

Mike Sears
Right for today,
ready for tomorrow

IBM Personal System/2 Model 70 386

Power and speed to spare

Combining high-speed processing power with large-capacity data storage, IBM Personal System/2® Model 70 386 brings new levels of capability to desktop computing. Three versions of this model put an 80386 microprocessor, up to 16MB of memory, and a 60MB or 120MB fixed disk at your command. In the top-of-the-line version, the processor runs at 25 MHz—and a 64KB memory cache pushes overall performance to impressive heights.

The point is, with Model 70 386, even if you're a "power user," you have power and speed to spare. What's more, thanks to Micro Channel™ architecture, you have the freedom to apply this fast and powerful PS/2™ however you need.

Support one or several sophisticated applications. With Model 70 386, you start with 1MB or 2MB of high-speed memory—more than enough to handle most advanced business programs. And you can expand memory to 16MB—an ample amount for working with especially lengthy spreadsheets, highly complex financial models, large relational data bases, and more.

Large single-task business applications aren't the limit with Model 70 386. When running IBM Operating System/2™ this model can easily support multiple programs and several tasks concurrently. And it's equally capable of supporting specialized engineering/scientific programs or image/voice applications as well.

Increase the efficiency of your communications environment. Connect Model 70 386 in a network or company-wide communications system, and you can use it in a variety of important ways. As an intelligent workstation, it's a match for your multifunction terminal emulation requirements. As an advanced-function station on a LAN, it can handle a large share of the work load. As a server or gateway, it can provide multiple users with files and programs or give them communications access to a host.

Highlights

However you put Personal System/2 Model 70 386 to work for you, you'll benefit from a range of advanced features and functions that distinguish this computer from the rest.

Micro Channel architecture provides efficient data paths for fast calculations and communications. It accounts for Model 70 386's balanced performance—even when supporting multiple tasks and input/output operations.



IBM

The Bigger Picture

IBM Personal System/2 Model 70 386 at a glance

Machine numbers	8570-E61	8570-121	8570-A21
80386 microprocessor	16 MHz, 0-2 wait states	20 MHz, 0-2 wait states	25 MHz, 64KB memory cache (25ns)
Optional 80387 Math Co-Processor	16 MHz	20 MHz	25 MHz
Permanent memory (ROM)	128KB standard		
Memory (RAM)²			
Standard	1MB (100ns)	2MB (85ns)	2MB (80ns)
Maximum on system board	6MB	6MB	8MB
System maximum	16MB	16MB	16MB
Integrated functions	Video Graphics Array (VGA) and display port, serial port, parallel port, pointing device port, keyboard port and diskette controller, clock/calendar		
System expansion	Three available expansion slots (two 32-bit, one 16-bit)		
Operating systems	DOS 3.30, IBM Operating System/2, AIX™ Personal System/2 ³		
Storage			
1.44MB 3.5-inch diskette drives			
Standard	1	1	1
Maximum	2	2	2
Fixed disk			
Standard	60MB (27ms)	120MB (23ms)	120MB (23ms)
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		
Text/graphics support	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)		
Display modes	All CGA and EGA modes plus: 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)		
Keyboard	101 keys, including 12 function keys, 3 lighted mode indicators; 9-foot coiled cable		
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		
Communications support³	IBM Token-Ring Network Adapter/A, IBM PC Network Adapter II/A, IBM PC Network Baseband Adapter/A, IBM 3270 Connection, IBM System 36/38 Workstation Emulation Adapter, IBM Dual Async Adapter/A, IBM Multi-Protocol Adapter/A, IBM 300/1200 Internal Modem/A, IBM Realtime Interface Co-Processor Multiport/2		
Power supply	132-watt worldwide autosensing and autoswitching		
Size	Approx. 5.5" H x 14.2" W x 16.5" D (140mm x 360mm x 420mm); 21 lbs. (9 kg)		

your display, keyboard, any serial device such as a printer—even an optional modem or pointing device.

60MB or 120MB fixed disk provides ready-access storage for extensive information. You'll be able to easily store large programs as well as lengthy files.

1.44MB diskette drive lets you easily load files and programs stored on compact 3.5-inch diskettes. Each durable, high-density diskette can hold the equivalent of 720 pages¹ of information.

Three expansion slots make it easy to add more functions to Model 70 386 to accommodate a variety of needs.

Switchless setup means all you do is connect your system and begin. Convenient ports and plugs make it simple.

Four PS/2 analog displays offer a range of choice in price and performance. Whether you need crisp text or detailed color graphics, you'll find the right display to suit your work and your budget. In addition, if your work calls for specialized graphics for science or engineering, you can install an IBM Personal System/2 8514/A Display Adapter to gain the superior performance you need.

Wide range of communications options opens the door to networking, multiple host communications, and public information services.

What you get

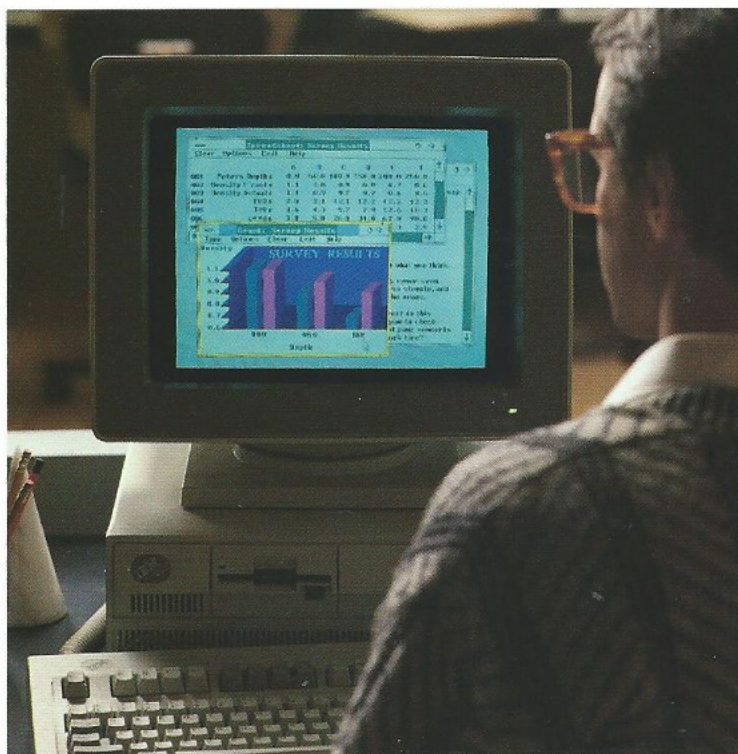
IBM Personal System/2 Model 70 386 is packaged in two cartons, one containing the system unit. The other contains:

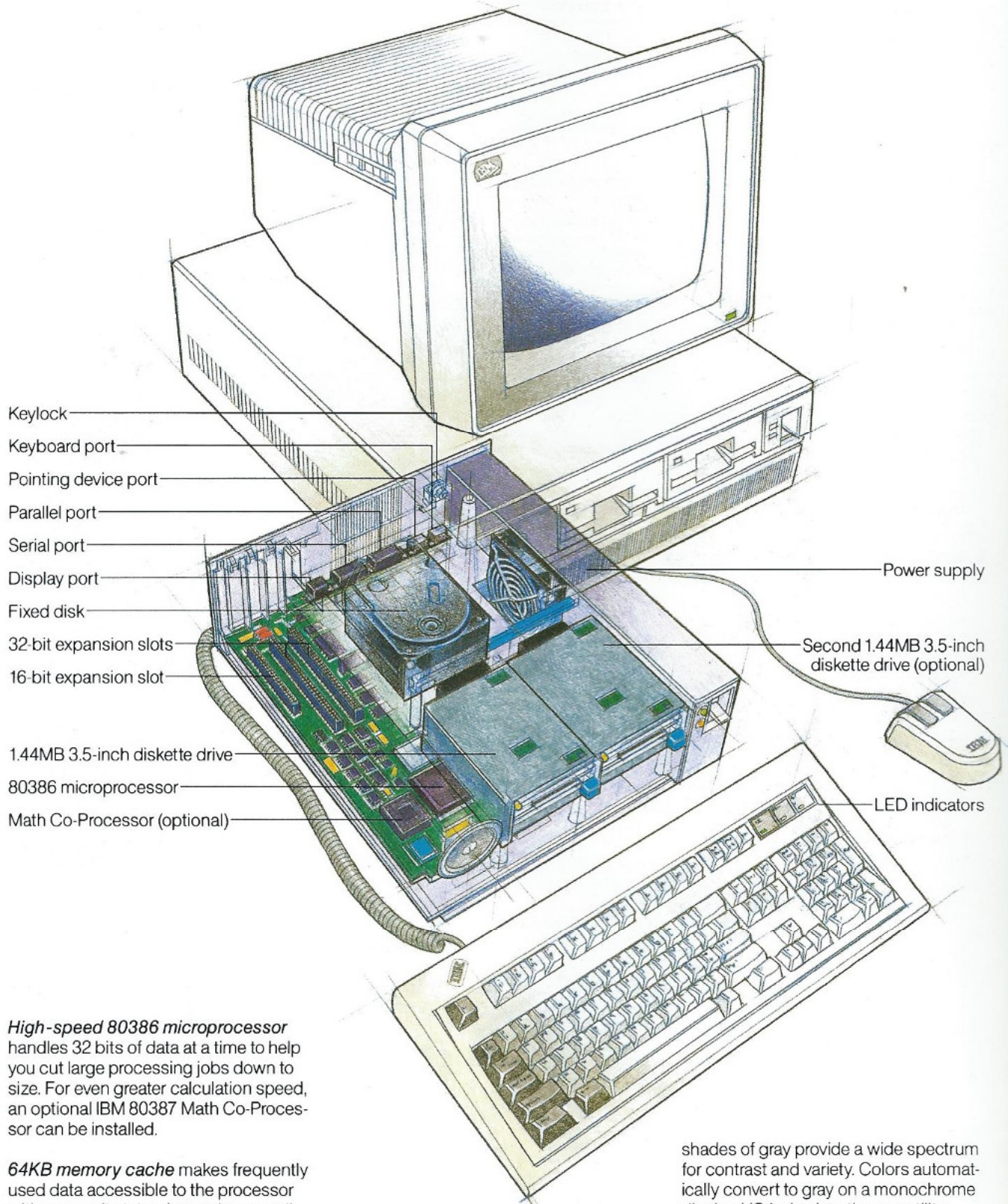
- One-page customer setup sheet
- System unit power cord
- Keyboard and cable
- Quick reference manual
- System reference diskette with tutorial and diagnostics
- Technical directory

Options

Model 70 386 supports a wide array of optional devices—including many of the peripherals currently available for IBM Personal Computers. What follows is a listing of some of the options available for Model 70 386:

- IBM Personal System/2 80387 Math Co-Processor
- IBM 2-8MB 80386 Memory Expansion Option





High-speed 80386 microprocessor handles 32 bits of data at a time to help you cut large processing jobs down to size. For even greater calculation speed, an optional IBM 80387 Math Co-Processor can be installed.

64KB memory cache makes frequently used data accessible to the processor with zero wait states, improving overall system performance.

1MB or 2MB of high-speed system memory—expandable to 16MB with memory expansion options—gives you plenty of workspace and tremendous speed.

Built-in Video Graphics Array (VGA) capabilities supply videolike clarity and detail for graphics—plus text that's almost as sharp and clear as a printed page. And up to 256 brilliant colors (from a palette of over 256,000) and 64

shades of gray provide a wide spectrum for contrast and variety. Colors automatically convert to gray on a monochrome display. VGA also has the versatility to support CGA, EGA and MCGA graphics and text.

Integrated functions pack more capabilities into fewer components. The result is greater reliability in a compact system that comes ready to support

- IBM 1MB Memory Module Kit
- IBM 2MB Memory Module Kit
- IBM 80386 Memory Expansion Option
- IBM 80386 Memory Expansion Kit
- IBM Personal System/2 Mouse
- IBM Personal System/2 5.25" External Diskette Drive Model 4869-001
- IBM Personal System/2 Data Migration Facility
- IBM 6157 Streaming Tape Drive
- IBM 3363 Optical Disk Drive
- IBM 300/1200 Internal Modem/A
- IBM Dual Async Adapter/A
- IBM Multi-Protocol Adapter/A
- IBM 3270 Connection
- IBM System 36/38 Workstation Emulation Adapter
- IBM Token-Ring Network Adapter/A
- IBM PC Network Adapter II/A
- IBM PC Network Baseband Adapter/A
- IBM Personal System/2 3117 Adapter/A
- IBM Personal System/2 High Speed Adapter/A
- IBM Realtime Interface Co-Processor Multiport/2

Warranty/Service

Every IBM product is built to meet high standards of quality and reliability. So you can count on Model 70 386 to perform smoothly year after year.

Model 70 386 is backed by a one-year limited warranty. And extended service terms are available from IBM and from IBM Authorized Advanced Products Dealers.

With an IBM Maintenance Agreement, you can arrange for on-site service.

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™ Micro Channel, PS/2, Operating System/2, AIX and Proprinter are trademarks of International Business Machines Corporation.

¹ 8½ x 11-inch, double-spaced typewritten pages.

² 128KB of this memory is reserved for hardware system use.

³ Compatibility test results forthcoming for Model 70-A21.

IBM Personal System/2 Model 70 386 features

Feature	Function	Benefit
Intel 80386 microprocessor	Processes data at a clock speed of 16 MHz (Model 70-E61) or 20 MHz (Model 70-121) or 25 MHz (Model 70-A21)	Capability to handle the most intensive computing applications and process large amounts of data in small amounts of time
64KB memory cache	Stores frequently used data for the processor to access with zero wait states	Significant improvement in overall system performance
128KB of permanent memory	Includes security features and Advanced BIOS functions	Data and program security; support for concurrent operations
1MB or 2MB of memory (RAM)²; expandable to 16MB with memory expansion options	Access rate of 80, 85 or 100 nanoseconds (based on model); provides electronic workspace for lengthy programs and files, and/or multiple applications	Rapid data processing; support for advanced applications, including multitasking/multiuser applications and network services
Micro Channel architecture	Delivers rapid processing and throughput	Fast, efficient, balanced system performance; foundation for future growth
Integrated functions and streamlined design	Pack more capabilities into fewer components using Surface Mount Technology (SMT) and Very Large-Scale Integration (VLSI)	Easy setup, operation and expansion; better price/performance; enhanced reliability
Internal fixed disk drives	Provide 60MB or 120MB of storage for up to 30,000 or 60,000 pages ¹ of information; 27ms or 23ms average access (based on model); user-selectable software disk cache memory; 1:1 disk interleave factor	Faster, more convenient access to programs and data than with diskettes; support for advanced applications, large data bases, and network services; enhanced throughput via reduced storage and retrieval time on fixed disks
1.44MB 3.5-inch diskette drive	Stores up to 720 pages ¹ of information on a double-sided diskette; second diskette drive optional	High-density storage; low-profile drive
3.5-inch diskettes	Protect media in hard plastic enclosure	Smaller, more portable; reliable storage
Built-in VGA capabilities	Include up to 256 colors (from a palette of over 256,000) plus 64 shades of gray (monochrome)	High-quality, high-detail graphics and text; improved on-screen readability
IBM PS/2 Enhanced Keyboard	Has 101 keys, including 12 function keys and 3 lighted mode indicators	Simplified command entry; less chance of accidental printing or erasing
Network and host emulation capabilities	With the appropriate hardware and software, offer network services and connection to larger systems	Shared hardware and software; electronic mail capability; workgroup productivity benefits; access to mainframe functions, files and applications
5.25-inch external diskette drive option	Provides capability to interchange data and software with systems that use 5.25-inch diskettes	Compatibility with IBM PC 360KB diskettes
200MB optical disk drive option	Writes once, reads many times; holds up to 100,000 pages ¹ of information on one cartridge	Fixed disk backup; large permanent storage; media removable for archiving
Tape drive option	Saves/restores data for using systems	Fast, convenient save/restore and data exchange between systems
IBM support and service	Assure parts and service nationwide; offer 12-month limited warranty	Customer purchase backed by IBM support and service



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International Business Machines Corporation
US Marketing & Services Group
Dept. KPE
900 King Street
Rye Brook, NY 10573

Printed in the United States of America
6-88

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G360-2803-00

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G360-2803-00