



### **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 all 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.

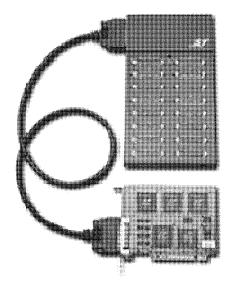




### **Serial I/O Multiport Boards**

#### **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



#### **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 <u>any</u> modem or RS232 serial device allowing very high flexibility

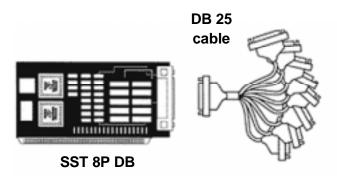
#### **Bonus Software**

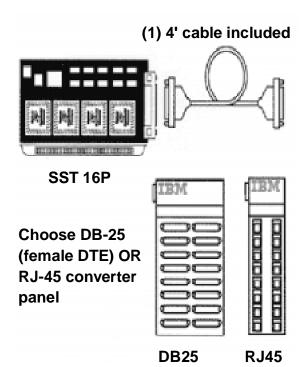
**FREE** port management software included with all Serial I/O products!

- EquiView Plus for NT
- SSDIAG for UNIX

#### **Drivers for Multiport Boards Included on CD-ROM**

BSDI UNIX
Citrix WinFrame
Citrix WinView<sup>+</sup>
Sun Solaris X86
Linux
UNIX SVR3
Novell AIO
UNIX SVR4
OS/2<sup>+</sup>
Windows 95/98
SCO UNIX
Windows NT





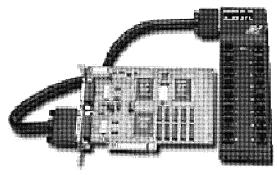
<sup>&</sup>lt;sup>+</sup> Not supported for 16-port boards



# 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



#### **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

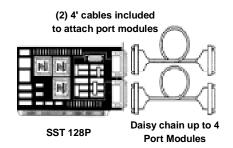
#### **Bonus Software**

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

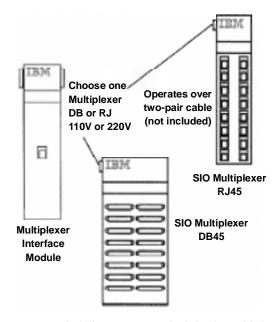
- EquiView Plus for NT
- · SSDIAG for UNIX

### Drivers for Expandable Subsystems Included on CD-ROM

BSDI UNIX SCO UnixWare
Citrix WinFrame SCO Xenix
Citrix WinView Sun Solaris X86
Linux UNIX SVR3
Novell AIO UNIX SVR4
OS/2 Windows 95/98
SCO UNIX Windows NT



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

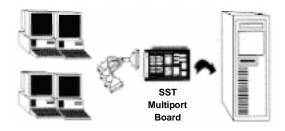


For extended distance, use a Serial I/O Multiplexer Set in place of a Port Module to connect a Multiplexer up to 3,500 feet away.



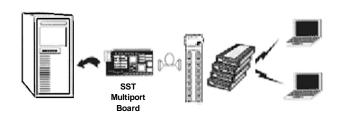
#### Here are some examples of IBM Serial I/O Solutions

#### **Multi-User Applications**



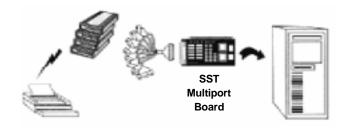
Connect from 8 to 128 ports to one slot in your server and support top speeds of 115 Kbps to 920 Kbps..

#### **Remote Access Applications**



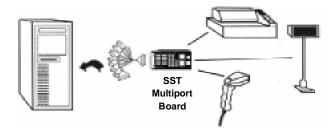
With full modem control, the Multiport Boards are optimized for server-based remote-access and dial-in/dial-out applications.

#### **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 terminals, printers, scanners and bar code readers to a computer.

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



### **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 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

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.

Options P/N's	Product Set Name	Set includes	Fru P/N's
37L1414	Serial I/O SST8P DB Set		
		8-Port Serial I/O card	37L1426
		8-Port Serial I/O cable	37L1474
37L1415	Serial I/O SST16P RJ Set		
		16-Port Serial I/O card	37L1427
		16-Port RJ45 Connector Panel	37L1475
		16-Port Cable	37L1476
37L1423	Serial I/O SST16P DB Set		
		16-Port Serial I/O card	37L1427
		16-Port DB25 Connector Panel	37L1428
		16-Port Cable	37L1476
37L1416	Serial I/O SST128P Expandable Set		
		128-Port Serial I/O card	37L1429
		64-Port expansion cable	37L1487
37L1417	Serial I/O PM16RJ Port Module		37L1430
37L1418	Serial I/O PM16DB Port Module		37L1431
37L1419	Serial I/O 16RJ Multiplexer Set		
		Serial I/O Multiplexer RJ45	37L4575
		Multiplexer Interface Module	37L4576
		Power Supply	37L1432
37L1420	Serial I/O 16DB Multiplexer Set		
		Serial I/O Multiplexer DB25	37L1495
		Multiplexer Interface Module	37L4576
		Power Supply	37L1432
37L1424	Serial I/O 16RJ Multiplexer Set World Trade		
		Serial I/O Multiplexer RJ45	37L4575
		Multiplexer Interface Module	37L4576
		Power Supply	37L1432
37L1425	Serial I/O 16DB Multiplexer Set World Trade		
		Serial I/O Multiplexer DB25	37L1495
		Multiplexer Interface Module	37L4576
		Power Supply	37L1432
37L1421	Serial I/O PS4 Power Supply	1 1 1	37L1432
37L1422	Serial I/O PS4 Power Supply World Trade		37L1432

#### Serial I/O Tech Specs

	Power Requirements			Dimensions (in inches)			Shipping Weight	Control	Surge
	+5V (mA)	+12V (mA)	-12V (mA)	Length	Height	Width	(in lbs.)	Signals	Suppression
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 Canada (800) 465-7999

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1-98

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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.