Fast emulation adapters for every system

IBM 5250 Express PC Card

Highlights

- ***Performance improvements for investment protection while you build for the future***
- ***Attachment of PCs with Type II or Type III PC Card slots to IBM System/3x and AS/400® hosts***
- ***New 5250 Express Data Stream feature for nearly four times more media throughput than other twinaxial devices***
- ***Seven display sessions or six display sessions and one printer session when attached to System/3x or AS/400 host***
- ***Supported on both IBM and non-IBM systems***
- ***Supported by IBM's most popular 5250 emulation programs***
- ***Plug and Play for easy installation***
- ***Cabling options for a variety of system types***
- ***Support available 24 hours a day, 7 days a week***

The new IBM 5250 Express PC Card™ provides attachment of PCs equipped with PC Card (PCMCIA) slots to IBM System/36™, System/38™ and AS/400 hosts using the popular twinaxial protocol. While maintaining the function and compatibility of its predecessor, the IBM 5250 Emulation PCMCIA Adapter, the 5250 Express PC Card offers significant improvements in performance, ease of installation and the number of physical sessions supported without a router.

Easy to configure and cost-effective, the 5250 Express PC Card prepares you for the future of twinaxial while protecting your network investment.

Reduce system delays with the 5250 Express Data Stream

One way the 5250 Express PC Card helps you build for the future is by supporting the 5250 Express Data Stream. This feature supports two separate modes of operation that increase performance: optimized mode and 2-Mbps mode.

Optimized mode reduces the number of bits required to transmit the same amount of data as the standard 5250 data stream. Using a supported 5250 emulation program such as the new IBM 5250 Express Program Version 4.0 and an AS/400 system that supports this feature, users can nearly double media throughput.

If all the devices on a twinaxial workstation controller port (up to seven devices per port) are 5250 Express adapters running software that supports the 5250 Express Data Stream, then the 2-Mbps mode becomes operational and the line speed doubles from 1 Mbps to 2 Mbps. Systems such as the IBM AS/400 Advanced Entry 9401 Model 150 support both the optimized and 2-Mbps modes.

The combination of both modes can result in media throughput nearly four times greater than that of other twinaxial devices. For more details on 5250 Express PC Card performance, refer to the IBM 5250 Emulation Family Home Page on the Internet at URL: http://www.networking.ibm.com/525/525home.html.

Protect your investment
The 5250 Express PC Card provides for competitively priced host attachment of any personal computer equipped with a Type II or Type III PC Card expansion slot meeting the PC Card Standard — February 1995 or later. The adapter is designed to operate and has been tested in personal computers such as the IBM ThinkPad® Series, IBM PC 300™ and PC 700™ Series with front-access PCMCIA support and selected systems from vendors like Toshiba, Compaq, Sharp, AST, Hewlett-Packard and NEC. And all 5250 Express Adapters carry a lifetime warranty.

The 5250 display station emulation function is provided when the adapter is used with a compatible 5250 emulation program. Compatible emulation programs are available for popular operating environments such as Windows® 3.x, Windows 95, Windows NT®, OS/2® and DOS.

This adapter is also supported by most of the compatible IBM terminal emulation programs available for previous IBM 5250 emulation adapters. In addition to protecting your hardware and software investments, such compatibility ensures that your investment in employee training can be directly applied for use with the newest member of the IBM 5250 Emulation Family.

Simplify setup and maximize flexibility
The 5250 Express PC Card minimizes your setup problems by offering the Plug and Play capability of PCs with a Type II or III PC Card expansion slot. So you don't have to configure memory and I/O addresses at installation; the PC automatically configures the adapter for you.

AS/400 Advanced 36® and System/3x users who don't have access to a multi-session router can still have the benefit of seven physical links (station addresses) to the host. These can be configured as seven display sessions or six display sessions and one printer session. AS/400 users can take advantage of the shared-addressing feature available with the 5250 Express Program to configure up to 28 sessions.

Attachment to the host is made via a supported host cabling system either locally to the host twinaxial workstation controller or remotely via a 5294, 5394 or 5494 Remote Control Unit. Adapter cables are available which connect the adapter directly to today's most popular cabling systems—STP and UTP, as well as traditional twinaxial cabling.

Go with the proven technology leader
This new adapter takes advantage of the latest design improvements and manufacturing processes available in order to provide a high level of function in a credit-card-size package. It features a new ASIC designed by IBM Charlotte in cooperation with AS/400 developers in Rochester, MN. The result is a potential boost in performance that is available only through technology developed by IBM.

The success of this newly available adapter in the mobile solutions marketplace reaffirms IBM's lead position as a market-driven designer and manufacturer of advanced technology components. The adapter was designed and manufactured by IBM Application Solutions Division, Complementary Products, located in Charlotte, NC.

For more information
To find out more about the IBM 5250 Express PC Card and other high-performance IBM communications and networking products, contact your IBM representative or call IBM Direct at 1 800 IBM-CALL (1 800 426-2255). You can also access the IBM 5250 Emulation Family Home Page at URL: http://www.networking.ibm.com/525/525home.html.

Copies of this and other related product specification sheets can be obtained from the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1 800 426-4239) in the U.S. or Canada or by dialing (415) 855-4329 outside the U.S. and Canada and requesting any of the following document numbers:

5210: *IBM 5250 Express PC Card*

5209: *IBM 5250 Express ISA Adapter*

5574: *IBM 5250 Express PCI Adapter*

1943: *IBM 5250 Emulation Family*

Features	*Benefits*
5250 Express Data Stream	Can provide nearly 4 times more media throughput than other twinaxial devices
Up to 7 physical links to the host	Provides maximum flexibility without a router
Emulation programs for most popular operating environments	Ease of use, investment protection
Supported on Type II or Type III PC Card slots	Compatible with IBM and non-IBM systems
Plug and Play capability	Fast and easy installation, automatic configuration
Available UTP and STP adapter cables	Connect to today's most popular cabling systems
Lifetime warranty	High reliability, low cost of ownership

IBM 5250 Express PC Card at a glance

Part numbers

Adapter and adapter cable kits
- 5250 Express PC Card: 88H0256
- Adapter with Terminating Twinax Cable: 88H0279
- Adapter 10-Pack: 88H0286

5250 Emulation Programs
- 5250 Express Program V 4.0: 88H0190
- 5250 Express Program V 4.0 Upgrade: 88H0215
- 5250 Emulation for Windows V 1.1: 11H1303
- 5250 Emulation for Windows V 1.1 Upgrade from V 1.0: 11H1308
- 5250 Emulation for Windows V 1.1 Upgrade from any IBM 5250 emulation program: 11H1340
- Personal Communications AS/400 for OS/2 Twinaxial Entry Level V 4.1: 51H5900
- Personal Communications AS/400 for OS/2 Twinax Entry Level V 4.1 Upgrade: 51H5909

Adapter cables

Twinax Cable: 6403635
Twinax Cable 10-pack: 11H0752
Data Connector Cable: 60G1043
UTP Balun (RJ-11 jack): 60G1042
UTP Balun (RJ-45 jack): 31H5087

Physical specifications

Width: 86 mm (3.4 in.)
Depth: 54 mm (2 in.)

Operating environment

Temperature
- On: 0° to 60°C (32° to 140°F)
- Off: 0° to 70°C (32° to 158°F)

Relative humidity
- On: 8% to 95% (non-condensing)
- Off: 5% to 95% (non-condensing)

Power requirements

Voltage	*Nominal Current*	*Maximum Current*
+5 V	850 mA	1200 mA

Certifications

This adapter meets FCC Class A, EEC EMC Directive (CE Mark) and VCCI Class 1 (0dB) operating criteria when connected by an IBM-supported adapter cable.

Publications

5250 Express Hardware Manual: S88H-0277
5250 Express Program Version 4.0 User's Guide: S88H-0191
5250 Emulation for Windows V 1.1 User's Guide: G571-0390
Personal Communications AS/400 for OS/2 Twinax Entry Level V 4.1 User's Guide: G571-0439

Limited warranty

Lifetime*

***Note**

The limited lifetime warranty is not transferable by the end-user customer. For information regarding the terms and conditions of IBM's limited warranty, please call 1 800 772-2227. Copies of IBM's statement of limited warranty are available upon request.

Installation information

Systems

Operates in any computer equipped with a Type II or III PC Card expansion slot meeting PC Card Standard—February 1995 or later.

Software and operating systems

- The IBM 5250 Express ISA Adapter is compatible with the same 5250 terminal emulation programs and the same functions as the IBM Emulation PCMCIA Adapter it replaces. Compatible IBM 5250 emulation programs and their operating system environments include:

IBM DOS 5.0 or higher

IBM 5250 Express Program V 4.0 or higher
IBM 5250 Enhanced Link V 3.0 or higher
IBM AS/400 Client Access™ V3 R1 M1 level or higher

Microsoft® Windows 95

IBM 5250 Emulation for Windows V 1.1
IBM Personal Communications AS/400 for Windows 95 V 4.1 or higher
IBM AS/400 Client Access V3 R1 M1 and V3 R1 M2 levels or higher

Microsoft Windows 3.x

IBM 5250 Emulation for Windows V 1.1
IBM Personal Communications AS/400 for Windows V 4.1 or higher
IBM AS/400 Client Access V3 R1 M1 level or higher

Microsoft Windows NT

IBM Personal Communications AS/400 for Windows NT V 4.1 or higher
IBM AS/400 Client Access V3 R1 M1 and V3 R1 M2 levels or higher

IBM OS/2 Warp V3 or higher

- IBM Personal Communications AS/400 for OS/2 Twinax Entry Level V 4.1 or higher
- IBM Personal Communications AS/400 for OS/2 V 4.1 or higher
- IBM AS/400 Client Access V3 R1 M1 level or higher
- IBM Communications Manager/2 V 1.1*
- IBM 5250 Emulation for Windows V 1.1
- Up to 2 sessions are supported in the WIN-OS/2 environment of OS/2*

- 5250 Express functions include the 5250 Express Data Stream, Plug and Play and access to 7 physical sessions without requiring a router. Not all 5250 terminal emulation programs fully support the new Express functions at this time. For a current list of 5250 terminal emulation programs that support the 5250 Express functions, refer to the IBM 5250 Emulation Family Home Page at URL: http://www.networking.ibm.com/525/525home.html.

Cables and connectors

An adapter cable is required to attach the adapter to the establishment host cabling system. One of the following available cables is recommended:

- 5250 Emulation Integrated Cable Assembly for twinaxial cabling
- 5250 Emulation Data Connector Cable for STP via an IBM Data Connector
- 5250 Emulation UTP Balun for UTP via an industry-standard RJ-45 or RJ-11 jack

***Notes**

IBM Communications Manager products support AS/400 attachment only. 5250 Emulation for Windows V 1.1, when running in the WIN-OS/2 environment of OS/2, supports AS/400 attachment only. Under native Windows, 5250 for Windows supports attachment to the IBM System/36, System/38 or AS/400.

© International Business Machines Corporation 1997

IBM United States
Department NAD, Bldg. 101
8501 IBM Drive
Charlotte NC 28262

Printed in the United States of America
6-97

All Rights Reserved

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

® Advanced 36, AS/400, AT, IBM, OS/2 and ThinkPad are registered trademarks of International Business Machines Corporation.

™ Client Access, PC 300, PC 700, System/36, System/38 and 5250 Express PC Card are trademarks of International Business Machines Corporation.

® Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation.

All other company names or products are trademarks or registered trademarks of their respective companies.

Printed on recycled paper

G571-0014-01