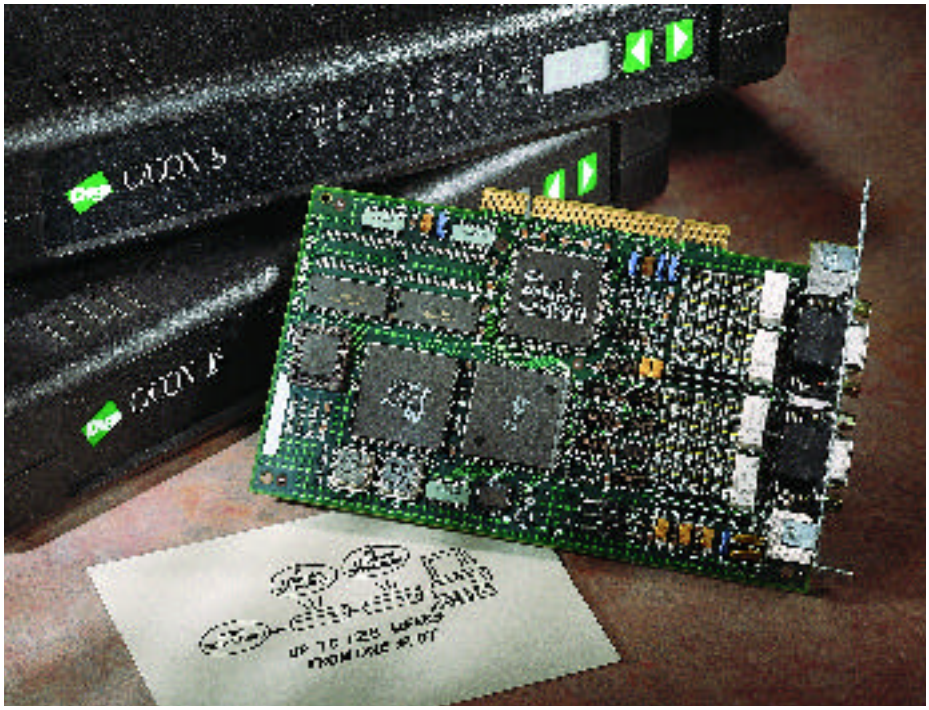
Digi AccelePort C/X Family

P R O D U C T

P R O F I L E

Low-Cost, High-Speed Cluster Technology



- **Supports up to 128 ports from a single slot, hundreds of ports from a single host**
- **Delivers data transmissions speeds up to 115.2 Kbps**
- **Supports serial ports just about anywhere—throughout a building, across town or around the world**
- **Configure and administer ports remotely, using synchronous modems, CSUs/DSUs, FRADs, ISDN terminal adapters or fractional T1s**
- **Available for PCI, ISA, Micro Channel, and RS/6000 platforms**

If you think configuring a large-scale multiuser system is a complex, expensive process—think again. Now, thanks to the AccelePort C/X Family, it's not only simple, it's surprisingly affordable.

The AccelePort C/X Family supports the multiuser and remote access environments. An AccelePort C/X System is a sophisticated blend of technologies, including an intelligent host adapter plus a compact Digi C/CON Concentrator offering eight or 16 high-speed, surge-protected EIA-232 serial ports. System expansion is painless, just add more concentrators. A single AccelePort C/X host adapter can support up to eight C/CON Concentrators, providing up to 128 ports from a single slot. And, depending on your host platform, eight or more AccelePort C/X host adapters can be installed, enabling a single host system to support hundreds of ports.

Supporting a wide range of platforms and operating environments, the AccelePort C/X Family offers a choice of device driver software.

For ease of installation and optimum flexibility, the concentrators can be located up to 1,000 feet (330 meters) from the host using standard EIA-422 cabling. A fiber optic cabling option allows you to locate your workgroups up to 1.25 miles (2 km) apart. Best of all, by using synchronous modems, you can locate concentrators anywhere in the world and enjoy a seamless extension of your system.

All this makes the AccelePort Digi C/X Family a serial connectivity solution that will meet your most demanding expansion needs today. . . and well into the future.

Features / Specifications

Features

AccelePort C/X Family Host Adapter

- 10 MHz 80186 microprocessor (20 MHz IDT 3051 RISC processor on SBus cards)
- 128K of tri-ported static RAM (512K on RS/6000) accessible to the host through a 32K memory window (1MB tri-ported DRAM on PCI)
- 85C30 serial communications controller, fully supported by DMA, driving two full duplex, surge-protected EIA-422 synchronous channels
- AccelePort C/X PCI features Hitachi 64570 serial communications controller
- Available for PCI, ISA, Micro Channel, and RS/6000 platforms
- ISA and Micro Channel supports two 1.2 Mbps bi-directional transmission speeds
- PCI host adapter supports up to 3.7 Mbps bi-directional transmission speeds

Digi C/CON Concentrators

- Eight or 16 EIA-232 asynchronous channels with RJ45 or DB25 connectors
- 16 MHz 80186 processor (20 MHz on C/CON-8)
- One full duplex EIA-422 synchronous 85C30 channel with full DMA support
- Pass-through fault tolerance
- Surge protection on all EIA-232 ports
- 128K SRAM

Regulatory Approvals

AccelePort C/X ISA and MC

- FCC Part 15, Class A
- ICES-003 Class A
- EN55022, Class A
- EN50082-2
- UL-1950
- CSA 22.2 No 950
- EN 60950

AccelePort C/X PCI and AccelePort C/X Rack Systems

- FCC Part 15, Class B
- ICES-003 Class B
- EN55022, Class B
- EN50082-2
- UL-1950
- CSA 22.2 No 950
- EN60950

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 3660 m)
- Air Movement 30 CFM forced

Operating System Compatibility

- Novell NetWare
- SCO OpenServer
- SCO UnixWare
- Solaris SPARC
- UNIX SVR4
- HP/UX
- QNX
- Mumps
- Windows NT
- SCO UNIX
- Solaris X86
- UNIX SVR3
- AIX
- Digital Unix
- Open VMS
- OS/2

For an updated list of software support via Digi and other Third Party vendors, please contact your Digi sales representative or visit Digi's web site (www.dgii.com).

Optional Accessories

Remote Cabling Options:

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

Rack Mount Options:

- 19" Rack Chassis-2U for C/CON-8 (RJ45 and DB25) and C/CON-16 (RJ45 only)

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

ISA Host Adapter
+12V +/-5% .095 Amps typical
-12V +/-5% .095 Amps typical
+5V +/-5% 550 Amps typical

Micro Channel & RS/6000 Host Adapter
+5V +/-5% 2.0 Amps typical
+12V +/-5% .25 Amps typical
-12V +/-5% .10 Amps typical

PCI Host Adapter
+5V +/-5% .90 Amps typical
+12V +/-5% .01 Amps typical
-12V +/-5% .01 Amps typical

AccelePort C/X Rack 16
+12V +/-5% .18 Amps typical
-12V +/-5% .05 Amps typical

C/CON-8 and -16 Concentrators
+5V +/-5% .76 Amps typical

Dimensions

Host Adapters	Length	Width	Height	Weight
PCI	6.875 in (17.5 cm)	4.2 in (10.7 cm)	.57 in (1.4 cm)	5.5 oz. (.15 Kg)
ISA	10.8 in (27.4 cm)	4.1 in (10.4 cm)	.5 in (1.3 cm)	10 oz. (.28 Kg)
Micro Channel & RS/6000	5.75 in (14.6 cm)	4.75 in (12.1 cm)	0.6 in (1.5 cm)	8.2 oz. (.23 Kg)

Concentrators	Length	Width	Height
C/CON-8 RJ45	12 in (30.48 cm)	7.0 in (17.8 cm)	2.42 in (6.15 cm)
C/CON-8 DB25	12 in (30.48 cm)	7.0 in (17.8 cm)	2.42 in (6.15 cm)
C/CON-16 RJ45	12 in (30.48 cm)	7.0 in (17.78 cm)	2.42 in (6.15 cm)
C/CON-16 DB25	12 in (30.48 cm)	7.0 in (17.78 cm)	4.3 in (10.9 cm)
C/X Rack 16	19.2 in (48.8 cm)	11.0 in (27.9 cm)	1.75 in (4.4 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	RXD	X	X	X	X
7	SG	7	SG	X	X	X	X
8	DCD	8	CTS	X	X	X	–
20	DTR	9	DTR	X	X	–	–
22	RI	10	DCD	X	–	–	–

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The AccelePort C/X Family—Now Hundreds of Users Can Share a Single Host System. . . and Never Know It.

Dependable, High-Speed Serial Ports for Hundreds of Users

Nowhere is the need for speed, reliability and economy more important than large-scale multiuser systems. Most users work best when connections are transparent to them. And they want optimum response. . .all the time. The AccelePort C/X Family rises to the occasion with the speed and day-to-day reliability that outperforms other cluster systems.

Two full-duplex, surge-protected EIA-422 channels link the eight- or 16-port concentrators to the host adapter and to each other at speeds up to 1.2 Mbps. The C/CON-8 or C/CON-16 Concentrators are designed to easily accommodate heavy I/O traffic and support data transmission speeds up to 115.2 Kbps.

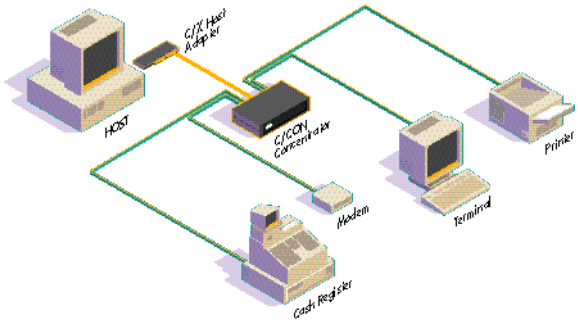
The AccelePort C/X Family includes a powerful on-board processor on each host adapter and each concentrator. Users never know that they are sharing the resources of a single host platform!

AccelePort C/X Host Adapter

- On-board processing relieves host CPU of communication bottlenecks
- Provides a maximum 1.2 Mbps transmission rate from host to concentrators
- Supports up to eight C/CON Concentrators per slot for a total of 128 ports

Digi C/CON Concentrator

- Eight or 16 surge-protected EIA-232 serial ports
- Supports data transmission rates up to 115.2 Kbps



Longer Distances—for Local and Remote Connections

Using standard EIA-422 cabling, Digi's C/CON Concentrators can be located up to 1,000 feet (330 meters) from the host. This distance advantage is often used to connect cash registers, terminals, data collection devices and scanners. Need even greater distances? Or need connections immune to electrical interference? Select the Digi FL (Fiber Link) option, and you can put up to 1.25 miles (2 km) between concentrators and your host. This means that concentrators can be daisy-chained over a distance of up to 5 miles (8 km) with no loss of performance.

In addition, the AccelePort C/X Family's unique cluster technology supports remote installations via high-speed synchronous modems or Customer Service Units/Data Service Units (CSUs and DSUs), ISDN terminal adapters, Frame Relay Access Devices (FRADs) and fractional T1s—thus eliminating the need for costly multiplexers. As a result, you can configure your concentrators anywhere in the world as a seamless extension of a multiuser system, providing "local" performance for each remote user. A field-proven solution for supporting branch offices and isolated warehouses.

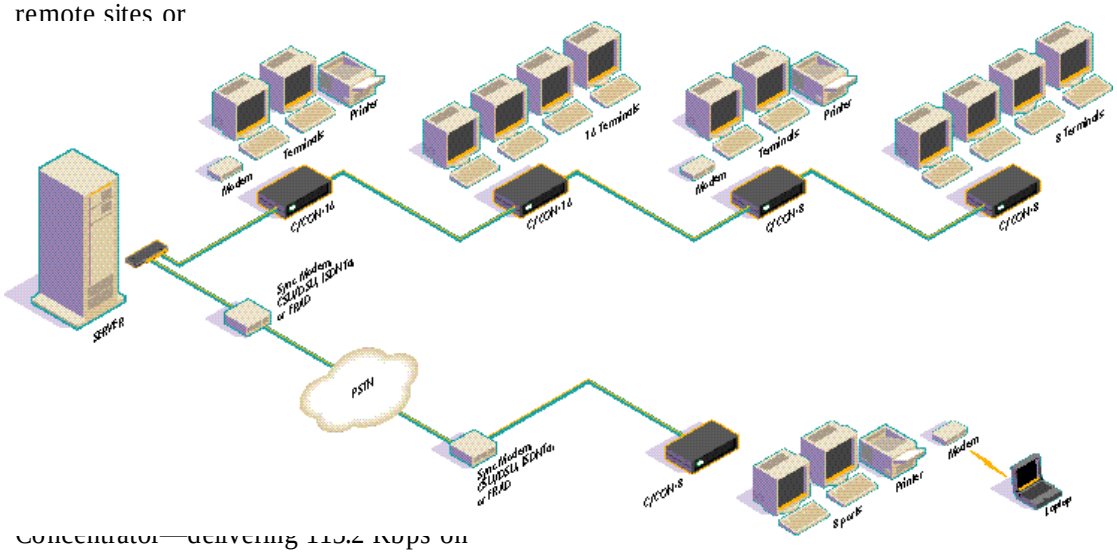
Multiuser Solution

The AccelePort C/X System integrates easily into any computing environment that requires wide-spread or remote connections. Supporting the most popular multiuser systems from AIX to Xenix, the multiuser drivers are engineered to support multi-channel serial port operations with no need for user programming. Compatible with a broad range of terminals, printers, modems and most other asynchronous serial peripherals, it's a logical choice for multiple-point data acquisition, order entry, point-of-sale, UNIX-based database, distributed accounting and office/factory automation applications.

For IBM RS/6000 systems or Power PCs running under AIX, the AccelePort C/X System provides higher speeds, greater CPU efficiency, superior reliability, longer distances and better diagnostics functions than any other AIX asynchronous solution. The Digi AccelePort C/X technology also extends to SPARC SBus systems running Solaris 2.X.

Remote Access Solution

The AccelePort C/X System offers a cost-effective, reliable means for connecting eight to 128 asynchronous devices or modems to a server. This allows remote users to dial in over modem connections and access information on the same host. Remote users also can upload information from a remote multiuser system to a central site. The serial data transmission rates are significantly higher than standard non-intelligent PC COM1/COM2 ports. For remote sites or



Concentrator—delivering 115.2 Kbps on each port—is an ideal solution.

Diagnostic Functions

By simply accessing the front display panel of the Digi C/CON-8 or -16 Concentrator, you can test, debug and trouble-shoot—all without shuttling between the host and concentrator at each workgroup site. This is especially important for remote installations where concentrators can be thousands of miles from the host.

Surge Protection

With the AccelePort C/X Family, you get more than high performance, you get high reliability, too. All EIA-232 and EIA-422 signals passing through the host adapters and C/CON Concentrators are safeguarded by built-in, multi-strike surge protection with pass-through fault tolerance. This ensures that I/O traffic will not be interrupted by electrical interference, surges or spikes.

Rack Mounted Concentrator Option

For installations that require a rack-mount solution, Digi provides the AccelePort C/X 16 Rack. Offering 16 EIA-232 ports in an industry-standard 19" rack-mountable cabinet, the AccelePort C/X 16 Rack features front-accessible RJ45 connectors and displays, back-mounted DB25 synchronous connectors and a built-in power supply. To rack mount standard standalone C/CON Concentrators, Digi offers a low-cost 19" rack chassis.

- Front panel display for testing, debugging and monitoring concentrator performance
- Two LEDs provide input and output flow control information for any port you select
- Reporting capabilities include Activity Display, Line Utilization, Processor Utilization, Packet Count and Error Count
- Eight LEDs provide critical information on data and line status