



Advanced technology—made practical

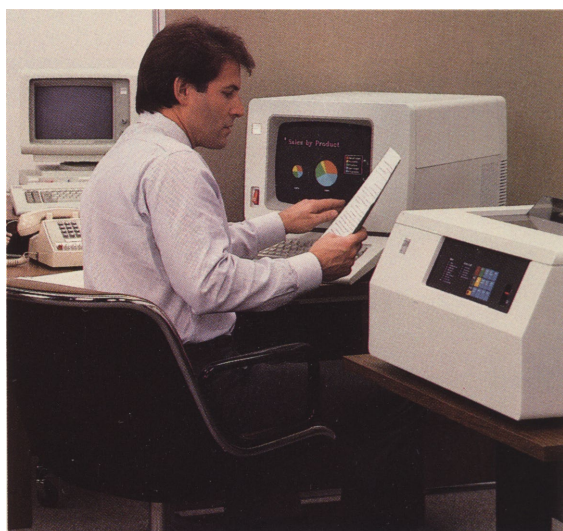
In both hardware and software, the key to System/36 effectiveness is the advanced technology we've built into it. While much of it is "transparent" to users, this IBM technology is practically applied—to improve the speed, reliability and availability of the system.

For effective performance, the system unit includes multiple internal processors which control specific system components—such as work stations, communication lines, printers, disk drives and tape drives. As a result, the system as a whole can do more—and do it more efficiently—than if one internal processor were managing all system operations.

Most important, reliability is inherent in this design since error checking and recovery are designed into the system unit.

The System/36 also includes extensive self-diagnostic and problem determination features that allow users to troubleshoot—and even diagnose—system problems on their own.

It all adds up to one of the most thoroughly tested and reliable IBM systems ever.



Some photographs in this brochure are of engineering and design models; some display screens are simulated computer displays, intended to serve only as examples. Any names of individuals, companies, brands, and non-IBM products are fictitious, and similarities to actual names are coincidental.

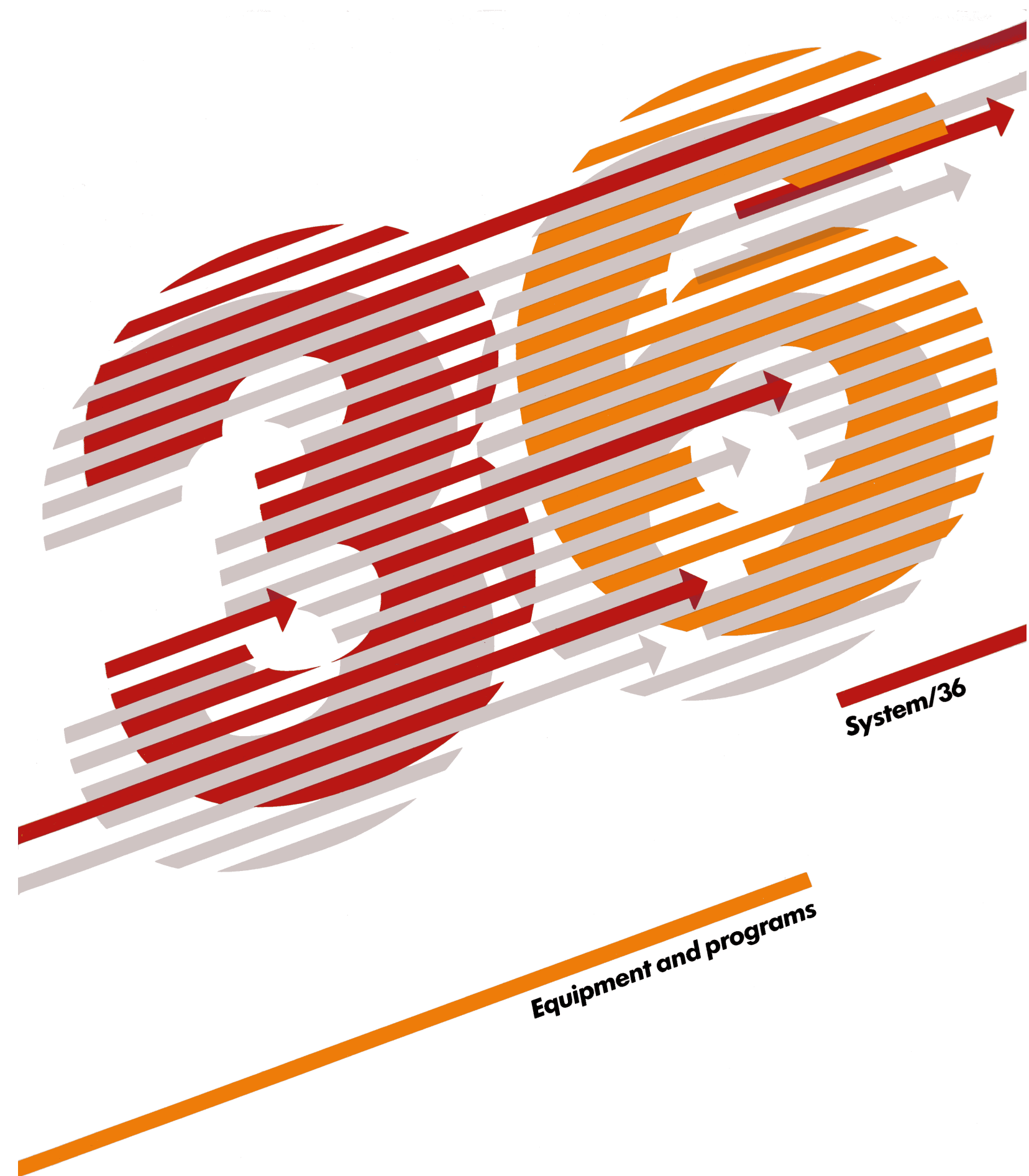
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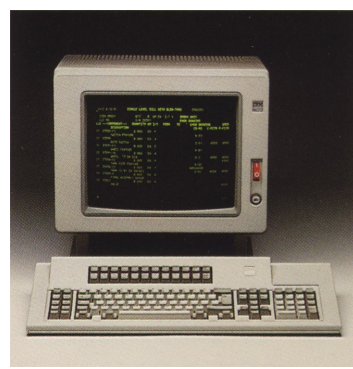
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- IBM 5292 Color Display Station**
- Displays up to 7 colors: red, green, turquoise, yellow, pink, blue and white
 - Tilttable screen with glare-reduction treatment
 - Moveable, low-profile keyboard with adjustable slope
 - Color alignment via keyboard
 - Cable-thru standard
 - Plug compatible with the 3180 Model 2, the 5251 Model 11 and the 5291 Model 2.

The sample screen was generated on the 5292 Model 2 Color Graphic Display.



- IBM 3180 Model 2 Display Station**
- Small, ergonomic 15-inch display
 - Screen that can be raised, lowered, tilted and rotated
 - 1,920 high-definition characters (24 lines of 80 or 132 characters)
 - Flicker-, glare- and smudge-resistant display
 - New keyboard with adjustable low profile (122 keys)
 - Separate message/error line
 - Improved reliability, availability and serviceability
 - Plug compatible with the 5251 Model 11, 5291 Model 2 and 5292 Color Display Stations
 - Adjustable audible alarm and security/keylock
 - Record/play

- IBM 5291 Model 2 Display Station**
- Small, lightweight, ergonomic design
 - Tilttable screen with glare-reduction treatment
 - Moveable, low-profile keyboard with adjustable slope
 - Cable-thru standard
 - Plug compatible with the 3180 Model 2 Display Station, 5292 Color Display Station and the 5251 Model 11 Display Station



- IBM 5251 Display Station**
- Models available for local or remote attachment
 - 1,920 high-definition characters (24 lines of 80 characters)
 - Upper- and lower-case characters
 - Provides intensified characters, underscores, reverse image, blinking fields
 - 83 keys, typewriter-style
 - 10-key numeric pad
 - Cluster feature on the Model 12 for direct attachment of up to 8 remote work stations



- Cable-thru capability for connecting multiple devices to a single twinaxial cable; saves cabling costs
- Plug compatible with the 3180 Model 1 Display Station, 5291 Model 2 Display Station and the 5292 Color Display Station

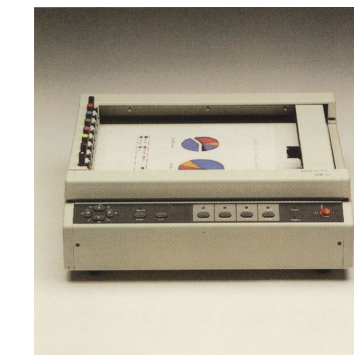
- IBM 5150 Personal Computer, 5160 PC XT, 5170 Personal Computer AT or 5155 Portable PC**
- Simple transition from stand-alone mode to system display
 - Desktop keyboard, electronics module and display screen
 - Keyboard: 83 keys, 10 function keys, 10-key numeric pad
 - Display screen: 25 lines of 80 characters, upper- and lower-case



- Stand-alone characteristics:
- User memory: 64K to 640K bytes
 - Permanent memory: (ROM) 40K bytes
 - Auxiliary memory: 2 optional diskette drives, 160K or 320K bytes each
 - Languages: BASIC, Pascal, FORTRAN, MACRO Assembler, COBOL
 - Color/Graphics: 16 colors, 246 characters and symbols (ROM)

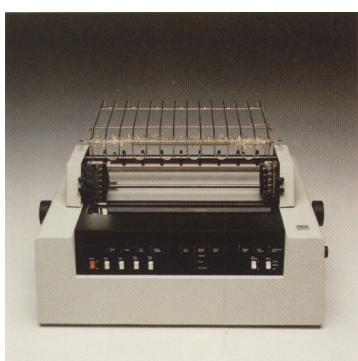


- IBM 5219 Printer**
- Tabletop, bidirectional printwheel printer
 - Correspondence quality with print speeds of up to 40 or 60 characters per second (cps)
 - 10-, 12-, 15-pitch and proportional spacing with appropriate software
 - Handles single sheets or continuous forms
 - Cartridge ribbon
 - Cable-thru standard



- IBM XY/749 Digital Plotter**
- Attaches to System/36 through the IBM 5292 Model 2 Color Graphic Display
 - Intelligent plotter with eight program-selectable pens
 - Multicolor plots can be drawn without manually stopping plotter to change pens
 - Flat-bed electrostatic plotting surface simplifies positioning and monitoring of full drawing

- Plots on paper, vellum or projection transparencies
 - Standard 8 1/2 x 11" format
 - High plotting speed
- Microprocessor control provides vector generation, circle (full, arc and sector) and axis generation
- Supports various line textures: solid, dotted, dash, uneven dash and dash-dot
- Bar graphs, pie charts, line charts, etc. are easily generated using the Business Graphics Utilities
- Operates as a plotter, printer or monitor
- Available with a variety of interfaces (IEEE-488 is supported by the System/36)



- IBM 5256 Printer**
- Tabletop, bidirectional impact matrix character printer
 - Maximum print speeds up to 120 cps
 - 95- and 184-character sets
 - Handles cut sheets or continuous forms
 - Cartridge ribbon
 - Cable-thru and audible alarm available

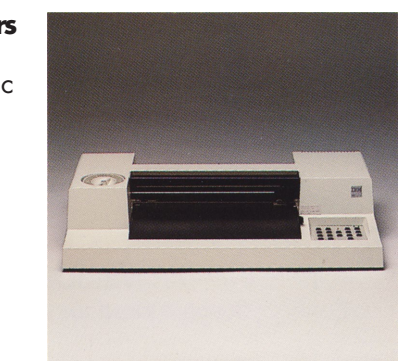


- IBM 5225 Printer**
- Floor-standing, impact matrix line printer
 - Four models, with rated speeds up to 280,400,490 and 560 lpm based on line length and print density
 - 95- and 184-character sets
 - Program-selectable at 10 cpi or condensed to 15 cpi
 - Variable-width forms tractor
 - Graphics printing capability
 - Cable-thru and audible alarm available



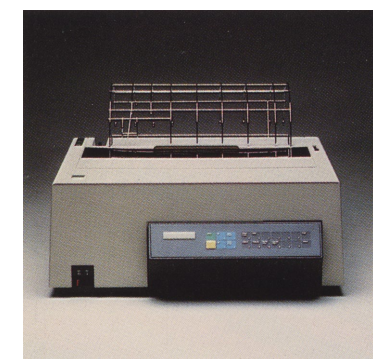
- IBM 3262 Printer/IBM 5262 Printer**
- Floor-standing, engraved band impact printers
 - Up to 650 lpm with 48-character set
 - Up to 625 lpm with 64-character optimized belt (466 lpm on 5262)
 - Can print 132 print positions at 6 or 8 lines per inch (lpi)
 - Simplified forms handling; up to 6-part forms, from 3.5 to 16 inches wide
 - 48-, 64-, 96- and 188-character sets available in English and other languages
 - Twinax interface attachment up to 5,000 cable feet from the CPU (5262 only)

- IBM 7371 and 7372 Color Plotters**
- Desktop plotters attachable to the IBM 5292 Model 2 Color Graphic Display and IBM Personal Computers
 - Easy-to-load, six-pen carousel on the 7372 Color Plotter and two-pen carousel on the 7371 Color Plotter
 - Two standard interfaces

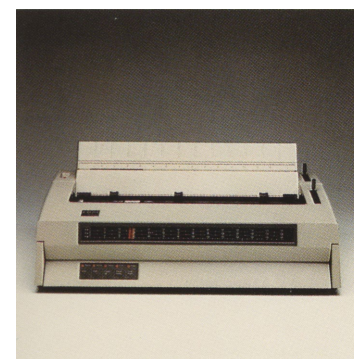


- Produces high-resolution charts, graphs and diagrams
- Draws on both "A4" and "A" size paper and transparency film
- Pens available in 10 colors for paper and eight colors for transparency film

- IBM 4214 Printer**
- Tabletop, impact serial matrix printer
 - Prints both Data Processing Quality (DPQ) and Near Letter Quality (NLQ)
 - Maximum print speed of 200 cps in DPQ mode and 50 cps in NLQ mode
 - Prints a maximum of 220 characters per line at 16.7 cpi for smaller, easier-to-handle reports
 - Prints special characters, logos, business graphics and oversize characters

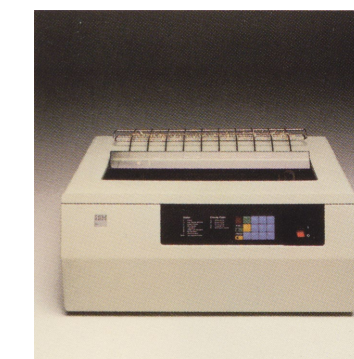


- Three paper handling modes—continuous forms tractor feed, manual sheet feed and document on demand
- Optional sheet feeder
- 16-character display uses text and numeric codes when entering commands or displaying messages

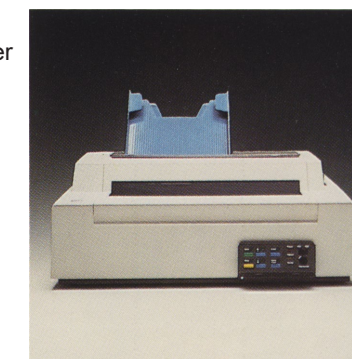


- IBM Quietwriter® Printer**
- Requires an IBM Personal Computer
 - Resistive ribbon, non-impact technology means extra-quiet operation
 - Letter-quality printing in a variety of type styles
 - Prints up to 60 cps
 - Optional sheet feed and continuous forms paper handling

- IBM 5224 Printer**
- Tabletop, impact matrix line printer
 - Two models, with speeds up to 140 and 240 lines per minute (lpm) based on line length and print density
 - Program-selectable printing at 10 characters per inch (cpi) or condensed printing at 15 cpi for letter-sized reports
 - 198 print positions per line at 15 cpi for flexible report design
 - 132 print positions per line at 10 cpi
 - Choice of character sets: 95 upper- and lower-case characters; 184 upper-case, lower-case, multinational
 - Variable-width forms tractor
 - Graphics printing capability
 - Cartridge ribbon
 - Cable-thru and audible alarm standard



- IBM Wheelprinter Printer**
- Requires an IBM Personal Computer
 - Printwheel, letter-quality printing
 - Standard automatic sheet feed and continuous forms feed
 - Prints up to 25 cps
 - Uses either single-strike or low-cost multi-strike ribbon
 - Acoustically engineered cover for quiet operation

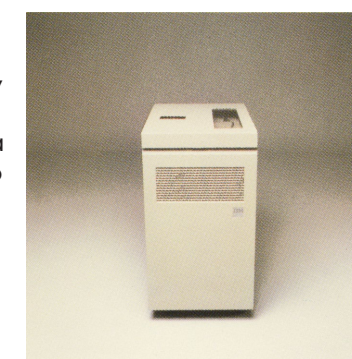


- IBM 5182 Model 1 Color Printer**
- Attaches to the System/36 through the IBM 5292 Model 2 Color Graphic Display, the IBM 5150 Personal Computer or 5160 PC XT
 - Tabletop, dot-matrix color printer
 - 82.5 dots per inch for high-resolution output
 - Four print modes: All Points Addressable graphics, 35 cps, 110 cps, 200 cps

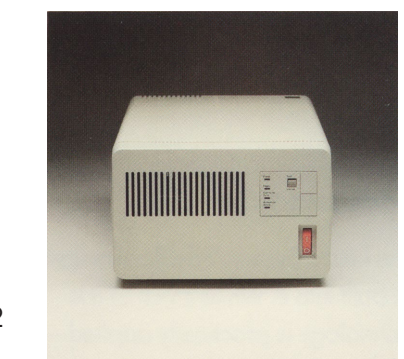


- Three choices of four-band ribbons: one-color (four bands of black); four-color (red, green, blue, black); eight-color (yellow, magenta, cyan, black—mixable to produce eight colors)
- Three builtin type fonts
- Multiple pitches: 10, 12, 17.1 and proportional spacing
- 13.5-inch print line

- IBM 8809 Tape Drive**
- For inexpensive storage of information not needed on a daily basis
 - Backup: for save/restore and data exchange with other systems up to 43 Mb per 2,400 ft. reel
 - Dual-speed capability: start/stop mode, 20K bps streaming mode, 160Kbps
 - Compact, space-saving design
 - Density: 1,600 bpi



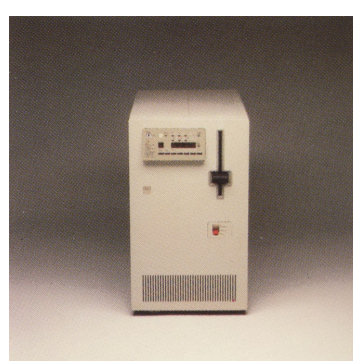
- IBM 5294 Remote Communications Control Unit**
- Remote work station controller for System/36
 - Can attach up to eight of the following work stations:
 - 3180 Model 2, 5251 Model 11, 5291, 5292 Display Stations
 - 4214, 5219 (Model DO1, DO2), 5224, 5225, 5256, 5262 Printers
 - IBM 5150 Personal Computer, 5160 PC XT and 5170 Personal Computer AT (with 5251 Model 11 emulation mode only)
 - Operates as an SDLC or an X.25 (HDLC) unit



- Features high-speed communication capability (up to 56,000 bps via DDS and 48,000 bps via X.21 signal conversion)
- Text-assist feature allows DisplayWrite/36 to be used from a remote location
- X.21 support available



- IBM System/36 PC (5364)**
- Most compact system unit for System/36
 - Main storage: 256K or 512K
 - Disk storage: 40 million, 80 million characters
 - 5 1/2" IBM Diskette Drive for reading and writing IBM Diskettes
 - Communications: utilizes Personal Computer communications hardware (one communications line)
 - Dimensions:
 - Height: 162mm (6.38")
 - Width: 540mm (21.25")
 - Depth: 426mm (16.75")
 - Weight: 26 kg (57 lbs.)



- IBM 5362 System Unit**
- Main Storage: 128K, 256K, 384K, 512K, 768K and 1,024K
 - Disk storage: 30 million, 60 million, 90 million, 120 million characters
 - Diskette drive for reading and writing IBM Diskettes
 - One to four communications lines
 - Dimensions:
 - Width: 375mm (14.76")
 - Depth: 750mm (29.50")
 - Height: 650mm (25.59")
 - Weight: maximum 79.3 kg (175 lbs.)

- IBM 5360 System Unit**
- Main storage: 128K, 256K, 384K, 512K, 768K, 1,024K, 1,280K, 1,536K and 1,792K
 - Disk storage: 30 million, 60 million, 200 million and 400 million characters
 - Diskette drive for reading and writing IBM Diskettes
 - One to eight communications lines
 - Dimensions:
 - Width: 1,125mm (44.50")
 - Depth: 750mm (29.50")
 - Height: 1,175mm (46.50")



- Weight: maximum 418kg (920 lbs.) minimum 279kg (614 lbs.)
- Heat output: 1,340 watts (4,577 BTU/hr.)
- IBM Diskette Magazine Drive that can process up to 20 diskettes without operator intervention

- IBM 5360 System Unit**
- An optional expansion unit that provides disk storage of up to 600 million or 800 million characters





Equipment that helps people work

The IBM System/36 provides a family of hardware components that can help people collect, process, file, retrieve and use daily business information with ease, flexibility and comfort.

There is a wide variety of affordable equipment you can choose to match your organization: monochrome and color display stations...personal computers...main storage expansion...fixed and removable storage media...communications...and a range of quality printers for many business needs.

Users can start small with the IBM System/36 PC (5364). Delivering up to 512K characters of memory and 80 million characters of disk storage, the IBM System/36 PC offers full-function, multiuser capability in a system unit that can fit on a desk top.

For entry-level or departmental use, the 5362 System Unit delivers up to 1,024K characters of memory and up to 120 million characters of disk storage. The 5362 is the size of a two-drawer file cabinet and provides multiuser capability.

For experienced and new users with large storage requirements, the 5360 System Unit provides up to 1,792K characters of memory and up to 800 million characters of disk storage.



System/36 also includes enhanced features for using IBM Personal Computers. This means that executives or managers can use their IBM Personal Computer to access, manage and share information with a local or remote System/36.

System/36 displays are highly versatile. They can be used singly, in clusters or as part of an enterprise-wide information network that may include multiple IBM systems and devices.

For still more configuration flexibility, a remote communications control unit is available which can use high-speed communications lines attached to the System/36 and can provide central control of up to eight remote work stations. A maximum of 64 remote work stations can be attached to the system with communications lines.

System/36 printers offer a wide variety of character sets, including letter-quality printing. Some also offer condensed printing which can save valuable space when storing archival reports and documents.



System/36 storage media include fixed disks, diskettes and a tape capability for inexpensive storage of information that is not needed on a daily basis. To help ensure smooth, non-disruptive system growth, System/36 memory and disk capacities can be expanded as your information and application requirements change. And, System/36 equipment is simple enough for you to set up yourself. So you can put it where you want to, when you want to—and move it easily as your business grows and changes.

Programs that help make the work easier

System/36 offers a broad range of support programs, languages, programming aids and communications products which enhance its usefulness in many environments—from a stand-alone department to a distributed processing network.

Plus, the many application programs developed for the popular IBM System/34 can run with minor changes on System/36. Also, users of the IBM Datamaster, System/32 or System/3 can step up to the System/36. So almost any investment you've already made in data processing with those systems can be protected when you grow into a System/36.

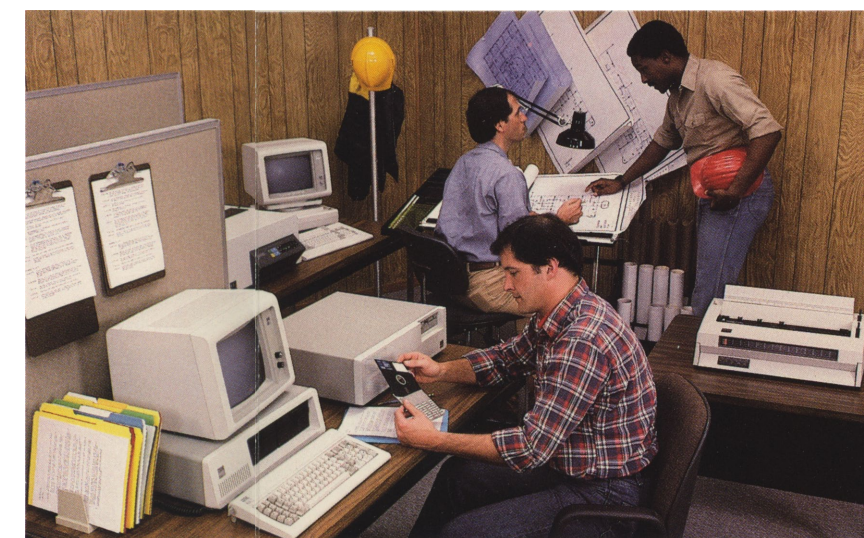


System Guided Operations

The System Support Program (SSP) is an IBM-licensed program that operates your System/36. It provides task-oriented menus and "HELP" text to guide users. Many other SSP functions help make using your System/36 easy and productive.

The SSP:

- Enables multiple display stations and printers to operate concurrently
- Supports remote display stations and printers on communications lines
- Includes password and resource security to let you decide who may have access to your system, programs and data files
- Allows menu selection of jobs
- Provides a job queue so you can submit a job to the system for processing and then go immediately to the next job
- Provides a sort/merge function which lets you arrange records in the order that meets your needs
- Provides spooling to optimize printer capabilities
- Provides interactive communication support with other systems for effective distributed processing

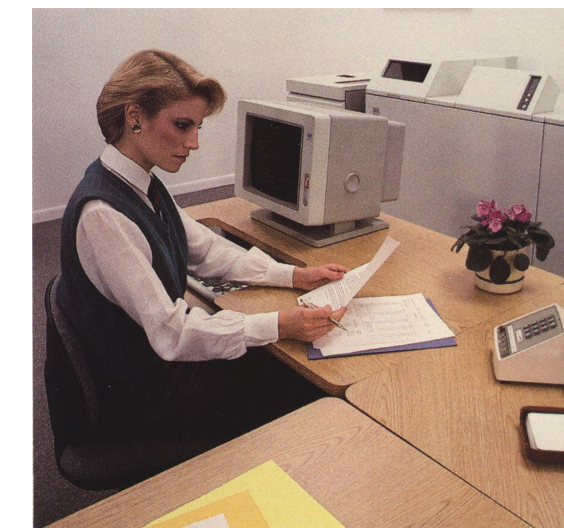


System/36 Languages

System/36 can support today's popular programming languages, including RPG II, COBOL, BASIC, FORTRAN IV and Assembler.

System/36 Utilities

- The Enhanced 5250 Emulation Program and the Remote 5250 Emulation Program transform the IBM Personal Computer into a local or remote work station for sharing data and resources with the host.
- The Work Station Utility (WSU) enables you to easily define customized programs to enter and edit data interactively
- A Data File Utility (DFU) allows you to create, maintain, inquire into and print data files without having to write your own application program.
- The Source Entry Utility (SEU) enables you to enter and maintain source programs and procedures on disk. You can enter statements in free-form text in one of the IBM-supplied formats or in a format you define.
- The Screen Design Aid (SDA) helps you create, change and delete your own menus, "HELP" text and screen formats interactively.



Data communications

System/36 supports:

- Batch Binary Synchronous Communication (BSC)
- Remote job entry in BSC or in Systems Network Architecture (SNA) using Synchronous Data Link Control (SDLC)
- Interactive communications to applications on:
 - System/370-type hosts (BSC or SNA/SDLC)
 - System/32 and System/3 (BSC)
 - Series/1 (BSC)
 - System/34 (BSC or SNA/SDLC)
 - Another System/36 (BSC or SNA/SDLC)
 - System/38 (BSC or SNA/SDLC)
- 3270 device emulation which allows the System/36 to appear as a 3271 Model 2 control unit (BSC) or 3274 Model 1 C control unit (SDLC) to a host system
- Distributed Data Management (DDM) that allows programs to access files stored on another System/36
- Advanced Program-to-Program Communications (APPC) that allows user-written programs to communicate with other systems.