

Communication Products for the IBM Personal Computer

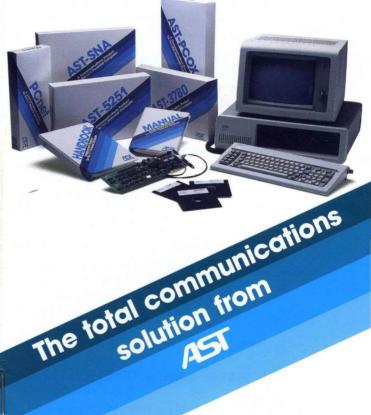




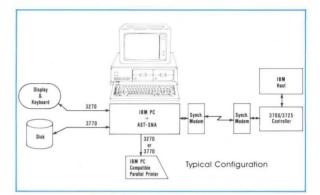
Table of Contents

Page

- 3 AST-SNA 3270 SNA/SDLC Support
- 7 AST-PCOX 3270 Coax
- 10 AST-BSC 3270 BSC Support
- 14 AST-5251 5251 Model 12
- 17 AST-3780 3780 BISYNC Support
- 21 AST-PCnet Local Area Network
- 24 CC-232

User programmable communication card

AST-SNA[™]



Features

Emulates IBM 3274 Model 51C Control Unit with Configuration B support which includes:

- Summary maintenance statistics
- Inbound/outbound pacing
- Automatic session recovery

Data link support includes:

- SDLC half duplex protocols using half or full duplex communication facilities
- Line speeds of up to 9600 BPS*
- Switched or nonswitched facilities
- NRZ or NRZI encoding
- Built- in modem eliminator for short distances

CRT and keyboard facilities include:

- 24-line x 80-column CRT
- 25th line status indicator
- Basic 3270 attribute support
- · Upper- and lowercase data
- 75- or 87-key EBCDIC (typewriter) keyboard

Emulates 3278 Model 2 or 3279 Model 2A Display Station

Emulates 3287-type printer with:

- 3270 Data Stream Compatibility (DSC) or SNA character string (SCS)
- Upper- and lowercase characters
- Local printer copy support with session level
 and between bracket printer sharing
- Host-initiated screen print

*Currently supported speeds of up to 4800 BPS.

Optionally emulates IBM 3770 Communication Terminal for batch data transfer operation such as Remote Job Entry with:

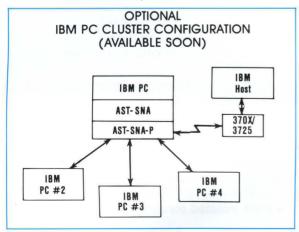
- Formatted printing
- Source and object data transfer
- Multiple job file support

Optionally supports multiple IBM Personal Computers.

Optionally supports multiple ASCII terminals. †

The tremendous growth of the personal computer market has created a real need for efficient communication between personal computers and mainframe computers. AST Research has been designing advanced communication products for several years. Since December, 1981, AST has devoted a significant amount of its resources to develop and market communication products for the IBM PC. These products include asynchronous communication adapters, multi-protocol communication adapters, bisync 2780/3780 emulation packages, and now the AST-SNA communication package.

With AST's family of SNA/SDLC products, the IBM PC emulates several types of SNA communications. The basic product is multifunctional so that all emulations supported can operate from a single IBM PC. AST-SNA is a complete software and hardware product family designed to utilize the full capabilities of any IBM computer supporting SNA/ SDLC communication protocol.



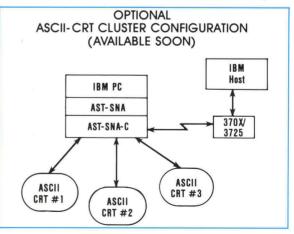
+IBM 3101 and DEC VT100 ASCII terminals only.

IBM's SNA is fast becoming the new data processing industry standard. The IBM PC with AST-SNA provides all the facilities of a 3270 or 3770 terminal with special added features. Specifically, the IBM PC operates as a:

- 3270 SNA/SDLC Display Station, Logical Unit (LU) 2 support.
- 3270 SNA/SDLC Printer, Logical Unit (LU) 1 and 3 support.
- Optional 3770 SNA/SDLC SCS communication, batch RJE.
- Optional cluster controller with support for additional IBM PCs or ASCII terminals.

All three logical units can exist and operate from the IBM PC. The family of AST-SNA products also allows various optional configurations. Additional IBM PCs can be supported through one unit being used as a cluster controller. Another configuration allows ASCII† CRTs attached to the IBM PC to emulate a 3278 Model 2.

AST-SNA is completely compatible with existing equipment. No costly changes to software or hardware are required. Best of all, the cost of all AST-SNA products including hardware and software is but a fraction of the price of the original equipment it replaces. AST's cluster arrangement of up to four IBM PCs is a perfect example of potential savings possible. Of course, there are also savings to be considered by comparing costs associated with interfacing extra lines to a 370X/3725 controller as is required for original equipment packages.



+ IBM 3101 and DEC VT100 ASCII terminals only.

AST-PCOX[™]

The AST-SNA family consists of the following products:

- AST-SNA Single Display Station support with attached printer (LU1, 2 & 3). Includes software and synchronous communication board. Available soon.
- AST-SNA-P cluster option for AST-SNA, allowing attachment of up to three additional IBM PCs as 3278 devices. Includes software and cluster communication board. Available soon.
- AST-SNA-C cluster option for AST-SNA, allowing attachment of up to three additional ASCII CRTs as 3278 Model 2 devices. Includes software and cluster communication board. Available soon.
- AST-SNA-RJE, 3770 RJE support, available soon.

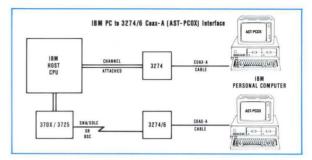
System Requirements

- IBM PC with 128K memory and one drive.
- Monochrome or color display
- Optional printer (parallel interface)
- One expansion slot AST-SNA adapter
- Optional one expansion slot for AST-SNA-P or AST-SNA-C cluster adapter
- Synchronous modem (for distances of more than 50 feet)
- PC-DOS 1.1 or 2.0

Easy to learn and use

AST-SNA has been designed with the user or operator in mind. There is no complicated instruction set to remember. A comprehensive User's Manual is provided to step you through all operations and to clarify any questions.

AST-SNA supports interaction with various host systems, subsystems, and access methods including CICS/VS, IMS/VS, JES 2 & 3, POWER/VS, RES, TCAM, VTAM, NCCF, TSO, NOSP, VSPC, 8100PX, and others.



Features

Complete IBM 3278 Model 2, 3, or 4 emulation

IBM 3279 Model 2A or 3A emulation (with color monitor)

Requires no host system or application changes

Attaches, as category A device, to:

- Channel-Attached IBM 3274
- Remote BSC IBM 3274 or 3276
- Remote SNA/SDLC IBM 3274 or 3276

Menu-driven file transfer utility

- Personal computer to host
- Host to personal computer

Concurrent PC-DOS and 3278/3279 sessions

AST-PCOX[™] allows communication and resource sharing between an IBM Personal Computer and an IBM host system via an IBM 3274/3276 terminal control unit category A coaxial interface. With AST-PCOX installed, the IBM PC retains its stand-alone processing capabilities. Added to these is the additional feature of IBM 3278/3279 terminal emulation.

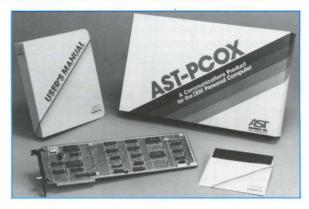
With AST-PCOX, an IBM PC can emulate IBM 3278 Models 2, 3, and 4 and IBM 3279 Models 2A and 3A (if a color display adapter is installed). Only

one Model can be emulated at one time; however, different software modules can be created to allow for easy switching between Model-types if desired. No host software changes are needed to support IBM terminal emulation and to interface with an existing channel-attached 3274, remote BSC 3274/3276, or remote SNA/SDLC 3274/3276.

The Professional Workstation Facility (PWF) is an optional program available with the AST-PCOX product. This program enables file transfers between an IBM PC and a host computer via familiar SPF-like menu selection. In addition, the standard AST-PCOX package includes interfacing subroutines used in the file transfer utility. This is to facilitate user-written IBM PC applications that directly interface with host applications. Customized file transfer applications, therefore, can be easily developed to communicate with host applications supporting any existing 3278/3279 terminals.

When looking at the total expense involved in other communication methods (the cost of the modem, communication line, and communication support at the host end), AST-PCOX offers a costeffective means of host connection. This is especially true when a 3274/3276 controller is already installed, or when a cluster of IBM PCs need to communicate with a host via an additional 3274/3276 controller. The prorated cost of the 3274/3276 per IBM PC is far more attractive than the cost of having a dedicated line for each IBM PC.

In short — AST-PCOX efficiently integrates the IBM PC into an IBM host network while putting no restrictions on the PC's local processing capacity. The IBM PC is changed into a PC/3278/3279, with emulation easily and quickly entered and exited.



Specifications

- Power Requirements: +5 V at 1.1 A (provided by PC).
- Physical: Primary Board Size 4" x 13" (10.2 x 34.3 cm). Secondary Board Size 3³/₄" x 9" (9.5 x 22.9 cm). (Secondary board is mounted on the Primary).
- Environmental: Operating Temperature 32° to 110°F (0° to 45°C). Storage Temperature -20° to 160°F (-30° to 70° C). Relative Humidity 0% to 95%, non-condensing. Heat Generation 6.5W (23.4 BTU/h).
- Functional: Microprocessor Proprietary, based on 74LS181 ALU. Interfaces Coaxial IBM Category A, 93Ohm. DMA Standard IBM PC interface, via edge connector.

System Requirements

- IBM PC with 128K, and one drive
- Monochrome or Color Display
- PC-DOS 1.1 or 2.0

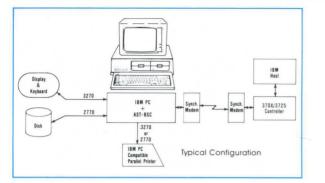
Model Number Designation

AST-PCOX includes software on 5¹/₄" diskette, User's Manual, and single slot PCOX board. ETU-PCOX includes software on 5¹/₄" diskette.

Availability: Immediate

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AST-BSC[™]



Features

Emulates IBM Model 51C Control Unit with Configuration B.

Data link support includes:

- IBM Binary Synchronous Communications (BSC)
- Line speeds of up to 9600 bps
- · Switched or nonswitched facilities
- Built-in modem eliminator for short distances

CRT and keyboard facilities include:

- 24-line X 80-column CRT
- 25th-line status indicator
- Basic 3270 attribute support
- Upper- and lowercase: data
- 75- or 87-key EBCDIC keyboard

Emulates 3278 Model 2 or 3279 Model 2A Display Station.

Emulates 3287-type printer with:

- 3270 Data Stream Compatibility (DSC)
- Upper- and lower case characters
- Local printer copy support
- Host-initiated screen print

Optionally emulates IBM 2770 Communication Terminal for batch data transfer operation such as Remote Job Entry with:

- Formatted printing
- Source and object data transfer
- Space compression/expansion

Optionally supports multiple IBM Personal Computers.

Optionally supports multiple ASCII terminals. † † IBM 3101 and DEC VT100 ASCII terminals only. The tremendous growth of the personal computer market has created a real need for efficient communication between personal computers and mainframe computers. AST Research has been designing advanced communication products for several years. Since December, 1981, AST Research has devoted a significant amount of its resources to develop and market communication products for the IBM PC. These products include Asynchronous communication adapters, Multiprotocol communication adapters, Bisync 2780/3780 emulation packages, and now the AST-BSC communication package.

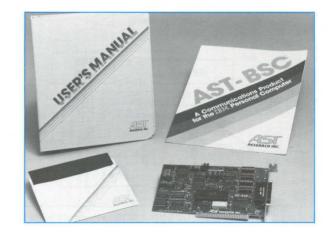
IBM's Bisync is a long-established standard for the data processing industry. With the AST-BSC family of products, the IBM PC emulates several types of Bisync communications. The basic product is multifunctional so that all emulations supported can operate from a single IBM PC. AST-BSC is a complete software and hardware product family designed to utilize the full capabilities of any IBM computer supporting the Bisync communication protocol.

The IBM PC with the basic AST-BSC package emulates the following devices:

- 3274 Bisync Control Unit
- 3278 or 3279 Display Station
- 3287 Printer

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13



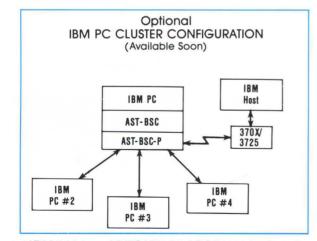
Optional extensions to the basic package provide even more functions to the user, adding:

- 2770 Terminal emulation (Batch RJE option)
- Support for attachment of additional PCs (PC cluster option).
- Support for attachment of ASCII CRTs (CRT cluster option).†

AST-BSC is completely compatible with existing equipment. No costly changes to software or hardware are required. Best of all, the cost of all AST-BSC products including hardware and software is but a fraction of the price of the original equipment it replaces. AST Research's cluster arrangement of up to four IBM PCs is a perfect example of the potential savings possible. Of course, there are also savings to be considered by comparing costs associated with interfacing extra lines to a 370X/3725 Controller as is required for original equipment packages.

The AST-BSC family consists of the following products:

- AST-BSC Single Display Station support with attached printer (includes software and synchronous communication board).
- AST-BSC-P, PC cluster option for AST-BSC allowing attachment of up to three additional IBM PCs as 3278 or 3279 devices. Includes software and cluster communication board. Available soon.



⁺ IBM 3101 and DEC VT100 ASCII terminals only.

- AST-BSC-C cluster option for AST-BSC, allowing attachment of up to three additional ASCII† CRTs as 3278 or 3279 devices. Includes software and cluster communication board. Available soon.
- AST-BSC-RJE, 2770 RJE support. Available soon.

System Requirements

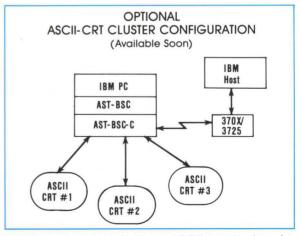
- IBM PC with 128K memory and one drive
- Monochrome or color display
- Optional printer (parallel interface)
- One expansion slot for AST-BSC
- Optional one expansion slot for AST-BSC-P or AST-BSC-C cluster adapter
- Synchronous modem or modem eliminator

Easy to learn and use

Nº.

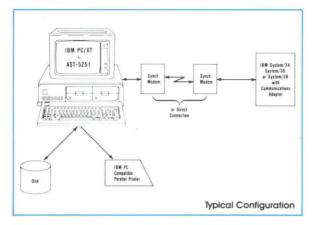
AST-BSC has been designed with the user or operator in mind. There is no complicated instruction set to remember. A comprehensive User's Manual is provided to step you through all operations and to clarify any questions.

AST-BSC supports interaction with various host systems, subsystems, and access methods including CICS/VS, IMS/VS, JES 2 & 3, POWER/VS, RES, TCAM, VTAM, NCCF, TSO, NOSP, VSPC, 8100PX, and others.



+IBM3101 and DECVT100 ASCII terminals only.

AST-5251[™]



Features

- Allows connection of IBM PC to System/34, System/36, or System/38 for interactive communications
- Emulates IBM 5251 Model 12 Display Station
- An attached Parallel Printer emulates IBM 5256 Printer
- Allows IBM PC connection to host system with modem or direct connection without additional external hardware
- Operates on switched, leased, point-to-point, or multipoint lines
- Supports line speeds from 1200 bps to 9600 bps
- Provides interface for bidirectional file transfers between IBM PC and host system (with optional ETU-34, ETU-36, ETU-38 emulator transfer utility)
- Supports field and display attributes
- Includes audible alarm and edge indicators
- Automatic mode for operatorless sessions

Now your IBM Personal Computer can emulate a powerful interactive remote work station with AST-5251.

AST-5251 is a hardware/software product allowing the connection of the IBM Personal Computer to the System/34, System/36, or System/38 for interactive communication under the IBM-supplied remote work station support for 5251 Model 12 Display Stations.

With AST-5251, the IBM Personal Computer is connected to the host system directly through synchronous modems (or direct connection to communications adapter) without additional external hardware such as protocol converters. Emulating the 5251 Model 12 remote work station with an attached 5256 printer, AST-5251 performs transparently under the standard operating system support of the System/34, System/36, and System/ 38 on switched, leased, point-to-point, or multipoint lines at speeds from 1200 bps (bits-persecond) to 9600 bps, and may coexist with 5251 terminal clusters in a communications network.

Prerequisite Programs

IBM's Personal Computer Disk Operating System (PC-DOS) Version 1.1 or 2.0 is required to run AST-5251.

Supported Functions

With AST-5251, the Personal Computer appears to the host system as an IBM 5251 Model 12 Display Station with an 83-key EBCDIC (typewriter) keyboard and an attached IBM 5256 dot matrix printer. Functions of the 5251 Model 12 Display



Station supported include field and display attributes, audible alarm, and edge indicators. Some functional improvements have been made as well, including audible keystroke error indication (in addition to normal 5251 error codes) and a typamatic Delete key.

Beyond the normal 5251 functions, AST-5251 also provides an interface for bidirectional file transfers between the IBM Personal Computer and the host system (with optional S/34, S/36, S/38 emulator transfer utility).

System Requirements

AST-5251 was designed to run on the IBM Personal Computer with the following hardware installed:

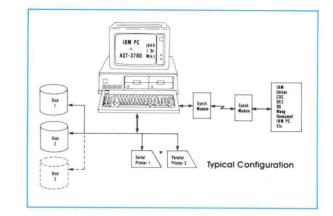
- At least 64K Memory (RAM) for DOS 1.1 (96K for DOS 2.0)
- A Diskette Adapter and at least one Diskette Drive
- Either the Monochrome or Color/Graphics Adapter
- An 80x25 Display Device (Monochrome or Color)
- A Parallel Printer Adapter and IBM-Compatible Printer (optional; only necessary if printer support is desired)

Model Number Designation

AST-5251 includes software on 51/4" diskette, User's Manual, and CC-432 (synchronous communications board).

Availability: Immediate

AST-3780[™]



Features:

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Emulates all common Bisync RJE Workstations:

- IBM 2780
- IBM 3780
- IBM 2770
- IBM 3741

Compatible with a wide range of host computers:

- IBM 370, 43XX, 30XX, System /34, etc.
- DEC
- Wang
- Honeywell
- Etc.

Data link support includes:

- Half duplex communications using half or full duplex facilities
- Line speeds of up to 19.2K baud.
- Switched or leased communication line operation
- Built- in modem eliminator for short distances
- Automatic translation to/from EBCDIC

Workstation features include:

- Transparent and nontransparent operation
- Dynamic device selection between display, printer, and disk
- Variable message block size up to 512 characters
- Optional text compression and decompression
- Support of all printer forms control functions

Different modes of operation:

- Interactive mode for use by operator
- Batch mode for unattended use

PC-to-PC communication supported.

Now your IBM Personal Computer can emulate a powerful remote job entry station with AST-3780.

AST-3780 is a complete software and hardware package designed to capture the full power of any computer supporting the Bisync, point-to-point communications protocol.

The IBM 2780 and 3780 RJE stations have been staples of the data processing industry for many years. With AST Research's AST-3780 emulator package, the IBM Personal Computer will provide you with all the power of these terminals plus many extra features. AST-3780 is completely plug-compatible with existing equipment— no costly changes to software or hardware are required. Best of all, the cost of a complete AST-3780 system including all hardware and software is but a fraction of the price of the original equipment that it replaces.

AST-3780 allows the user to transfer program, data, or text files between IBM Personal Computer and a host computer system at high (up to 19.2K baud) speeds. All messages are automatically checked for possible data transmission or reception errors and are corrected as necessary without operator intervention. The data may then be used as input to a program running on the Personal Computer, or output from the PC may be sent to the host system.

Easy to learn, easy to use.

AST-3780 has been designed with the novice user or operator in mind. There is no complicated instruction set to remember because all operations are menu driven. As an example, only two keystrokes are required to initiate a transmit operation from the keyboard. A comprehensive User's Manual is provided to step you through all operations and clarify any questions. **A command file can be created for unattended batch operations**.

More versatile than an IBM RJE.

AST-3780 allows the user to transmit and receive data directly to or from diskette, eliminating the headaches associated with punched cards. One 5¼-inch diskette can hold more than 320,000 characters—as much as 4,000 cards. Any dot matrix may also be connected to the system, allowing up to 600 lines-per-minute hard copy output. Full input and output text formatting is automatically provided, as well as transparent text (column binary) capabilities.

The keyboard and screen may also be used for input and output to facilitate easy interaction with communication software such as HASP, JES1, POWER, or RES.

More advanced features

Unattended operation permits the transmission and reception of data without operator interaction.

Back-to-back mode may be used to transfer files between two Personal Computers (with AST-3780) without special hardware.

Hold-scroll allows keyboard control of the rate that data is displayed.

Device independence means that AST-3780 can utilize any random access storage device connected to the Personal Computer for input and output.

System Requirements

- IBM PC with 64K memory (128K for DOS 2.0) with one drive
- Color or Monochrome Display
- Optional Printer
- PC-DOS 1.1 or 2.0

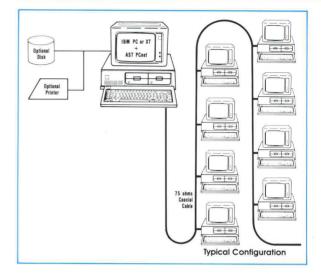


Model Number Designation

AST-3780 includes software on 5¹/₄" diskette, User's Manual, and CC-432 (synchronous communications board).

Availability: Immediate

AST-PCnet[™]



Features

- CSMA/CD, base band Local Area Network
- Disk sharing
- File locking
- PC sharing (remote command execution)
- Serial and Parallel printer sharing
- No dedicated file or print servers
- Uses standard 75-ohm CATV coaxial cable
- Network cable can run up to 7,000 feet
- Transmits data at a rate of approximately 1 Mbps
- Designed to support IBM PC-DOS compatible hard disks and printers
- Network together up to 256 PCs

PCnet offers an integrated hardware and software solution to your IBM Personal Computer's networking problems.

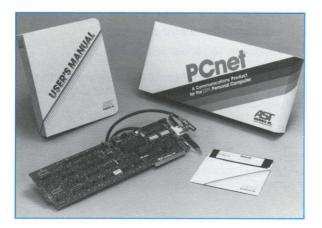
PCnet is the first Local Area Network designed specifically for the IBM PC or XT and the PC-DOS operating system. It provides low system cost, high performance, maximum configuration flexibility, easy installation, and a transparent PC-DOS interface that is powerful yet easy to use.

PCnet Hardware Features

- The PCnet adapter fits in a single IBM PC I/O slot and connects directly to the network cable.
- PCnet uses interrupt lines #2 and #5, or #2 and #3, DMA channel #1, and I/O port address hex 380-38F, inclusive.
- PCnet uses standard 75-ohm CATV coaxial cable as the transmission medium. The maximum distance the network cable can run is 7,000 feet.
- PCnet transmits data at a rate of approximately 1 Mbps.

PCnet Software Features

- Disk sharing allows PCs to share disk drives and files installed in other PCs. Shared drives appear to be locally attached and file transfers between PCs are as simple as PC-DOS copy commands. Complete read/write protection by user and drive is provided. PCs can execute programs directly from shared drives. The PCnet disk sharing interface is designed for compatibility with most existing and future PC-DOS compatible hard disks.
- PCnet software provides DOS level commands as well as function calls to lock and unlock files by filename or record. This enables single user applications to be easily converted to multiuser.
- PCnet's unique "remote execution" feature allows a user on one PC to run a command on another PC as if the command had been entered on that PC's keyboard. Thus users



can off load processing tasks such as compilations, assemblies, data base sorts, etc.

- Printer sharing allows PCs to share serial and parallel printers installed in other PCs.
- Controlled access to each disk volume for each network user.
- File and Print servers are not dedicated and retain local PC processing.
- Simple installation routine.

System Requirements

- IBM PC running PC-DOS
- Monochrome or Graphics Display Device
- Floppy Diskette Adapter and One Drive

Model Number Designation

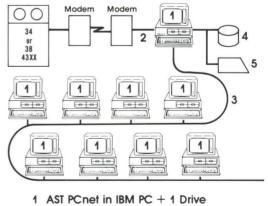
PCnet includes software on 5¹/₄" diskette, User's Manual, and single-slot PCnet network card.

Availability: Immediate

Future Products

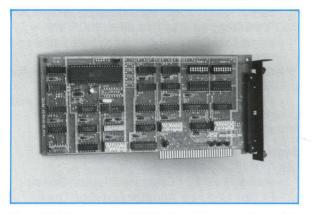
- Electronic Mail Software
- Print Spooling Software
- Bisync/SNA communications 3270 gateways
- PCnet software for other PC look-alikes.

With AST's other products, this type of communications link is possible:



- 2 Connection to IBM PC with AST-3780 (3270 in future)
- 3 75 Ohm Coaxial Lead
- 4 Optional Disk
- **5** Optional Printer

CC-232



The AST Research CC-232 multiprotocol card is designed for the user who will be writing his own communications software.

Features

- Utilizes the versatile Z-80 SIO communications processor
- Programmable for use in asynchronous or synchronous line protocols (bisync, SDLC/ HDLC, etc.)
- Two independent full-duplex channels (Port A & Port B)
- Two software-programmable baud rate generators
- Complete flexibility for routing of transmit & receive clocks (modem supplied vs internally supplied, etc.)
- Switch-selectable for port addressing and interrupt line used
- Includes 6-foot cable terminating in two male DB25 connectors
- Includes User's Manual, schematics, SIO technical programming documentation
- One-year parts and labor warranty (extended second year warranty available for \$50.00)

NOTE: This card is not equivalent to or a replacement for the standard IBM async serial ports COM1 and COM2, but it can coexist with the standard ports.

Other Products

Other AST products for the IBM PC

- ComboPlus[™] (up to 256K, clock, 1 serial, 1 printer port)
- MegaPlus II[™] (up to 512K, clock, 2 serial, 1 parallel, 1 game port)
- I/O Plus II[™] (ØK, clock, 2 serial, 1 parallel, 1 game port)
- SixPakPlus[™] (up to 384K, clock, 1 serial, 1 parallel, 1 game port)
- SuperDrive[™] (electronic disk emulator software) and SuperSpool[™] (electronic print spooler software) now available with all memory and memory/ multifunction boards.

Warranty

A one-year limited warranty is standard, and an additional second-year paid extended warranty is available. Software updates available at nominal charges.

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Compaq is a trademark of COMPAQ Computer Corporation.

Z-80 is a registered trademark of Zilog, Inc. IBM is a registered trademark of International Business Machines Corporation.

Model Number

IBM PC Advanced Communications Products

MODEL	DESCRIPTION
AST-SNA	SNA/SDLC Emulation
AST-SNA-P	PC Clustering Option
AST-SNA-C	ASCII Terminal Clustering Option
AST-SNA-RJE	3770 RJE support
AST-PCOX	3278/9 Coaxial
AST-BSC	3270 BSC
AST-BSC-P	PC Clustering Option
AST-BSC-C	ASCII Terminal Clustering Option
AST-BSC-RJE	2770 RJE support
AST-5251	5251 Emulation
AST-3780	Bisync Emulation
CC-232	Multiprotocol Card

Software Upgrade

MODEL	
AST-SNA-S	
AST-BSC-S	
AST-5251-S	
AST-3780-S	

MODEL

File Transfer Utility

MODEL	DESCRIPTION
ETU-34	For use with AST-5251 and System/34
ETU-36	For use with AST-5251 and System/36
ETU-38	For use with AST-5251 and System/38
ETU-PCOX	For use with AST-PCOX

NOTE: CC-232 card is intended for the end user who wishes to supply his own communications software. AST-SNA, AST-PCOX, AST-BSC, and AST-5251 are complete hardware and software packages. Each includes a synchronous communication card, a 5¹/₄" diskette containing the emulation software and a comprehensive User's Manual.

The same synchronous communication card is required by each package (except the AST-PCOX). If emulation of different protocols on 1 single IBM PC is desired, a one-time purchase of the synchronous communication card is necessary. Software is available separately.

IBM PCnet Networking Products

PCnet is the first Local Area Network designed specifically for the IBM Personal Computer. It consists of the necessary hardware and software to set up a powerful, yet cost-effective Local Area Network for the IBM PC. PCnet includes 1 Software Pkg., 1 PCnet Adapter Card, 1 PCnet User's Manual and 1 BNC "T" Connector.

RIPTION

PC-001 PCnet Card with Software

PCnet (Required for first time users) Starter Kit

PCnet Starter Kit includes 2 PCnet network adapter cards, 2 BNC "T" Connectors, 1 PC-C050 Coax Cable, 2 BNC 75-ohm terminators, 1 PCnet User PC Software, 1 PCnet Shared PC Software, and 1 PCnet User's Manual.

MODEL DESCRIPTION

PC-002 PCnet Starter Kit

PCnet Finished Cable-RG59B/U

MODEL	DESCRIPTION	
PC-C020	Twenty Foot Cable	
PC-C050	Fifty Foot Cable	
PC-C100	One Hundred Foot Cable	