractional T1s and ISDN terminal adapters

### Digi EPC/CON-16 Concentrator

- 16 high-speed surge-protected EIA-232 serial ports
- 115.2 Kbps data transmission rate

# Features/Specifications

## Features

### Digi EPC/X Host Adapter

- 20 MHz IDT 3051 RISC processor
- Hitachi 64570 serial communications controller, fully supported by DMA, driving two full duplex EIA-422 synchronous channels
- Supports two 10 Mbps bi-directional data transmission on each EIA-422 channel
- 1MB of dual-ported RAM with 32K memory window; 2MB on SBus; 2MB of triple-ported DRAM on PCI
- Available for PCI, ISA, EISA, Micro Channel and SBus platforms
- 256K Local Program Memory on ISA, EISA and Micro Channel platforms
- 64K of ROM on SBus platform
- Surge protection on both EIA-422 lines
- Compatible with Digi C/X Systems

### Digi EPC/CON-16 Concentrator

- Sixteen EIA-232 asynchronous serial ports with RJ45 or DB25 connectors
- Daisy chain up to 14 concentrators off each host adapter
- 20 MHz IDT 3051 RISC processor
- 1MB RAM; 256K ROM
- 16C554 Quad UARTs
- 10 Mbps bi-directional data transmission speed on sync channel
- 115.2 Kbps data transmission speeds on serial ports
- Pass-through fault tolerance on folded ring daisy chain connections
- Supports three or more additional Digi PORTS Modules
- Surge protection on all EIA-232 signals and EIA-422 lines
- Copper wire or optional fiber optic connections
- Compatible with C/X System

### Remote Cabling Options

- EIA-232 sync modem to remote concentrator
- Host adapters to EIA-422 sync modem
- EIA-422 sync modem to remote concentrators
- Host adapter EIA-232 sync modem

### Rack Mount Option

- 19" rack chassis - 2U for EPC/CON-16 (RJ45 only)

## Regulatory Approvals

- FCC Part 15 Class A
- ICES-003 Class A
- EN55022 Class A
- EN50082 - 1
- UL1950
- CSA 22.2 No. 750
- EN50950

## Software Compatibility

### Digi AccelePort EPC/X (Remote Access)

- Microsoft Windows NT
- Novell NetWare
- OS/2

### Digi EPC/X (Multiuser)

- SCO UNIX
- Solaris X86
- UNIX SVR4
- Solaris SPARC
- SCO UnixWare
- SCO OpenServer
- UNIX SVR3
- HP/UX
- Digital UNIX
- OpenVMS

*For an updated list of software via Digi and other Third Party vendors, please contact your Digi representative.*

## System Requirements

- One 16-bit or 32-bit slot
- 32K unused memory
- One unused I/O port address, except on PCI system

## Environmental Requirements

- Ambient temperature: 50°F to 130°F (10°C to 55°C)
- Relative humidity: 5% to 90%
- Altitude: 0 to 12,000 ft. (0 to 3,660 m)
- Air movement: 30 CFM forced

## Digi Service And Support

You can purchase with confidence knowing that Digi is here to support you with expert technical support, the industry's strongest warranty (five full years) and a 30-day money-back guarantee.

## Power Requirements

### Micro Channel Host Adapter

+5V ± -5% 1.3 Amps typical  
+12V ± -5% .04 Amps typical  
-12V ± -5% .04 Amps typical

### SBus Host Adapter

+5V ± -5% 1.35 Amps typical  
+12V ± -5% .015 Amps typical  
-12V ± -5% .04 Amps typical

### EISA Host Adapter

+5V ± -5% 2.3 Amps typical  
+12V ± -5% .1 Amps typical  
-12V ± -5% .04 Amps typical

### PCI Host Adapter

+5V ± -5% 1.5 Amps typical  
+12V ± -5% 1.5 Amps typical  
-12V ± -5% 1.5 Amps typical

### ISA Host Adapter

+5V ± -5% 2.3 Amps typical  
+12V ± -5% .04 Amps typical  
-12V ± -5% .04 Amps typical

## Dimensions

Host Adapters	Length	Width	Height	Weight
ISA	13.3 in (33.3 cm)	4.5 in (11.4 cm)	.6 in (1.5 cm)	12 oz (34 kg)
EISA	13 in (33 cm)	4.8 in (12.2 cm)	.64 in (1.6 cm)	10 oz (28 kg)
Micro Channel	11.37 in (28.89 cm)	3.5 in (8.89 cm)	.6 in (1.52 cm)	1.25 lbs. (.57 kg)
SBus	5.8 in (14.7 cm)	3.12 in (7.9 cm)	.6 in (1.5 cm)	5 oz (.14 kg)
PCI	6.875 in (17.5 cm)	4.2 in (10.7 cm)	.6 in (1.5 cm)	12 oz (34 kg)

Concentrators	Length	Width	Height
RJ45	12 in (30.48 cm)	7.0 in (17.78 cm)	2.42 in (6.15 cm)
DB25	12 in (30.48 cm)	7.0 in (17.78 cm)	4.5 in (10.9 cm)

## Pin Assignments

DB25 Concentrator		RJ45 Concentrator		Pins in Connector			
Pin	Signal	Pin	Signal	10	8	6	4
1/Shell	C.GND	1	RI	X	-	-	-
2	TXD	2	DSR	X	X	-	-
3	RXD	3	RTS	X	X	X	-
4	RTS	4	C. GND	X	X	X	X
5	CTS	5	TXD	X	X	X	X
6	DSR	6	DSR	X	X	X	X
7	SG	7	SG	X	X	X	X
8	DCD	8	CTS	X	X	X	-
20	D'IR	9	DTR	X	X	-	-
22	RI	10	DCD	X	-	-	-

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