IBM Serial I/O Solutions

IBM Serial I/O Multiport Boards deliver the performance and speed you need — at a very affordable price. These intelligent serial I/O boards use less than 1% system load so your server won't slow down as you run more applications, attach more devices or service more users. Installation and set up take just a few minutes. Using the "autoinstall" feature on the supplied SuperSerial CD, your boards will automatically be detected, located and configured. This CD also includes drivers, manuals, extensive install/diagnostic help and utilities. Multiport Boards are available in 8 and 16-port configurations.

IBM Serial I/O Expandable Subsystems provide an easy, manageable and cost-effective way to attach up to 128 devices to one slot in your server.

For local or clustered connections, mix and match any combination of DB-25 or RJ-45 connectors.

If you want to connect a cluster of serial devices up to 3,500 feet from the server, use the Serial I/O Multiplexer Sets.

OPTIONS
by IBM

![IBM]

Serial I/O Multiport Boards

Benefits and Features

Connects from 8 or 16 ports to one slot in
your server

Supports speeds up to 920 Kbps per port, full duplex

Offloads virtually all serial processing from the
host CPU

15,000 volts multistrike surge protection on every pin
of every port

Includes full modem control on all ports (TXD, RXD,
CTS, RTS, DSR, DCD, DTR, RI)

Support for most popular operating systems

Up to 4 cards per system

Easy to install and configure with the "autoinstall"
feature, no IRQ, I/O ports or memory holes
to specify

Includes comprehensive EquiView Plus NT Connections
Manager software, as well as complete port
management/diagnostic tools for Unix

DB-25 or RJ-45 connectors available

Three-year warranty
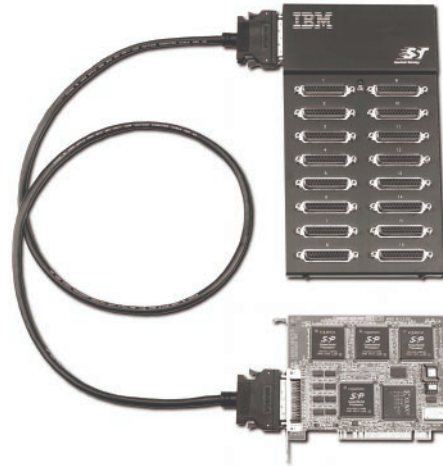
SST-16P DB board with 16 Port Connector Panel

The IBM PORT 8 or 16 SIO adapters with connection
capability for all existing RS232 serial devices for remote
access, point-of-sale, automation, etc. These adapters are an
intelligent serial IO interface card for PCI based
workstations and Netfinity Servers. These port cards offer 8
or 16 RS-232 serial connections with industry leading
performance, durability, and management capabilities.

Hardware Highlights

On-board RISC CPU offloads almost all
communication load
Uses no IRQs, memory mapped architecture
Up to 4 cards per system
15,000 volt surge suppression

SST8P Adapter:

8-RS232 serial ports
Support for all ports at 920Kbps simultaneously
DB-25 RS232 standard "Octopus" Cable Interface

SST16P Adapter:

16-RS232 serial ports
Support for all ports at 230Kbps simultaneously
16-Port RS232 DB 25 or RJ45/RJ11 port
module option

IBM

Software Highlights

Support for any standard COM interface application

Comprehensive diagnostic utilities with SNMP management support for Windows NT

High speed Remote Access and local device connectivity

Operating system support for Windows NT, OS/2, Novell, and UnixWare 7.0.

Major benefits and solutions

Remote Access (modem connectivity) applications can be implemented on Netfinity servers and commercial desktops using standard operating systems and communications packages such as Microsoft BackOffice, IBM Communications Server, Citrix WinFrame, or Windows Based Terminal Server.

Local serial connectivity (local serial device point-of-sale, industrial automation, etc.) applications can be implemented on Netfinity servers and commercial desktops using standard operating systems and any application using standard COM interfaces.

High performance interface maximizes Netfinity CPU power for application usage.

Adapter can be used with any modem or RS232 serial device allowing very high flexibility

Bonus Software

FREE port management software included with all Serial I/O products!

EquiView Plus for NT
SSDIAG for UNIX

Drivers for Multiport Boards Included on CD-ROM

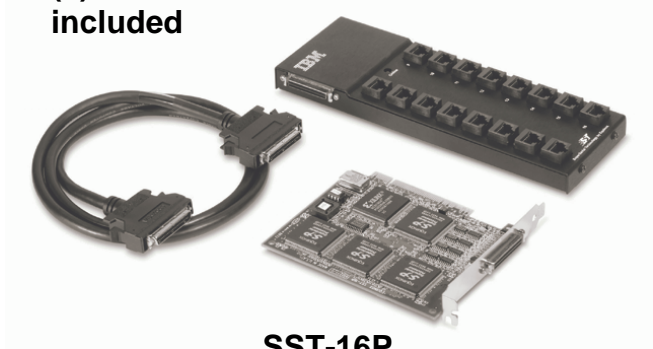|	
BSDI UNIX	SCO UnixWare
Citrix MetaFrame	Sun Solaris-Intel
Citrix WinFrame	UNIX SVR3
Citrix WinView[+]	UNIX SVR4
Linux	Windows 95/98
Novell AIO	Windows NT
OS/2[+]	
SCO UNIX	

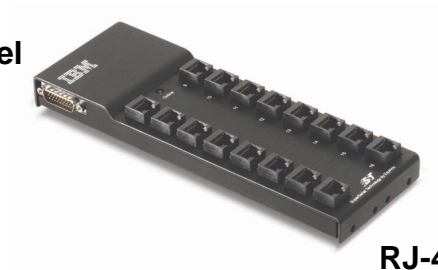[+] *Not supported for 16-port boards*

DB-25 cable

SST-8P DB
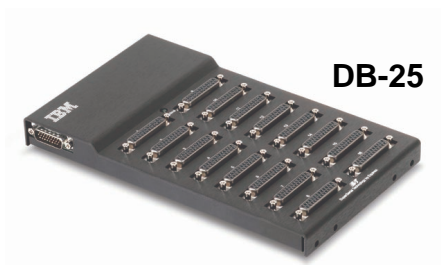
(1) 4' cable included

SST-16P

Choose DB-25 (female DTE) OR RJ-45 converter panel

RJ-45

DB-25

3

Serial I/O
Expandable Subsystems

Benefits & Features

Connects from 16 - 128 high-speed serial ports to a single host slot

Supports speeds up to 115 Kbps per port, full duplex

Offloads virtually all serial processing from the host CPU

15,000 volts multistrike surge protection on every pin of every port

RS-232 port modules support full modem control on all ports (TXD, RXD, CTS, RTS, DSR, DCD, DTR, RI)
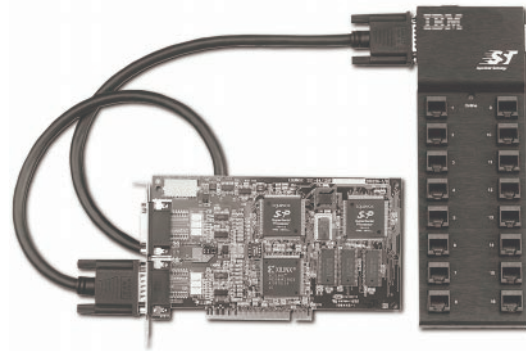
Support for most popular operating systems

Includes comprehensive EquiView Plus NT Connections Manager software, as well as complete port management/diagnostic tools for Unix

Provides high availability I/O solutions for NT, Novell and Unix clustering environments

DB-25 or RJ-45 connectors available

Three-year warranty

SST-128P board with a PM16-RJ port module

The IBM PCI SIO Expandable Adapter is 128 port capable adapter with connection capability for all existing RS232 serial devices for remote access, point-of-sale, automation, etc. The adapter is an intelligent Serial IO interface card for PCI based workstations and Netfinity Servers. The adapter incrementally expands 16 ports at a time using port modules or local area multiplexers. This adapter offers up to 128 RS-232 serial connections with industry leading performance, durability, and management capabilities.

Hardware Highlights

128 port expandable PCI host adapter
16 port RS232 DB25 or RJ45/RJ11 port module options
16 port RS232 DB25 or RJ45/11 local area multiplexer options
Cable option to support concurrent operation from two servers
External power supply option
Support for all ports at 115 Kbps simultaneously
On-board RISC CPUs offload almost all communication load
Uses no IRQs, Memory mapped architecture
Up to 4 cards per system for 512 port total capability
15,000 volt surge suppression

![IBM logo]

(2) 4' cables included to attach port modules

SST-128P

Daisy-chain up to 4 Port Modules

Software Highlights

Support for NT Enterprise, SCO Sentinel, or Vinca for NT clustering allows the same serial ports to load share or fail-over between two servers without physical intervention
Support for any standard COM interface application
Comprehensive diagnostic utilities with SNMP management support for Windows NT
High speed Remote Access and local device connectivity
Operating system support for Windows NT, OS/2, Novell, and UnixWare 7.0.

Major benefits and solutions

Local multi-user serial connectivity (local serial device point-of-sale, industrial automation, etc.) applications can be implemented on Netfinity servers and commercial desktops using standard operating systems and any application using standard COM interfaces.
Remote Access (large modem rack connectivity) applications can be implemented on Netfinity servers and commercial desktops using standard operating systems and communications packages such as Microsoft BackOffice, IBM Communications Server, Citrix WinFrame, or Windows Based Terminal Server.
High performance interface maximizes Netfinity CPU power for application usage.
Adapter can be used with <u>any</u> modem or RS232 serial device allowing very high flexibility

Any of the following Port Modules can be used together or in any combination up to 200 feet apart.

Choose one Multiplexer DB or RJ 110V or 220V

Multiplexer Interface Module

SIO Multiplexer RJ-45

SIO Multiplexer DB-45

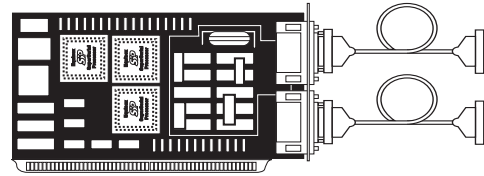# Bonus Software

FREE port management software included with all Serial I/O products!

EquiView Plus for NT

SSDIAG for UNIX

Drivers for Expandable Subsystems Included on CD-ROM

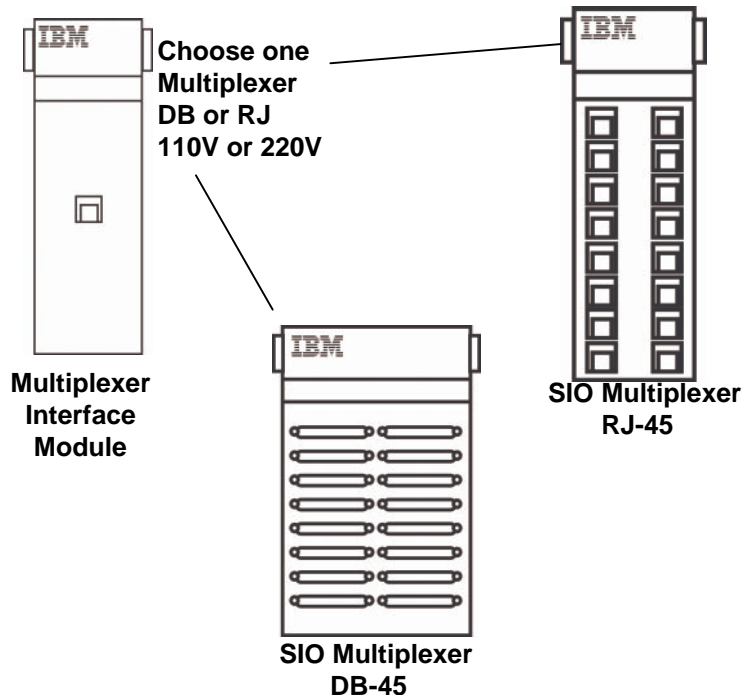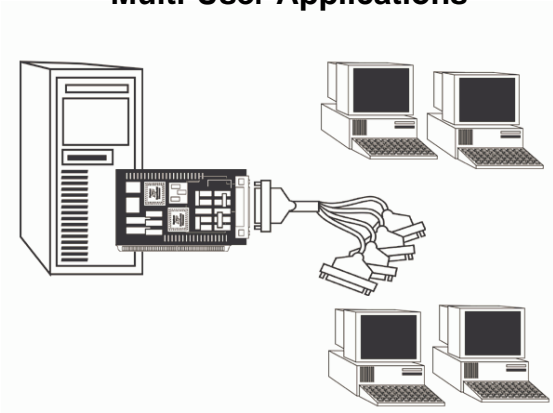|	
BSDI UNIX	SCO UnixWare
Citrix MetaFrame	Sun Solaris-Intel
Citrix WinFrame	UNIX SVR3
Citrix WinView	UNIX SVR4
Linux	Windows 95/98
Novell AIO	Windows NT
OS/2	
SCO UNIX	

For extended distance, use a Serial I/O Multiplexer Set in place of a Port Module to connect a Multiplexer up to 3,500 feet away.
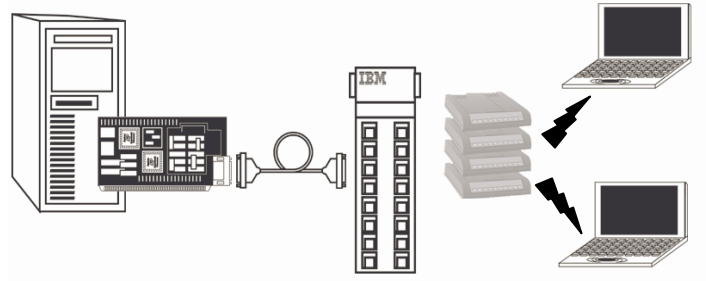
Here are some examples of IBM Serial I/O Solutions

Multi-User Applications
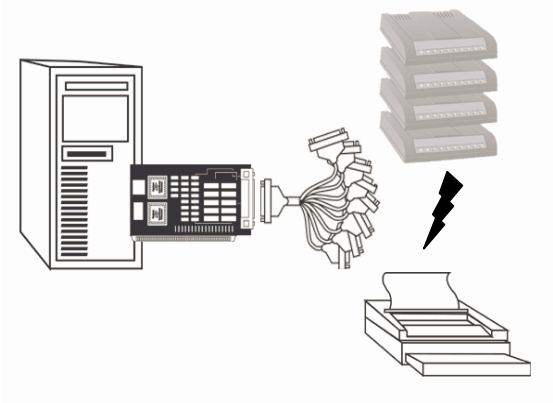
Connect from 8 to 128 ports to one slot in your server and support top speeds of 115 Kbps to 920 Kbps.

Remote Access Applications

With full modem control, the Multiport Boards are optimized for server-based remote-access and dial-in/dial-out applications.

Fax and Print Servers Applications

Connect multiple modems for fax server applications without the expense of proprietary fax modem boards.

Point-Of-Sale (POS) Applications
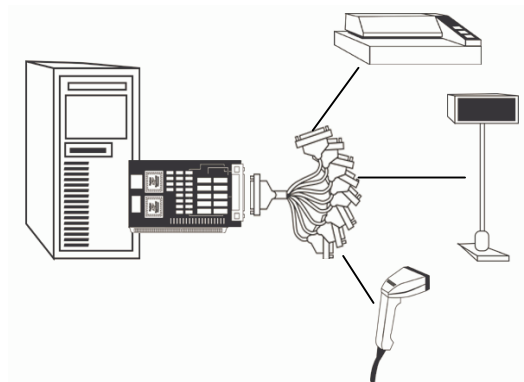
Easily connect devices such as scanners, bar code readers, printers, and cash drawers to a computer.

The flexibility and salability of SuperSerial Technology (SST) enable you to choose the products that fit your specific application.

IBM

EquiView Plus

Managing Your NT Connections with EquiView Plus

Benefits and Features

Included FREE with all IBM Serial I/O products

Solve troublesome serial I/O problems easily and quickly, without the need to physically connect test equipment to the system

Easy-to-use graphical interface for monitoring and managing devices attached to serial ports

Supports SNMP (Simple Network Management Protocol) for LAN and dial-in remote management

View all devices on your entire network - either locally or remotely

Reset modems, run loopback tests, send modem AT commands and more - in the office or miles away

Break-out box displays control signal status on all pins

EquiView Plus provides a graphical topology of all attached products. Simply point and click on the graphics to analyze activity on the serial hardware, attached cabling and individual ports and modems.

With SNMP (Simple Network Management Protocol) support built in, you can easily monitor Modem Pools, terminal servers and serial ports attached to host servers on an Ethernet LAN.

EquiView Plus provides integration with Windows NT Remote Access Service, allowing you to diagnose idle modems, hot-swap modems that have failed and also busy out a telephone line that is causing problems.

"EquiView Plus has reduced my costs of supporting serial I/O applications. It is easy to use and intuitive, so I can quickly troubleshoot problems with serial I/O and modems independent of their applications."
— Typical User

Options By IBM Serial IO Products

Part Number	Product	Estimated Reseller Price
37L1414	**Serial I/O SST8P DB Adapter** 8 Port PCI RS232 Adapter Kit with DB25 Fan Cable	399.00
37L1415	**Serial I/O SST16P RJ Adapter** 16 Port PCI RS232 Adapter Kit with RJ45 Connector Panel	789.00
37L1423	**Serial I/O SST16P DB Adapter** 16 Port PCI RS232 Adapter Kit with DB25 Connector Panel	789.00
37L1416	**Serial I/O SST128P Host Adapter** 128 Port PCI Host Adapter (Requires up to 8 Port Modules and/or Multiplexer Sets Below)	739.00
37L1417	**Serial I/O PM16RJ Port Module** 16 Port, RJ45, RS232 Expansion Module for 37L1416 Host Adapter (Requires one 37L1421 Power Supply for up to four Port Modules)	539.00
37L1418	**Serial I/O PM16DB Port Module** 16 Port, DB25, RS232 Expansion Module for 37L1416 Host Adapter (Requires one 37L1421 Power Supply for up to four Port Modules)	539.00
37L1421	**Serial I/O PS4 Power Supply** Power Supply for up to four 37L1418 and/or 37L1417 Port Modules	90.00
37L1419	**Serial I/O 16 RJ Multiplexer Set** 16 Port, RJ45, RS232 Multiplexer Expansion Set for 37L1416 Host Adapter (Extends to 1km over 2 UTP phone cable)	929.00
37L1420	**Serial I/O 16 DB Multiplexer Set** 16 Port, DB45, RS232 Multiplexer Expansion Set for 37L1416 Host Adapter (Extends to 1km over 2 UTP phone cable)	929.00
37L1424	**Serial I/O 16 RJ WT Multiplexer Set** International version 16 Port, RJ45, RS232 Multiplexer Expansion Set for 37L1416 Host Adapter (Extends to 1km over 2 UTP phone cable)	929.00
37L1425	**Serial I/O 16 DB WT Multiplexer Set** International version 16 Port, RJ45, RS232 Multiplexer Expansion Set for 37L1416 Host Adapter (Extends to 1km over 2 UTP phone cable)	929.00

Pre-Sales Support 800-275-3500 x247
Product Info www.equinox.com/ibm

Serial I/O Tech Specs

	Power Requirements			Dimensions (in inches)			Shipping Weight (in lbs.)	Control Signals	Surge Suppression
	+5V (mA)	+12V (mA)	-12V (mA)	Length	Height	Width			
Multiport boards									
SST-8P	600	130	165	5.65	4.2	0.72	2.81	Full	Yes
SST-16P	600	80	80	5.38	5	0.72	1.34	Full	Yes
Connector Panel									
CP-16 DB	340	260	300	9.62	0.88	5.5	1.78	Full	Yes
CP-16 RJ	340	260	300	9.62	0.88	3.38	1.06	Full	Yes
Expandable Boards									
SST-128P	1650			12.28	4.2	0.72	3.72	Full	Yes
Port Modules									
PM16-DB	1250			9.5	0.96	5.56	2.16	Full	Yes
PM16-RJ	1250			9.5	0.96	3.22	1.38	Full	Yes
MIM-1	630	Sold as part of package		9.5	0.96	3.22	1.28	Full	Yes
CMX16-DB	830			15.56	0.96	5.74	4.37	Full	Yes
CMX16-RJ	830			9.5	0.96	3.22	4.32	Full	Yes

Need more information?

IBM Reseller and General Information
United States (800) 426-9735 ext. 4752
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IBM Fax Information Service
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Technical Support
United States (800) 426-7378
Canada (800) 426-7378

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Department D7VA
3039 Cornwallis Road
Research Triangle Park, NC 27709

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* This scenario is a composite based upon typical customer requirements and not intended to represent a specific customer engagement. Individual customers will have different requirements. Contact your IBM representative to discuss your specific needs.