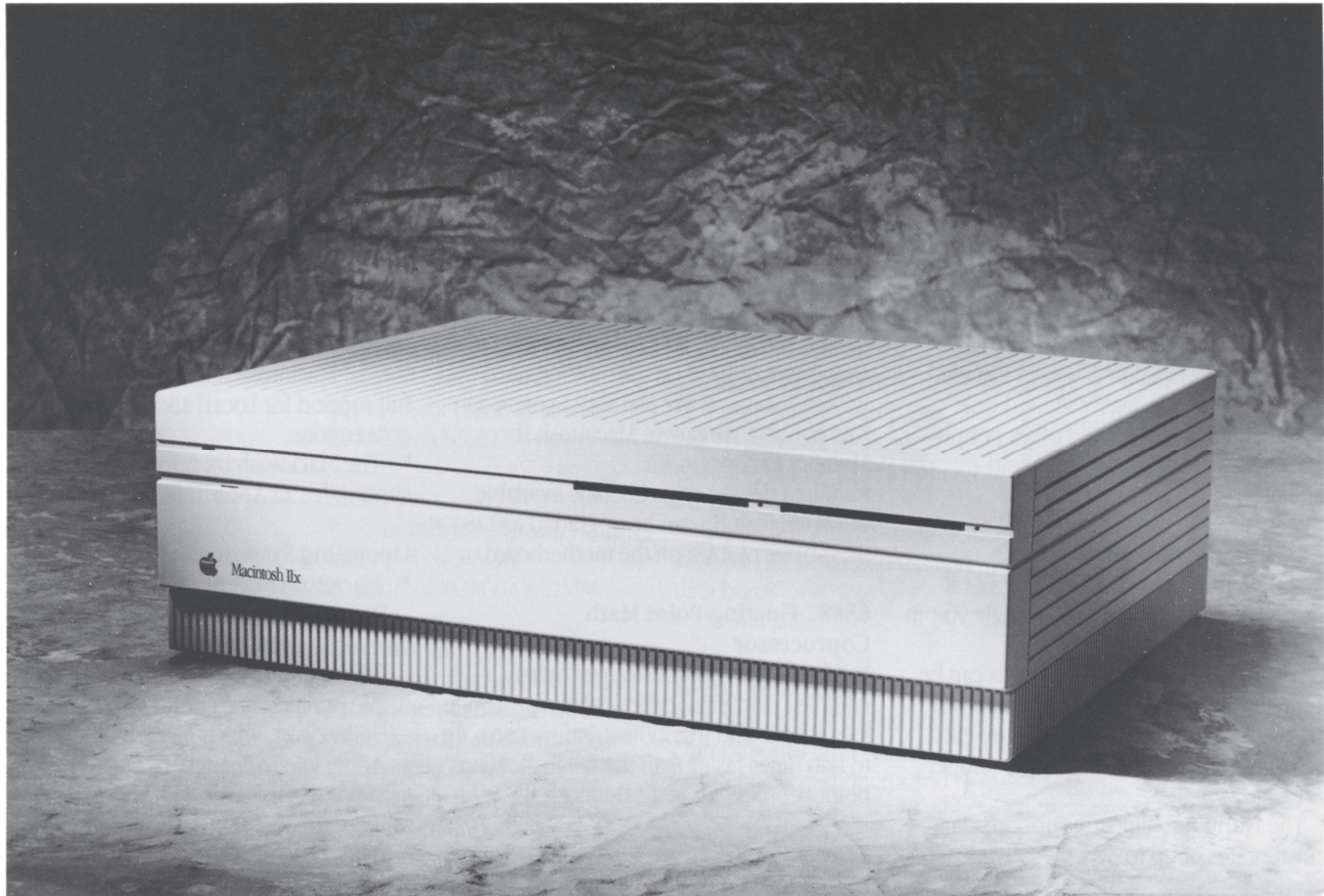| *Features*	*Benefits*
▶ Six built-in ports: two serial, two Apple Desktop Bus, one SCSI, one sound	▶ Lets you expand your system with popular peripherals without using expansion slots. ▶ Provides access to LocalTalk™ cable-based networks, which allows you to connect your Macintosh IIx to other computers and to LaserWriter® printers through the AppleTalk Network System. ▶ Provides connection for Apple Desktop Bus devices, such as a keyboard, hand-controlled pointing device (such as a mouse or track ball), or graphics tablet. ▶ Supports up to seven SCSI peripherals.
▶ Macintosh user interface: mouse, icons, windows, and pull-down menus	▶ Makes most applications intuitive and easy to learn. ▶ Provides a consistent interface across applications. ▶ Reduces training and support costs.
▶ MultiFinder operating system	▶ Lets you easily integrate information from multiple applications by cutting and pasting. ▶ Lets you move quickly and easily between applications. ▶ Allows you to continue working with applications while performing some tasks in the background, such as print spooling to a LaserWriter printer or downloading remote files.
▶ Macintosh software compatibility	▶ Runs virtually all Macintosh II software, including applications designed to take advantage of the 68881 floating-point coprocessor.
▶ Apple stereo sound chip	▶ Provides high-quality digital sound. ▶ Offers compatibility with all applications that use Macintosh sound.
▶ Choice of keyboards (sold separately): —Apple Keyboard —Apple Extended Keyboard	▶ Apple Keyboard includes numeric keypad and cursor keys for efficient operation. ▶ Apple Extended Keyboard also includes 15 function keys, letting you work effectively with alternate operating systems, terminal-emulation programs, and other data communications applications.
▶ Choice of monitors (sold separately): —Apple High-Resolution Monochrome Monitor —AppleColor™ High-Resolution RGB Monitor	▶ Lets you choose the monitor that best meets your needs.

Overview

The Macintosh® IIx, a member of the Macintosh personal computer family, enhances the performance and flexibility of the Macintosh II personal computer. It is ideal for advanced users who require maximum system speed, flexibility, and capacity from their computers.

The full 32-bit 68030 microprocessor of the Macintosh IIx provides faster program execution than its predecessor, the 68020 microprocessor, and its built-in Paged Memory Management Unit (PMMU) supports multitasking operating systems such as A/UX®, Apple's implementation of AT&T UNIX®

The Macintosh IIx also uses Apple's new FDHD™ Internal Drive (a high-density floppy disk drive with 1.4-megabyte capacity). In addition to providing almost twice the storage capacity of existing 800K disks, the Apple® FDHD Internal Drive lets users read directly from and write directly to MS-DOS, OS/2, and Apple II disks, for improved multivendor integration.

The Macintosh IIx includes a 68882 floating-point coprocessor that provides fast processing of complex functions such as logarithmic and trigonometric series. And the computer comes standard with 4 megabytes of RAM, to accommodate the most powerful,

sophisticated software available.

Like the Macintosh II, the Macintosh IIx offers high-performance computing power in an open-architecture environment. It provides advanced color and graphics capabilities, with a palette of more than 16 million colors. It accommodates up to 8 megabytes of on-board RAM. And it includes six built-in ports and six expansion slots that let you create virtually any system configuration you need.

The Macintosh IIx is compatible with virtually all Macintosh II applications, including applications that have been designed to take advantage of the 68881 floating-point coprocessor.

Ordering Information	**Macintosh IIx CPU**	Order No. M5820	With your order, you'll receive: ▶ Macintosh IIx personal computer with a built-in 1.4-megabyte disk drive ▶ Mouse ▶ Owner's guide ▶ System software and HyperCard ▶ Training disk ▶ Limited warranty statement
	Macintosh IIx Hard Disk 80 CPU	Order No. M5830	With your order, you'll receive: ▶ Macintosh IIx personal computer with a built-in 1.4-megabyte disk drive and an internal 80-megabyte SCSI hard disk drive ▶ Mouse ▶ Owner's guide ▶ System software and HyperCard ▶ Training disk ▶ Limited warranty statement
	Macintosh IIx Hard Disk 80 CPU with A/UX	Order No. M5850	With your order, you'll receive: ▶ Macintosh IIx personal computer with a built-in 1.4-megabyte disk drive and an internal 80-megabyte SCSI hard disk drive ▶ A/UX operating system installed on the internal 80-megabyte hard disk ▶ A/UX accessory kit (M0693) ▶ Mouse ▶ Owner's guide ▶ System software and HyperCard ▶ Training disk ▶ Limited warranty statement

Features / Benefits

▸ Full 32-bit 68030 microprocessor with built-in Paged Memory Management Unit (PMMU)

▸ Executes most applications an average of 15 percent faster than the 68020-based Macintosh computers.
▸ Provides the memory management necessary to run multitasking operating systems such as A/UX.

▸ 68882 floating-point coprocessor

▸ Offers up to twice the performance of the 68881 floating-point coprocessor, for faster processing of complex mathematical functions.

▸ 4 megabytes of on-board RAM, expandable to 8 megabytes

▸ Lets you run multiple applications concurrently under Apple's MultiFinder™ operating system.
▸ Lets you work with large amounts of data, such as large spreadsheets, scanned images, and sound files.
▸ Provides the flexibility to grow as you need additional memory.

▸ Apple FDHD Internal Drive

▸ Provides almost twice the storage capacity of existing 800K disks.
▸ Lets you conveniently transfer data files between Macintosh, OS/2, MS-DOS, and Apple II systems.

▸ 256K of ROM on a SIMM (Single In-line Memory Module), a superset of Macintosh II ROM, including:
—Hierarchical File System
—Drivers for Macintosh hard disk drives, Apple Desktop Bus,™ 68882 floating-point coprocessor, SCSI, and AppleTalk® network
—Macintosh Toolbox
—Color QuickDraw™

▸ The SIMM mounting makes it easy to remove and replace ROM for more convenient configuration and servicing.
▸ The Hierarchical File System organizes storage for documents and allows easy access to files.
▸ The SCSI interface supports high-performance peripherals.
▸ QuickDraw provides the consistent interface throughout the Macintosh family.
▸ Color QuickDraw provides a consistent interface for both black-and-white *and* color applications.

▸ Six NuBus™ expansion slots

▸ Lets you configure your system to meet specific needs.
▸ Makes it easy to add a variety of cards. (Cards are self-configuring—they require no DIP switches, and can be placed in any slot.)
▸ Provides flexibility for expansion as your requirements change.

Product Details

System Configuration
▸ Three configurations are available:
—The Macintosh IIx CPU includes the CPU, 68882 floating-point coprocessor, 4 megabytes of RAM, one 1.4-megabyte floppy disk drive, and mouse.
—The Macintosh IIx Hard Disk 80 CPU, which includes all the features listed above plus an internal 80-megabyte hard disk drive.
—The Macintosh IIx Hard Disk 80 CPU with the A/UX operating system installed on the internal 80-megabyte hard disk.
▸ Keyboard, monitor, and other peripheral devices are packaged and sold separately.

NuBus Expansion Slots
▸ NuBus provides a multiplexed 32-bit address bus and data bus on a single 96-pin connector.
▸ NuBus is self-configuring. Cards can be plugged into any slot and the system will automatically identify and configure each card, without any DIP switches or jumper wires.
▸ The NuBus architecture supports data transfer rates of up to 37.5 megabytes per second.

68030 Processor
▸ The 32-bit 68030 processor runs at 15.7 megahertz.

▸ The 32-bit address bus provides a total addressable space of 4 gigabytes.
▸ Separate instruction and data caches provide significantly faster processing.
▸ Built-in PMMU supports virtual, shared, and protected memory in operating systems that have been designed for it (such as Apple's A/UX).

RAM
▸ The Macintosh IIx can be upgraded to 8 megabytes of RAM on the motherboard with two 2-megabyte Memory Expansion Kits or one 4-megabyte Macintosh II Memory Expansion Kit.
▸ When denser chips become available, the Macintosh IIx can be upgraded to 128 megabytes of RAM on the motherboard.

68882 Floating-Point Math Coprocessor
▸ The 68882 coprocessor performs complex mathematical calculations, such as logarithmic and trigonometric functions, up to two times faster than the 68881 floating-point coprocessor in a Macintosh II.

Stereo Sound
▸ The Apple Sound Chip supports stereo sound at a sampling rate of up to 44.1 kilohertz.

SCSI (Small Computer Systems Interface)
▸ SCSI is a high-performance interface for connecting the computer to hard disks and other mass-storage peripherals. Up to seven SCSI peripherals (including an internal hard disk) can be connected to the Macintosh IIx.
▸ SCSI provides data transfer rates of up to 1 megabyte per second.

Network Support
▸ The Macintosh IIx serial ports provide full support for LocalTalk network connections.
▸ The Macintosh IIx provides full ROM support for all AppleTalk protocols.

Operating System Software
▸ Macintosh System software includes:
—System Tools 6.0 or greater (the Macintosh operating system)
—Printer disk (the printer drivers for all Apple printers)
—Utility disks, which include utilities such as Apple File Exchange, HD SC Setup, Close View, Disk First Aid, and Font/DA Mover

HyperCard
▸ Apple's HyperCard® software and manual are included.

Cover-Release Button   Six NuBus Slots   Outlet for Monitor   Cover-Release Button

Reset   Stereo Audio Jack   Apple Desktop Bus Connectors   Serial Ports   SCSI Connector   Power   Security Tie-Down Connector

Technical Specifications

Processor
▸ MC68030 32-bit internal Harvard architecture
▸ 15.667-megahertz clock speed
▸ 256-byte instruction and data caches
▸ On-board PMMU (Paged Memory Management Unit)

Coprocessor
▸ 68882 floating-point coprocessor (IEEE standard—80 bits precision)

Memory
▸ 4 megabytes of RAM, mounted on SIMMs
▸ 256K of ROM on a SIMM

Disk storage
▸ Two standard configurations
—One built-in double-sided drive that uses standard-density floppy disks or 1.4-megabyte high-density floppy disks
—One built-in double-sided drive that uses standard-density floppy disks or 1.4-megabyte high-density floppy disks, and an internal 80-megabyte SCSI hard disk drive
▸ Options include 20- and 40-megabyte internal SCSI hard disk drives and a variety of external drives.

Mouse
▸ Mechanical tracking: optical shaft encoding at 3.54 pulses per mm (90 pulses per inch) of travel

Interfaces
▸ Two mini-8 serial (RS-232/RS-422) ports
▸ SCSI interface: uses a 50-pin connector (internal) and a DB-25 connector (external)
▸ Two Apple Desktop Bus (ADB) ports allow daisy-chaining of multiple peripheral devices
▸ Six NuBus internal slots support full 32-bit address and data buses
▸ Sound jack

Sound generator
▸ Apple custom digital sound chip provides 8-bit stereo sampling at 44 kilohertz and includes four-voice wave-table synthesis. Capable of driving stereo headphones or other stereo equipment through the sound jack.

Electrical requirements
▸ Line voltage: 90 to 140 volts AC; 170 to 270 volts AC, automatically configured
▸ Frequency: 48 to 62 Hz
▸ Maximum power: 230 watts, not including monitor power

Size and weight
Main unit
▸ Height: 5.51 in. (14.0 cm)
▸ Width: 18.66 in. (47.4 cm)
▸ Depth: 14.37 in. (36.5 cm)
▸ Weight: 24 lbs. to 26 lbs. (10.9 kg to 11.8 kg)*
Mouse
▸ Height: 1.11 in. (2.8 cm)
▸ Width: 2.1 in. (5.3 cm)
▸ Depth: 3.8 in. (9.7 cm)
▸ Weight: 6 oz. (.17 kg)

* Weight varies depending on whether optional hard disk or second 3 5-inch disk drive has been installed.