

Overview

Models

4-port Intelligent Synchronous Communications Adapter
2-port Intelligent Synchronous Communications Adapter

3X-PBXDD-AB
3X-PBXDD-AA

Introduction

The Digi DataFire SYNC 2000 adapters available from HP provide remote WAN and SNA connectivity for PCI servers, which make them ideal for branch offices of central sites. X.25 is a proven, packet switched technology that has been around for many years. X.25 provides 100 percent error correction and network-managed flow control. It guarantees that every packet will arrive at its destination without any errors. This is a slow, deliberate process that involves a great deal of overhead and is widely used internationally where leased lines are not readily available.

High-speed Synchronous WAN Communications

Subscribers pay a variable rate based on connect time and packets transmitted. Frame Relay is designed as the successor to X.25 for transmitting data over the phone network. It is also a packet switching protocol, but it provides no guarantee of data integrity. Frame Relay links have more in common with dedicated lines than switched lines, but the cost can be substantially lower for an equivalent capacity, as subscribers pay a variable rate based on bandwidth and the committed information rate.

Intelligent Synchronous Adapters

The Digi DataFire SYNC 2000 is a family of intelligent synchronous communication adapters that provide advanced server-based Wide Area Network (WAN) solutions. Available in two- and four-port models. The DataFire SYNC 2000 2P and 4P models are mid-level, intelligent WAN adapters based on the Motorola MPC860 PowerQUICC processor running at 25 MHz and 40 MHz, respectively. All DataFire SYNC 2000 adapters run Frame Relay FRF.9 compression to boost throughput. All DataFire SYNC 2000 models work with PCI-based servers running at either 3.3- or 5-volts. Four MB of on-board RAM supports T1/E1 speeds on all ports in full-duplex mode. Cables are available for the common interfaces-V.24, EIA-530, V.35, V.36, V.11 and EIA-449. Each port uses an optional independent cable, allowing any combination of electrical interfaces to be used. The cable is automatically configured when plugged into the board, eliminating troublesome configuration options. Each port can report the status of all compliant modem signals and attached cables. Each interface also can measure and report the speed of modems and CSU/DSUs for faster troubleshooting.

Product Highlights

DataFire SYNC 2000

- Two- and four-port models supporting up to T1/E1 speeds
- 32-bit, 33-MHz Universal PCI interface
- UIB automatic interface detection
- 25-MHz Motorola MPC860 Power QUICC RISC processor - two port version
- 40-MHz Motorola MPC860 Power QUICC RISC processor - four port version
- 4-MB dual-port RAM
- Independent quad transmit and receive channels
- Surge protection
- Internal/External clocking

PBXDP To PBXDD Option and Cable Migration Chart

Retired PBXDP Options		New PBXDD Options	
Description	Part Number	Description	Part Number
2-port, Serial Interface with Individually configurable ports via PCI cables. NOTE: At least one Port Cable must be ordered with the NIC in order to be useable.	PBXDP-AA	DataFire SYNC 2000 2-port PCI Adapter. At least one (up to two) port cable must be ordered for the adapter to be useable	3X-PBXDD-AA
4-port, Serial Interface with RS232 (V.24/V.28) 6-foot octopus cable. Individual ports may be further configured using one of the following adapters/port.	PBXDP-AB	DataFire SYNC 2000 4-port PCI Adapter. At least one port cable (up to four) must be ordered for the adapter to be useable	3X-PBXDD-AB
8-port, Serial Interface with RS232 (V.24/V.28) 6-foot octopus cable. Individual ports may be further configured using one of the following adapters/port.	PBXDP-AC	No Equivalent Available (Use Two 3X -PBXDD-ABs)	See "Description" at left
Port Cable RS232, 6 foot, MD25F/DB25M, Female/Male/v.24/v.28/v.11/x.27 Used on PBXDP-AA ONLY.	BC33L-06	DataFire SYNC 2000 V.24 6-foot cable/RS232 (marked as 63000106-02)	3X-BC34L-06
		DataFire SYNC 2000 V.11 6-foot cable (marked as 63000105-02)	3X-BC34S-06
Port Cable RS422/RS530, 6-foot, MD25F/DB25M, Female/Male Used on PBXDP-AA ONLY.	BC33M-06	DataFire SYNC 2000 EIA-530 6-foot cable (marked as 63000109-02)	3X-BC34G-06
Adapter RS422/RS530, MD25F/DB25M, Female/Male Used on PBXDP-AB/-AC ONLY.	BC33V-06		
Port Cable RS449, 6-foot, MD25F/DB25M, Female/Male 37 pin. Used on PBXDP-AA ONLY.	BC33P-06	Order 76000440, DataFire SYNC 2000 EIA449 6- foot cable (marked as 63000110-02)	Order from Digi Direct
Port Cable RS485, 6-foot, MD25F/DB25M, Female/Male Used on PBXDP-AA ONLY.	BC33R-06	No Equivalent Available	See "Description" at left
Port Cable X.21, 6-foot, MD25F/DA15M, Female/Male X21T/X.21. Used on PBXDP-AA ONLY.	BC33S-06	DataFire SYNC 2000 V.11 6-foot cable (marked as 63000105-02)	3X-BC34S-06
	Adapter X.21, MD25F/DA15M, Female/Male Used on PBXDP-AB/-AC ONLY.		
Port Cable V.35, 6- foot, MD25F/Win34M, Female/Male X35T/V.35 Used on PBXDP-AA ONLY.	BC33T-06	DataFire SYNC 2000 V.35 6-foot cable (marked as 63000107-02)	3X-BC34T-06
Adapter X36/V.36 Used on PBXDP-AB/-AC ONLY.	BC33Y-06	Order 76000429, DataFire SYNC 2000 V.36 6-foot cable (marked as 63000108-02)	Order from Digi Direct

NOTE: Refer to the following website for PBXDD connector pin-outs:

<http://www.digi.com/support/productdetl.jsp?pid=1792&osvid=56&sideb=0&sidea=0&peripheral=1&vc=view#cabling>

Product Highlights

Host Platform Support and Configuration Rules Before ordering, refer to the Supported Options List for specific AlphaServers or AlphaStations at <http://h18000.www1.hp.com/alphaserver/technology/index.html> to determine support status (hardware configuration rules, minimum supported revisions for operating systems, console firmware, and other related layered products).

Driver Support and Where to Find It **3X-PBXDD-AA and -AB**
Legacy Application Support via WANDD Kits (Tru64 UNIX and OpenVMS on Alpha):
X.25 for OpenVMS Alpha Systems (SPD 47.37.xx)
<http://h18000.www1.hp.com/info/SP4737/SP4737PF.PDF>
Wide Area Networking for Tru64 UNIX (SPD 42.47.xx)
<http://h18000.www1.hp.com/info/SP4247/SP4247PF.PDF>

Ordering Information

NOTE: Refer to the respective **Supported Options List (SOL)** <http://h18002.www1.hp.com/alphaserver/> for specific AlphaServers or AlphaStations to determine current option support status, minimum console and operating system revisions, and system configuration rules.

Multi-Port Intelligent Synchronous Communications Adapters for use on HP Alpha Systems

PCI to Dual-port Intelligent Synchronous Communications Adapter (Digi DataFire SYNC 2000) for use on AlphaServers and AlphaStations. 3X-PBXDD-AA

NOTE: There are NO cables supplied with the adapter. A cable must be provided for each port and can be ordered from the list below.

PCI to Quad-port Intelligent Synchronous Communications Adapter (Digi DataFire SYNC 2000) for use on AlphaServers and AlphaStations. 3X-PBXDD-AB

NOTE: There are NO cables supplied with the adapter. A cable must be provided for each port and can be ordered from the list below.

Required Cables Available from HP

EIA-530 Single-port Cable (Cable marked as: 63000109-02) 3X-BC34G-06

V.11 / x.21 Single-port Cable (Cable marked as: 63000105-02) 3X-BC34S-06

V.35 Single-port Cable (Cable marked as: 63000107-02) 3X-BC34T-06

V.24 / EIA232 Single-port Cable (Cable marked as: 63000106-02) 3X-BC34L-06

Technical Specifications

Bus Interface	PCI V2.1 bus master, 32-bit, 33 MHz with dynamic DMA optimization Universal, 3.3 and 5.0 volt bus signaling Arbitration: bus master PCI bus transactions: All Read, Write and Termination operations PCI bus error: both parity and system errors		
Dimensions	4.2 x 5 x 6.9 in (10.6 x 12.7 x 17.5 cm) - 1/2 length		
Weight	9 oz (255.1 g)		
Environmental	Operating	Temperature	50° to 131° F (10° to 55° C)
		Humidity	5% to 90% non-condensing
		Altitude	0 to 12,000 ft (0 to 3,660 m)
	Storage	Temperature	-40° to 212° F (-40° to 100° C)
		Humidity	5% to 90% non-condensing
Power	3X-PBXDD-AA Dual-Port	Maximum: 1.8	Typical: 5.0 Volts at 0.965 AMPs
	3X-PBXDD-AB Quad-Port	Maximum: 1.9 A	Typical: 0.965 A
Certifications	FCC Class B EN55022 Class B EN50082-1 -2 EN61000-3-2, 3 EN60950 VCCI Class II AS3548 ICES-003 UL 1950 DOC CSA 22.2 No. 950 AS3260 CTR2		
MTBF	MTBF is computed using Belcore Method 1 Parts Count 3X-PBXDD-AA 64,517 Hours 3X-PBXDD-AB 89,697 Hours		
Warranty	Maximum - The remaining warranty of the HP AlphaServer in which it is installed. Minimum - 1-year Return-to-Factory with Advance Exchange NOTE: Certain restrictions and exclusions apply. Contact 1-800-OK-COMPAQ for details.		

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