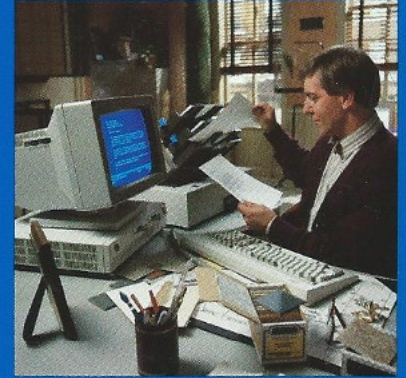
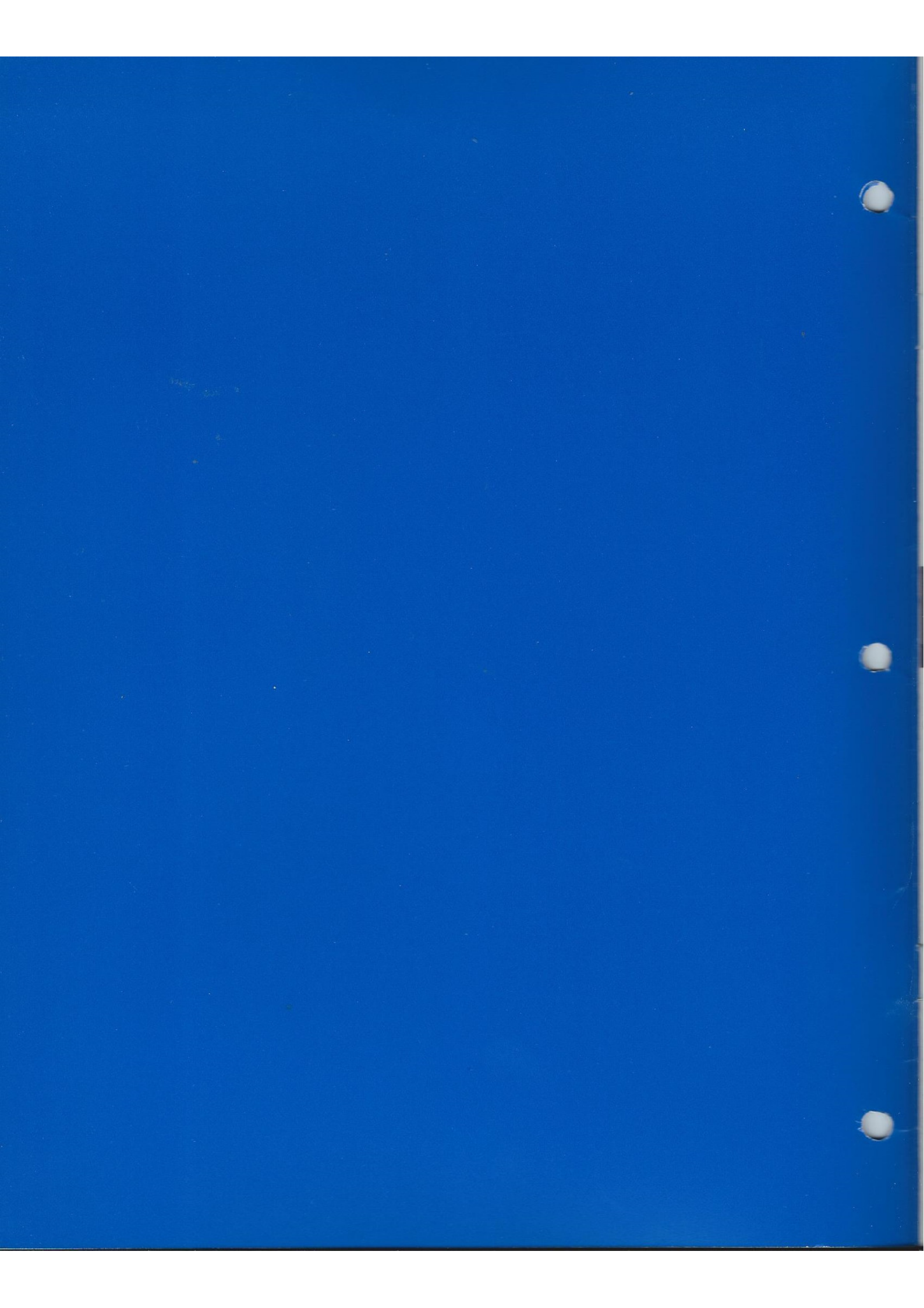


*The next generation
in personal computing*

IBM Personal System/2





IBM Personal System/2
Color Display 8512



IBM Personal System/2
Monochrome Display 8503



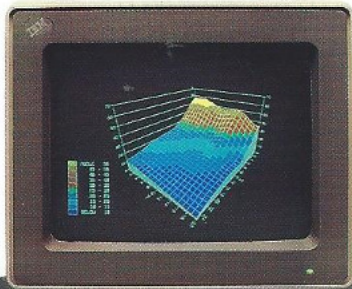
IBM Personal System/2 Model 30 provides excellent performance at an economical price—making it a smart choice for offices of every size. Two versions of this model come with:

- 8086 microprocessors
- 640KB of user memory
- Either two 720KB diskette drives or one 720KB diskette drive and a 20MB fixed disk

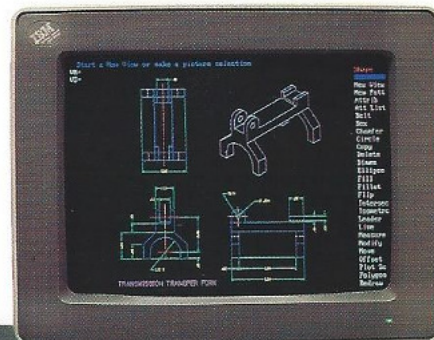
IBM Personal System/2 Model 50 packs advanced performance into a streamlined package. It's the ideal desktop system to help raise productivity to new heights. Features of this model include:

- 80286 microprocessor
- 1MB of user memory—expandable to 7MB
- 20MB fixed disk
- 1.44MB diskette drive

IBM Personal System/2
Color Display 8513



IBM Personal System/2
Color Display 8514



IBM Personal System/2

Model 60 combines advanced capability and capacity to help you—and your office—work at peak efficiency. Two versions of this model provide:

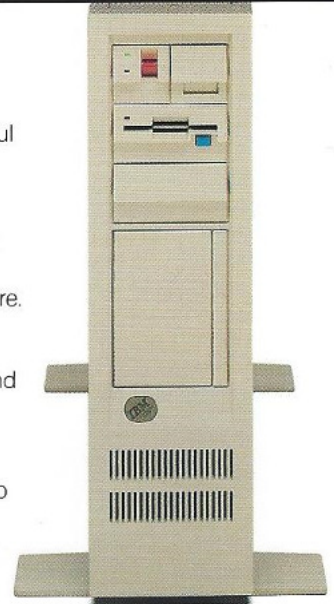
- 80286 microprocessors
- 1MB of user memory—expandable to 15MB
- 44MB or 70MB fixed disks—and optional second 44MB, 70MB or even 115MB fixed disks can be added
- 1.44 MB diskette drives



IBM Personal System/2

Model 80 is the most powerful member of the Personal System/2 family. It provides ample power, speed and capability to handle high-level applications in business, science, engineering, and more. Three versions offer:

- 80386 microprocessors
- 1MB or 2MB of 80-nanosecond user memory—expandable to 16MB
- Fixed disk storage capacity ranging from 44MB to 70MB to 115MB—and those numbers can at least double with optional second fixed disks
- 1.44MB diskette drives



Redefining personal computing

Introducing IBM Personal System/2:™ an entire family of products based on advanced technology that gives new meaning to personal computing. IBM Personal System/2 is new system units, displays and printers... new standards for business graphics... an enhanced IBM PC DOS... a powerful new operating system... impressive connectivity capabilities... and more.

Personal System/2 covers the whole range of support you might need to implement business strategies and maintain a competitive edge. It's much more than a solution for personal productivity—it's a total solution for organizational efficiency.

And that's what these fast-changing times demand. Where once word processing alone did the job, now desktop publishing is frequently required as well. Where simple spreadsheets used to meet accounting needs, today complex financial models are the rule.

Where one application used to be enough, now several often have to be run at once. And while stand-alone computing was the norm not long ago, now connections are called for—within networks, to departmental systems, to central mainframes, to outside information sources.

Personal System/2 has what is needed to help you meet these demands head-on. Power. Performance. Capacity. Compatibility. Connectivity. Reliability. Ease. Put Personal System/2 to work in any stand-alone or systems setting—from departmental networks to host-connected workstations to companywide communications. Equip everyone in your organization—experienced users and entry-level users alike—with workstations that truly match the work they do.

With Personal System/2 system units, you've got a range of choices to suit your business. Two floorstanding models and two desktop models provide 80386, 80286 or 8086 micro-processing power—and memory and storage to match. Add to this a wide selection of options, and there's almost no limit to your opportunities to improve efficiency and extend your competitive lead with IBM Personal System/2.



Personal System/2: a smart investment for today and tomorrow

Personal System/2 is more than a smart approach to organizational efficiency—it's a smart business investment as well. That's because this family of products offers technological breadth and depth that represent extraordinary value.

System solutions at microcomputer prices

With just one powerful Personal System/2 model—used as a server—you can increase the cost-effectiveness of an entire network.

Use it as a gateway, and you can enhance mainframe communications for a whole group. The point is, since Personal System/2 products are designed to work powerfully and smoothly in a network setting, the value of each model extends well beyond the model itself.

And the value can build—because the new IBM Operating System/2™ will permit a system¹ to take on increasing numbers of jobs. In a typical business, for example, a person using a single Personal System/2 model will be able to:

- Support multiple applications and host sessions
- Support multiple applications and host sessions
- Even support multiple applications, host sessions and a network session

Additional value can be gained from a large number of resources. Because this family is compatible, most applications² and peripherals used with one model can be easily shared or used with others.

A sound investment in the future

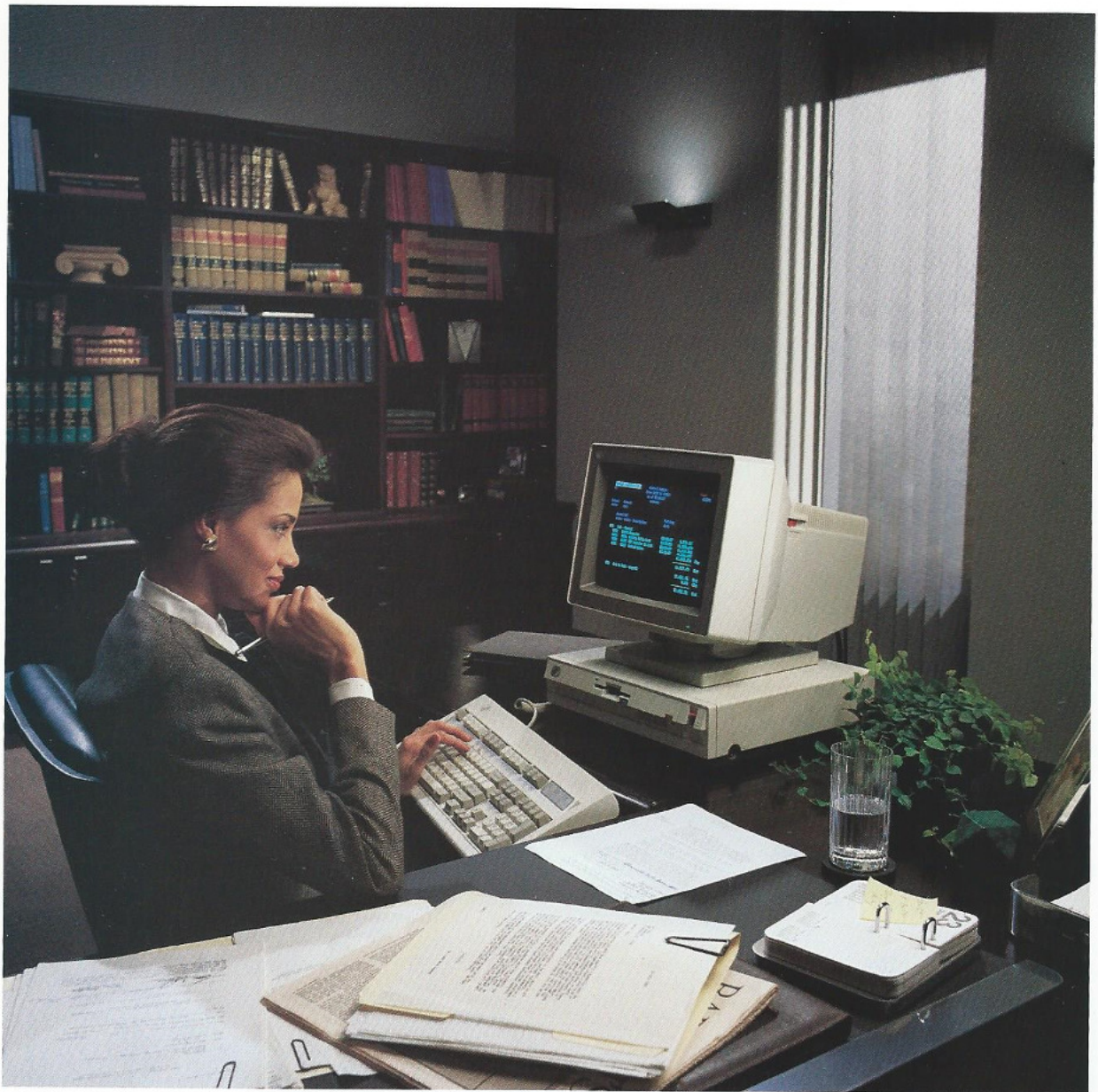
Compatible machines—and consistent operations—are the cornerstones of an even larger plan IBM has for the future: Systems Application Architecture. It's a plan to make software increasingly uniform—and achieve integration of computing products at every level. As the first phase of that plan, the new IBM Operating System/2 puts Personal System/2—and you—squarely in position for tomorrow.

Operating System/2 Extended Edition will provide built-in relational data base capabilities—and make it easy to create, maintain and access data bases of other systems and mainframes. And because the operating system will also provide a consistent user interface, once people know data base operations on one Personal System/2 model, their skills can more easily be transferred to another. So the dollars you spend on training can stretch further than ever before.

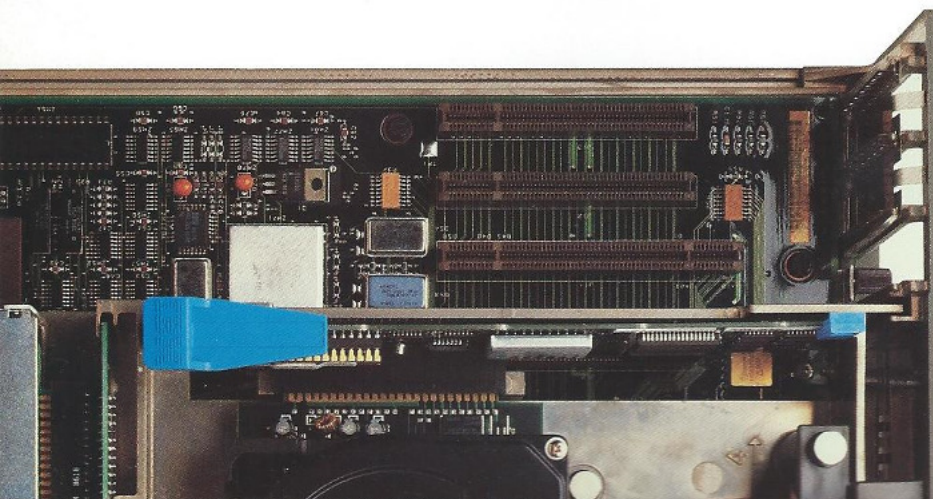
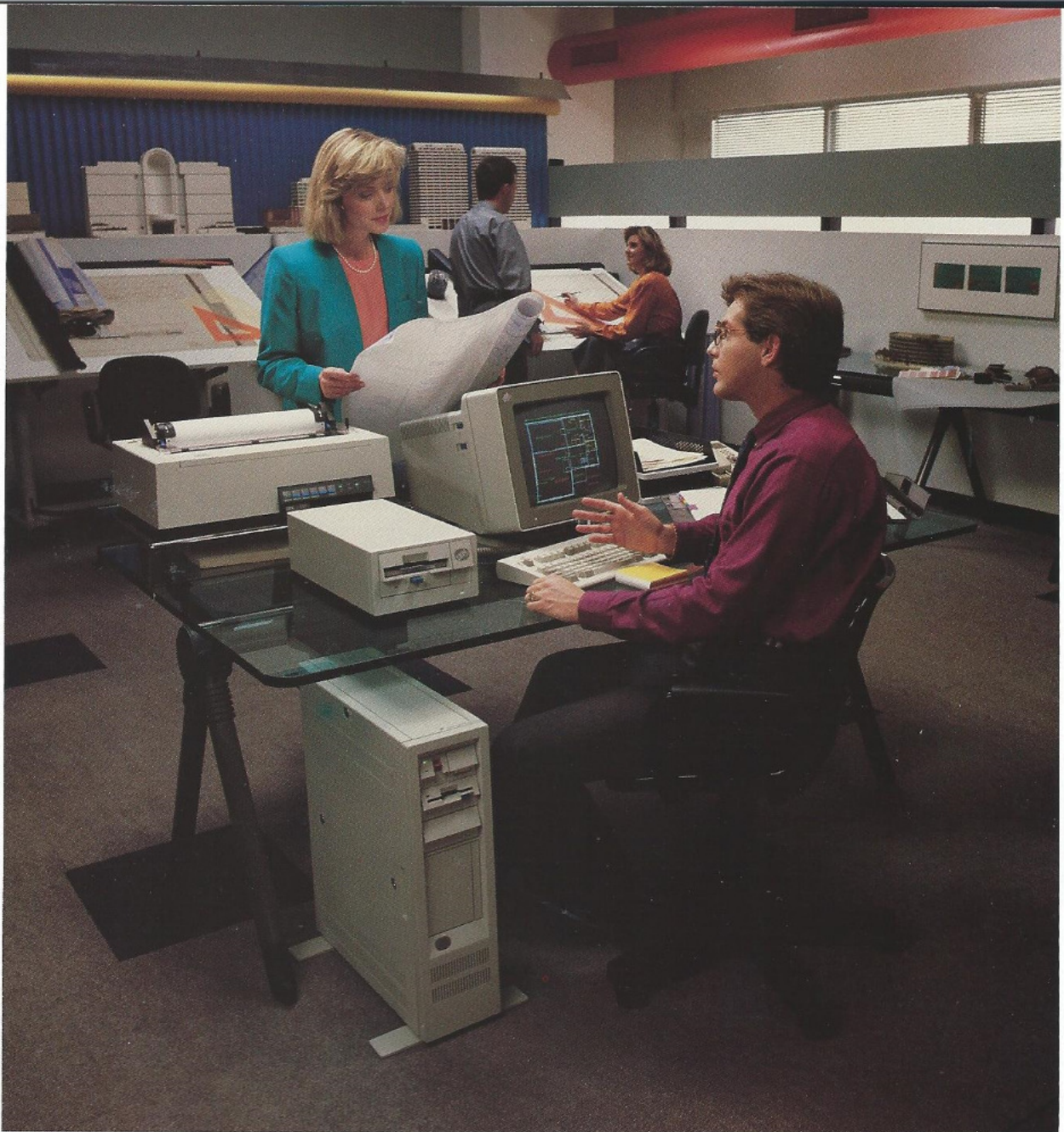
Together, Personal System/2 and Operating System/2 will provide a firm foundation for growth.

The new IBM Micro Channel™ architecture is key to that growth. It prepares this family³ for expansion—to levels of capability and capacity that most microcomputers couldn't approach before now. More peripherals can be attached—and supported simultaneously. On some high-end models, memory can be doubled on the system board, then increased all the way to 15MB or 16MB with memory expansion options.





With an optional 200MB optical disk drive attached, a single IBM Personal System/2 model can back up data files or provide information for everyone on a network.



New surface mount technology results in fewer wires to come loose and fewer fragile connections—a major reason why Personal System/2 models are so reliable.

The Personal System/2 difference

On the most powerful Personal System/2 model, memory expansion boards mean one million bits per chip. That's because the architecture accepts the same kind of chip used in IBM's mainframe systems—leaving expansion slots available for further memory expansion or other options.

Whichever Personal System/2 model you choose, you'll have the storage capacity—and expandability—to match its memory. The Personal System/2 floorstanding systems, for example, come ready with 44MB, 70MB, even 115MB fixed disks—and with optional second fixed disks, those numbers can at least double. For extra convenience as well as capacity, a second diskette drive and two other options—a 200MB optical disk and a streaming tape drive—can be installed on most Personal System/2 models.

On a larger systems scale, more system units can be added and supported within existing networks. And multiple connections with mainframes and minicomputers can be established, too.

No matter how fast your business grows, Personal System/2 will keep pace. It's computing technology you can build on—instead of replace. So whether you're adding more systems or adding capabilities to existing

systems, your investment in this generation of personal computing products is protected for years to come.

Protection for your past investment

With Personal System/2, your investment in IBM Personal Computers is protected as well—because the family's compatibility doesn't stop with the family alone. The new system units can be introduced to existing local area networks (LANs) to work side by side with the IBM Personal Computer, Personal Computer XT,[™] and Personal Computer AT[®] systems you've already got in place. They'll also work compatibly with the IBM PC Convertibles you send on the road.

Easy coexistence of the Personal System/2 and IBM Personal Computer families even extends to files and applications. Personal System/2 uses a new storage media—higher-capacity 3.5-inch diskettes—but still protects your investment in files and most applications stored on 5.25-inch diskettes. Several media conversion options are available to provide easy migration of data and programs² between IBM PCs and Personal System/2.

A wealth of distinctive features make Personal System/2 much different—and much better—than what has come before. Inside and out, they're the reasons why IBM calls Personal System/2 "the next generation in personal computing."

Micro Channel architecture

Until now, many personal computing systems have been hard-pressed to meet growing business demands. Few were designed to deliver the fast throughput, rapid communications and large-capacity storage so critical today.

Enter Personal System/2—with new Micro Channel architecture that prepares the family to offer levels of performance many earlier systems couldn't offer even with upgrades.

Wider, faster data paths, advanced system architecture, extended microcode support, and more direct memory access channels are some of the features that distinguish Personal System/2 from other computers. Since data can flow through these systems more quickly and directly, the pace of processing and throughput picks up and smooths out. The benefits to your business include high-speed calculations and communications—plus the ability to support multiple tasks and input/output operations without sacrificing throughput or risking system conflicts.

Integrated functions

Very large-scale integration (VLSI) is a driving principle of design in IBM Personal System/2. Coupled with new surface mount technology (a method of mounting circuitry directly on the face of the system board), VLSI makes it possible to pack more functions into less space. As a result, the Personal System/2 models contain fewer separate components yet offer more built-in capabilities. Not only are advanced color and monochrome graphics and text capabilities built in, so is support for a display, printer, keyboard—even for an optional mouse.

There's more. Integrated functions add connectivity as well as capability to the Personal System/2 models—with built-in serial ports. They add reliability, too, because fewer components mean fewer potential problems. That simple fact translates into optimum performance year after year.

Color, graphics and new analog displays

A change in technology is the basis of an entirely new level of display performance with Personal System/2. With IBM's three new analog color displays, you can view up to 256 colors at a time—from a palette of over 256,000. And colors automatically convert to up to 64 shades of gray on the new analog monochrome display.

In color or monochrome, the built-in text and graphics capabilities of the Personal System/2 systems combine with the enhanced addressability of the new displays to provide a picture that's sharp, clear and highly detailed. Natural, too. Even digitized photos—of products, property or people—appear natural.

Bigger and better storage media

The big storage story with the IBM Personal System/2 family is about internal fixed disks that range in capacity from 20MB to 115MB. These fixed disks supply the storage required to work with large data bases or sophisticated accounting packages—at individual workstations or all around a network. And anyone accessing these large fixed disks can count on getting the information they need in a hurry. In fact, some models' fixed disks deliver data up to four times faster than those in IBM PC products of the past.

The smaller storage story with Personal System/2 is about 3.5-inch diskettes that are compact in size but large in capacity—a combination that adds up to more convenience and less diskette swapping. Depending on the model selected, as many as 360 or 720 pages⁴ of information can be stored on a single diskette—and easily accessed with a 720KB or 1.44MB diskette drive.

Streamlined design and documentation

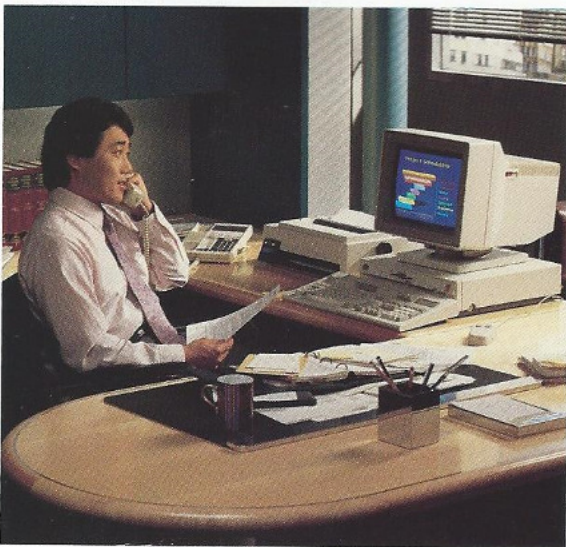
Even though the Personal System/2 models carry so many capabilities, they won't crowd your office. The desktop models are smaller, more streamlined, more space-saving than ever. And with the floor-standing systems, all that need be placed on a desk are the keyboard and display.

The documentation for Personal System/2 models is as streamlined as the models themselves. Because these system units are so easy to set up, one slim volume and a simple tutorial provide all the documentation required.

Switchless setup, easy expansion

Thanks to convenient ports and plugs, setting up a Personal System/2 model is simple. There are no system switches to set, no cards to add, no need to lift a cover.

Unless, of course, you decide to expand a particular system. Even that operation has been made simple—on the 80286 and 80386 models, snap-in adapter cards make it easy to add features and functions.







*Convenient
ports and plugs
make setup
quick and
simple.*

The many choices of Personal System/2

Personal System/2 bridges today's requirements and tomorrow's demands—with extraordinary versatility. Nowhere is versatility more apparent than in the range of choices that IBM Personal System/2 products offer. These choices address your needs at every level—from overall business operations to the quality you require on a printed page.

System units

The four models in the Personal System/2 family—Models 30, 50, 60 and 80—provide different levels of power, memory and storage to match your immediate business needs and your long-term business plans.

Model 30 offers excellent performance at an economical price. By itself, it can boost the productivity of a single office or a single user. Connected in a network, it can share resources from other systems to save time and effort.

Designed for desktop convenience, Model 50 offers the kind of performance that can help raise productivity to new heights. Installed in a network or standing alone, this model can help users streamline routine work. So they can finish all of today's work today—and even get a start on tomorrow's.

Model 60 combines high performance with high capacity, making it an excellent choice for anyone who manages large quantities of information, big projects or tight schedules.

In a network, this model can be used as a server for files and programs or to provide rapid communications—so, no matter how much there is to do, everyone can work at peak efficiency.

The most powerful model in the family—Model 80—is so fast, so capable, it's almost like having a minicomputer at your desk. Use this system by itself or connect it to other systems. Its 80386 microprocessor and 80-nanosecond memory are the right combination to support highly advanced applications—even multiuser applications—in business, science, engineering and more.

Operating systems

A new version of the widely accepted Disk Operating System (DOS), IBM PC DOS Version 3.30, supports the enhanced performance and many of the new functions provided by Personal System/2.⁵

Version 3.30 offers several enhancements over Version 3.20, including:

- Faster access to files that are opened and closed very frequently
- Faster and more secure methods of writing data
- Better support for data base applications requiring access to large numbers of files at once
- Enhanced utility commands

The new IBM Operating System/2 will put the large memory addressability of the 80286 and 80386 Personal System/2 system units at your disposal. Standard Edition provides a way to break

through the 640KB memory barrier and support flexible operations with multiple applications using up to 16MB of memory. And those applications can include text and graphics in a windowing environment.

Extended Edition will supply all the enhanced functions that the Standard Edition does—and much more. This edition makes data base management easy, provides all the tools to create a data base, and even reduces the need for data base programming. Extended Edition also includes a powerful communications subsystem that permits multiple connections to hosts and peer stations on a network. That means a Personal System/2 model can communicate with a public information service and conduct 3270 host sessions and 5250 sessions all at once.

With either edition of Operating System/2, frequently used applications can be held in memory for quick access. In addition, several tasks can be handled at a time. And whether applications are being held at the ready or are running, you can switch quickly from one to another.



The IBM Personal System/2 models at a glance

The wealth of features common to both editions of this powerful operating system include:

- 16MB memory addressability
- Multiapplication support
- Enhanced ease-of-use facilities
- Graphics
- Windowing
- Optional DOS environment
- Consistent user interface

SolutionPacs

The comprehensive approach of Personal System/2 extends to specific businesses through IBM SolutionPacs.[™] These new integrated packages provide the right mix of products—software as well as hardware, in some cases—to help you become more productive quickly. SolutionPacs will be available for such industry applications as accounting, and computer-aided design and drafting. And these are just the first examples of many business-specific SolutionPacs coming from IBM.

Software

Many popular software programs from IBM and other leading vendors are available on the 3.5-inch diskettes used with Personal System/2—and new advanced programs continue to be developed. For now, several easy transition

tools from IBM allow files and some programs² stored on 5.25-inch diskettes to be converted for use with IBM Personal System/2 models.

Displays

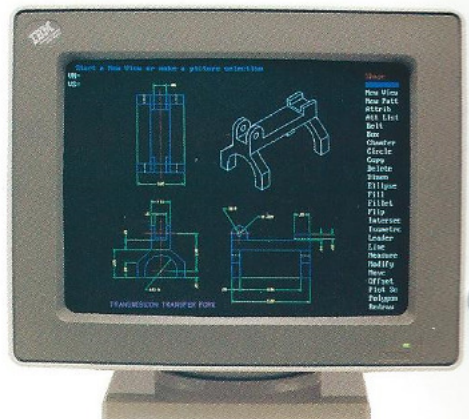
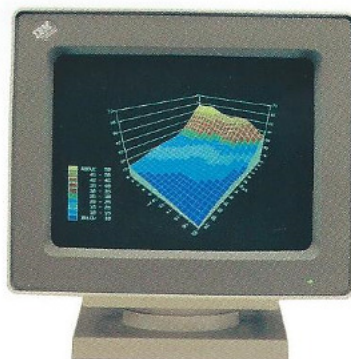
Created especially for Personal System/2—yet compatible with the IBM Personal Computer line⁶—three new color displays and one new monochrome display provide new levels of performance. Complex graphics are brighter, higher in definition, and easier to understand than ever before. On-screen text is clean and easily readable. Whether you're viewing graphics or text, you'll get a steady picture and be able to view even tiny details in the screen image.

Printers

IBM's expanded line of personal printers can be used to produce everything from quick drafts to quality presentations with the IBM Personal System/2 models—as well as with systems in the IBM Personal Computer line. The print technologies you can choose include dot matrix, resistive ribbon thermal transfer, ink jet, daisywheel, and more. Whatever your needs, whatever your budget, there's an IBM printer to match both.

All models

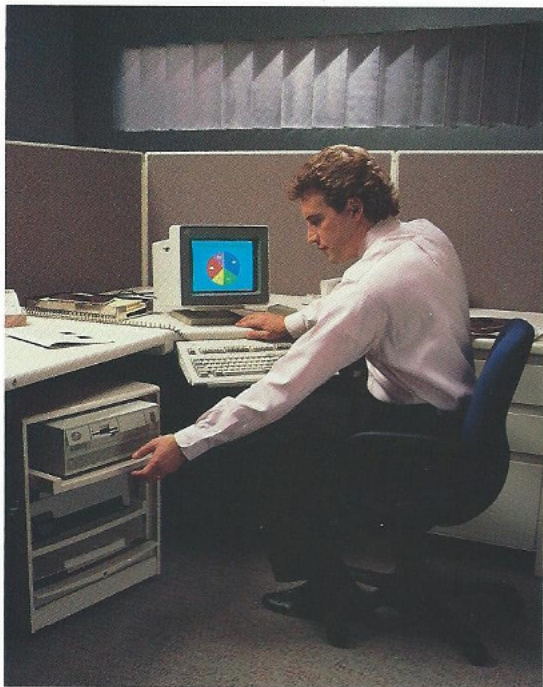
Integrated functions	Graphics and text capabilities and display port, serial port, parallel port, pointing device port, keyboard port, and diskette controller
Keyboard	IBM Enhanced PC Keyboard
Supported displays	IBM Personal System/2 Color Displays 8512, 8513 and 8514; IBM Personal System/2 Monochrome Display 8503
Supported printers	IBM Proprinter [™] family, IBM Quietwriter [®] printers, IBM Wheelprinters, IBM Pageprinter, IBM Color Jetprinter



	Models 30-002 and 30-021	Model 50	Models 60-041 and 60-071	Models 80-041, 80-071 and 80-111⁷
Microprocessor	8086, 8 MHz Optional: IBM 8087 Math Co-Processor (8 MHz)	80286, 10 MHz Optional: IBM 80287 Math Co-Processor (10 MHz)	80286, 10 MHz Optional: IBM 80287 Math Co-Processor (10 MHz)	80386, 16 MHz (Models 80-041 and 80-071) or 20 MHz (Model 80-111) Optional: IBM 80387 Math Co-Processor
Permanent memory (ROM)	64KB standard	128KB standard	128KB standard	128KB standard
Memory (RAM)	640KB standard	1MB standard, expandable to 7MB with memory expansion options	1MB standard, expandable to 15MB with memory expansion options	1MB (Model 80-041) or 2MB (Models 80-071 and 80-111) 80-nanosecond memory standard, expandable to 16MB with memory expansion options
Text/graphics support	MultiColor Graphics Array (MCGA) supports CGA modes and provides up to 256 colors (from a palette of over 256,000) and 64 shades of gray (monochrome)	Video Graphics Array (VGA) supports CGA, EGA and MCGA modes and provides up to 256 colors (from a palette of over 256,000) and 64 shades of gray (monochrome)	Video Graphics Array (VGA) supports CGA, EGA and MCGA modes and provides up to 256 colors (from a palette of over 256,000) and 64 shades of gray (monochrome)	Video Graphics Array (VGA) supports CGA, EGA and MCGA modes and provides up to 256 colors (from a palette of over 256,000) and 64 shades of gray (monochrome)
New display modes	320 x 200 pels x 256 colors— all points addressable 640 x 480 pels x 2 colors— all points addressable 8 x 16 character box—16 colors (text)	320 x 200 pels x 256 colors— all points addressable 640 x 480 pels x 16 colors— all points addressable 9 x 16 character box—16 colors (text)	320 x 200 pels x 256 colors— all points addressable 640 x 480 pels x 16 colors— all points addressable 9 x 16 character box—16 colors (text)	320 x 200 pels x 256 colors— all points addressable 640 x 480 pels x 16 colors— all points addressable 9 x 16 character box—16 colors (text)
Dimensions	approx. 4" H x 16" W x 15.6" D (102mm x 406mm x 397mm)	approx. 5.5" H x 14" W x 16" D (140mm x 360mm x 420mm)	approx. 23.5" H x 6.5" W x 19" D (597mm x 166mm x 482mm)	approx. 23.5" H x 6.5" W x 19" D (597mm x 166mm x 482mm)
Auxiliary storage	Model 30-002: two 720KB 3.5-inch diskette drives Model 30-021: one 720KB 3.5-inch diskette drive and a 20MB fixed disk Optional: IBM 5.25" External Diskette Drive (Model 30-021 only), IBM 3363 Optical Disk Drive, IBM 6157 Streaming Tape Drive	One 1.44MB 3.5-inch diskette drive and a 20MB fixed disk Optional: either a second 1.44MB diskette drive or IBM 5.25" External Diskette Drive; IBM 3363 Optical Disk Drive, IBM 6157 Streaming Tape Drive	Model 60-041: one 1.44MB 3.5-inch diskette drive and a 44MB fixed disk standard; additional 44MB fixed disk optional Model 60-071: one 1.44MB 3.5-inch diskette drive and a 70MB fixed disk standard; additional 70MB or 115MB fixed disk optional Also optional: either a second 1.44MB diskette drive or IBM 5.25" External Diskette Drive; IBM 3363 Optical Disk Drive, IBM 6157 Streaming Tape Drive	Model 80-041: one 1.44MB 3.5-inch diskette drive and a 44MB fixed disk standard; additional 44MB fixed disk optional Model 80-071: one 1.44MB 3.5-inch diskette drive and a 70MB fixed disk standard; additional 70MB or 115MB fixed disk optional Model 80-111: one 1.44MB 3.5-inch diskette drive and a 115MB fixed disk standard; additional 70MB or 115MB fixed disk optional Also optional: either a second 1.44MB diskette drive or IBM 5.25" External Diskette Drive; IBM 3363 Optical Disk Drive, IBM 6157 Streaming Tape Drive
System expansion	Three available expansion slots	Three available expansion slots	Seven available expansion slots	Seven available expansion slots
Operating systems	IBM PC DOS 3.30	IBM PC DOS 3.30 IBM Operating System/2	IBM PC DOS 3.30 IBM Operating System/2	IBM PC DOS 3.30 IBM Operating System/2
Communications support	IBM Token-Ring Network Adapter, IBM PC Network Adapter, IBM PC Network Baseband Adapter, 3278/79 Emulation Adapter, 5250 Emulation Adapter	IBM Token-Ring Network Adapter/A, IBM PC Network Adapter II/A, IBM PC Network Baseband Adapter/A, IBM 3270 Connection, System 36/38 Workstation Emulation Adapter, IBM Dual Async Adapter/A, IBM Multi-Protocol Adapter/A, IBM 300/1200 Internal Modem/A	IBM Token-Ring Network Adapter/A, IBM PC Network Adapter II/A, IBM PC Network Baseband Adapter/A, IBM 3270 Connection, System 36/38 Workstation Emulation Adapter, IBM Dual Async Adapter/A, IBM Multi-Protocol Adapter/A, IBM 300/1200 Internal Modem/A	IBM Token-Ring Network Adapter/A, IBM PC Network Adapter II/A, IBM PC Network Baseband Adapter/A, IBM 3270 Connection, System 36/38 Workstation Emulation Adapter, IBM Dual Async Adapter/A, IBM Multi-Protocol Adapter/A, IBM 300/1200 Internal Modem/A

IBM Personal System/2: more than the sum of its parts

From hardware to software to streamlined communications, IBM Personal System/2 is more than the sum of its parts. It's a range of choices that offers a solution that truly suits your needs. It's a commitment to quality in every component. It's expert service and support that make your choices as secure as they are smart. Above all, it's IBM's best for business and the people in business—today and tomorrow.



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¹ IBM Operating System/2 supports IBM Personal System/2 Models 50, 60 and 80.

² Before copying any software product, be sure to read, understand and comply with the specific license agreement and installation instructions for that product.

³ IBM Micro Channel architecture is a feature of IBM Personal System/2 Models 50, 60 and 80.

⁴ 8½ by 11-inch, double-spaced typewritten pages.

⁵ IBM PC DOS 3.30 also supports IBM Personal Computers.

⁶ IBM Personal System/2 Display Adapter is required to support Personal System/2 displays on IBM PC products.

⁷ Model 80-111 refers to the IBM Personal System/2 Model 8580-111.



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