



# Apple Facts

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# The Macintosh Advantage

## Desktop Computer Systems

## Multimedia Products

## Portable Computers

## Apple Software

## Printers, Displays, and Imaging

## Personal Digital Assistants

## Networking and Connectivity

## QuickCharts

Welcome to **AppleFacts 10.95**—a concise guide to Apple products offered worldwide. Because product availability, configurations, and part numbers vary worldwide, we suggest that you contact your local Apple dealer or Apple office for this information.

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#### **6★** The Macintosh Advantage

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### **A key to symbols used in *AppleFacts*:**


- Indicates either a product that is available in a configuration specifically designed for use with Windows software, or a peripheral product that can be used with Windows software-based systems.
- ★ Indicates a new product.
-  32 Represents a cross-reference. For more information, simply turn to the page listed (in this case, page 32).

# The Macintosh Advantage

# The Macintosh Advantage

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## What comes with every Macintosh

- *Macintosh System 7.5:* The popular Macintosh operating system. Imitated, but never equaled, System 7.5 makes Macintosh incredibly easy to learn and use. It runs on all Apple Macintosh computers,<sup>1</sup> offering capabilities such as multitasking, virtual memory, on-screen help, and file sharing.  98
- *An Apple SuperDrive floppy disk drive.* The Apple SuperDrive floppy disk drive<sup>2</sup> is a high-density floppy disk drive that can read from and write to Mac OS, MS-DOS, Windows, OS/2, and ProDOS disks. You can, for example, use it to open a file that's stored on an MS-DOS disk, modify the file with a program for Macintosh, and save your work back to the MS-DOS disk.<sup>3</sup>
- *Built-in networking ports.* All Macintosh computers come with a LocalTalk port, which lets you easily connect Macintosh computers together in an AppleTalk network. You can also connect a Macintosh to DECnet, TCP/IP, SNA, APPC, 3270, and X.25 networking environments.  158
- *WYSIWYG.* Macintosh offers “what you see is what you get” capabilities—things you create and view on the screen will appear exactly as you would expect when you print them.
- *Easy connection to printers.* It's easy to connect your Macintosh to an Apple printer—all you need is a single cable. And if you are connected to more than one printer over a network, it's easy to select the particular printer you want to use.

<sup>1</sup> System 7.5 requires 4MB of RAM (8MB on a Power Macintosh computer) and a hard disk.

<sup>2</sup> The PowerBook Duo computers can be used with an external 1.4MB floppy disk drive.

<sup>3</sup> Requires use of either Macintosh PC Exchange (included as part of System 7.5) or Apple File Exchange.

- *SCSI port.* You can connect as many as seven SCSI devices to your Macintosh—hard disk drives, CD-ROM drives, scanners, and more—with no need for extra cards or connectors.
- *Apple Desktop Bus.* The Apple Desktop Bus (ADB) port is a built-in peripheral port for input devices—such as mouse controllers, keyboards, and graphics tablets. It lets you easily add input devices to suit your needs. All Macintosh computers offer an ADB port—and some models have two.<sup>4</sup>
- *Sound capabilities.* Every Macintosh can play back high-quality sound. And all Macintosh models feature sound-input capabilities, so you can add voice annotation or music to your work.
- *Built-in video.* Nearly all Macintosh computers come standard with built-in video support. There's no need to purchase, configure, or install video cards. The Macintosh LC 580 and Performa 580, Performa 5200CD and 5300CD, Power Macintosh 5200/75 LC and 5300/100 LC, PowerBook, and PowerBook Duo computers have built-in displays. All other Macintosh computers (with the exception of the Power Macintosh 9500/132) have built-in support for a variety of Apple displays.
- *Built-in features designed to meet the needs of individuals with disabilities.* Out of the box, the Macintosh is the most accessible personal computer available:
  - Every Macintosh comes with Easy Access, a system utility that allows you to use Sticky Keys, which lets you type multiple keystrokes without actually having to press the keys simultaneously; Slow Keys, which lets you type very slowly and ignores accidental keystrokes by delaying the acceptance of the next keystroke; and Mouse Keys, which lets you use the numeric keypad to imitate the way the mouse moves your cursor.
  - Most Macintosh computers come with CloseView, a screen utility that allows you to magnify what you see on your Macintosh screen from two to sixteen times its normal size. It also lets you invert black-on-white text screens to white-on-black, which is helpful for people with certain visual impairments.
  - Every Macintosh has the built-in capability to substitute a flashing menu bar for the sound of the system beep.

<sup>4</sup> The PowerBook Duo Dock Plus and PowerBook Duo Floppy Adapter offer ADB ports for the PowerBook Duo systems.



## 8 **Why Macintosh?**

*"Why should I buy a Macintosh instead of a PC clone running Windows?"*

The short answer to that question is this: People are more productive with Macintosh. And that's fact, not opinion.

In 1994, the Arthur D. Little consulting firm asked Macintosh users and Windows users to perform a number of identical, typical business tasks on their computers. What it discovered was that the people using Macintosh computers got their work done in almost half the time required by the Windows users—and got it done more accurately.<sup>5</sup>

In another study, the Roper Organization surveyed Macintosh and Windows users, and found that Macintosh computers were rated significantly higher—both in overall satisfaction, and in the amount of work accomplished.<sup>6</sup>

And a third study, by Evans Research, surveyed people who use both Macintosh computers and PCs running Windows. It came to the same conclusions: People got more done with Macintosh and were more satisfied with Macintosh.<sup>7</sup>

*"Why does a Macintosh make people more productive?"*

There are a number of reasons, which, in general, fall into four categories: power, ease of use, compatibility, and overall value.

- **Power.** Power Macintosh computers offer the high-performance advantage of the RISC-based PowerPC processor. Several independent studies have shown that Power Macintosh computers generally run application programs significantly faster than comparable Pentium processor–based PCs running Windows. And the Macintosh speed advantage should increase over time, because RISC processors such as the PowerPC are at the beginning of their life cycle and will keep getting much faster for a relatively low cost. In contrast, CISC processors, including Pentium and Intel 80x86 clones, are nearing the end of their life cycle, and making them faster is very expensive.

<sup>5</sup> Study conducted by Arthur D. Little, Inc., 1994.

<sup>6</sup> Study conducted by the Roper Organization, 1993.

<sup>7</sup> Study conducted by Evans Research Associates, 1992.

- *Ease of use.* Doesn't the Windows 95 user interface make the PC just as easy to use as Macintosh? That's what PC makers would have you believe. But it takes more than a mouse and icons and windows to make a computer easy to use. True ease of use requires a unified architecture, with the hardware and software working closely together, so people can concentrate on doing their work, instead of figuring out how to work on the computer.

On Macintosh, both the hardware and the operating system software were designed by Apple—and they're built to work tightly together. So, when you insert a disk into a Macintosh computer, the system automatically creates an icon for it on screen. In the PC world, the hardware and operating software are made by different companies—so they don't work together like they do on Macintosh. For instance, when you insert a disk into a Windows software-based machine, nothing happens at all. To see the disk's contents, you have to open up "My Computer" and double-click the correct disk drive icon. When you eject the disk, its directory still remains on screen. And it stays there, even when you've inserted an entirely different disk. To view the contents of the current disk, you have to use the "Refresh" command. That might sound like a minor point—until you've erased a disk with irreplaceable information because the wrong window was on screen. And this is just one example of the advantages of Macintosh hardware and software integration.

- *Compatibility.* Every Macintosh desktop computer built today has an Apple SuperDrive floppy disk drive, which—used in conjunction with Apple's Macintosh PC Exchange software—allows you to exchange information with a PC on a standard 3.5-inch floppy disk. And you can actually run programs written for MS-DOS 6.2 and Windows 3.1 on a Power Macintosh by using Insignia Solutions' SoftWindows software emulation program. In addition, some Macintosh models now also include a 486DX2 processor for hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 applications. Macintosh computers are also highly compatible in the networking arena, connecting easily to a variety of networking environments. And all of this compatibility helps people to work together more efficiently.



• *Overall value.* If you look at performance benchmarks in conjunction with street prices, you'll find confirmation that Power Macintosh systems offer some of the best price/performance values in the mainstream personal computer market today. Macintosh computers include as standard many features that cost extra on PCs. And the Macintosh value advantage increases over time—when you consider training requirements and other ongoing costs, Macintosh systems demonstrate even greater value over PCs.

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### ★ **The competitive advantage**

In performance tests completed in July 1995 by Competitive Assessment Services, the latest PowerPC processor-based Power Macintosh computers continued to significantly outperform comparable Intel Pentium processor-based personal computers running Microsoft Windows 3.1 or Windows for Workgroups 3.11. Here are some key findings:

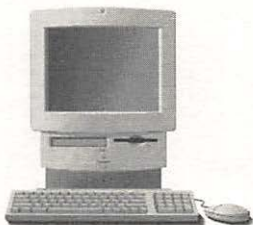
- Overall, the Power Macintosh 9500/132 was 63 percent faster than a PC based on a 120-megahertz Intel Pentium processor.
- Overall, the Power Macintosh 9500/120 was 39 percent faster than a PC based on a 120-megahertz Intel Pentium processor.
- Overall, the Power Macintosh 8500/120 was 44 percent faster than the Pentium processor-based system tested running at the same clock speed.
- Overall, the Power Macintosh 7500/100 was 30 percent faster than the Pentium processor-based system tested running at the same clock speed.
- The Power Macintosh 7200/90 was 58 percent faster than the 90-megahertz Pentium processor-based system tested when running graphics and publishing applications.
- For graphics and publishing applications, the Power Macintosh computers were up to 80 percent faster than Pentium processor-based systems tested running at the same clock speed—and the Power Macintosh 9500/132 beat the 100-megahertz Pentium processor-based system by 123 percent.
- When tested running scientific and engineering applications, the Power Macintosh 9500/132 was more than 80 percent faster than the 120-megahertz Pentium processor-based PC tested.

# Desktop Computer Systems

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# Macintosh LC 580

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## At a glance

- The Macintosh LC 580 gives you more multimedia for less—in a convenient all-in-one design. [Note: This Macintosh computer is not sold in the same channels worldwide as the Macintosh Performa 580; it is available to U.S. education customers only.]
- It features a Motorola 68LC040 processor, and can be upgraded to take advantage of the PowerPC processor.
- It includes a built-in CD-ROM drive (some configurations), as well as a video slot and an optional connector for video output.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- *Processor:* 68LC040 with 32-bit data bus
- *Speed:* 66/33 megahertz
- *Memory:* 8MB of RAM, expandable to 52MB—4MB on logic board, one 4MB SIMM, and one 72-pin SIMM slot
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB hard disk drive
  - Supports one internal CD-ROM drive
- *Expansion capabilities:* Macintosh LC-compatible processor-direct slot; communications slot for Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; supports six SCSI devices
- *Ports:* Two serial ports, ADB port, optional video connector that can support connection to another display or the Apple Presentation System, high-performance SCSI port, sound-input/output ports
- *Displays:* Built-in 14-inch (diagonal) high-resolution display; supports 32,768 colors

- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 17.9 by 13.5 by 16.5 inches (45.5 by 34.3 by 41.9 cm)
- *Weight:* 40.5 lb. (18.3 kg)—will vary based on internal devices installed

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### **Key features**

- Provides the power of a Motorola 68LC040 processor.
- Can be upgraded to take advantage of the PowerPC processor.
- Offers advanced multimedia capabilities in a convenient all-in-one design.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### **Other Macintosh models to consider**

- The Macintosh LC 630 DOS Compatible provides hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications.
- The Power Macintosh 5200/75 LC offers the power of the PowerPC processor in an innovative all-in-one design, and is optimized for multimedia.



# Macintosh LC 630 DOS Compatible



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## At a glance

- The Macintosh LC 630 DOS Compatible is an affordable, compatible system that offers advanced multimedia capabilities. [Note: This Macintosh computer is not sold in the same channels worldwide as the Macintosh Performa 630 DOS Compatible; it is available to U.S. education customers only.]
- It is, essentially, two computers in one: built-in 68LC040 and 486DX2 processors enable it to run applications, games, and CD-ROM titles for MS-DOS 6.2 and Windows 3.1, as well as the Mac OS.
- Its unique design allows you to tailor the system to your needs by adding one of a range of multimedia kits.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processors:** 68LC040 and 486DX2 with 32-bit data bus
- **Speed:** 66 megahertz for both processors
- **Memory:** 8MB of RAM, expandable to 52MB (Mac OS); 4MB expandable to 32MB (DOS and Windows environment)—4MB on logic board, one 4MB SIMM, and one 72-pin SIMM slot (Mac OS); one 4MB SIMM (DOS and Windows environment)
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB hard disk drive
  - Internal CD-ROM drive
- **Expansion capabilities:** Communications slot for Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports six external SCSI devices

- *Ports:* Two serial ports, ADB port, monitor port that can support connection to external video output, high-performance SCSI port, stereo sound-input/output ports, PC game port for DOS and Windows environment
- *Displays:* Built-in support for Apple displays of up to 17 inches in size; supports VGA and SVGA displays
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card); ODI driver supports Novell NetWare IPX and TCP/IP (DOS and Windows environment)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices installed

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### Key features

- Comes with a 486DX2 processor, for hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications and CD-ROMs, and includes MS-DOS 6.22 and Windows 3.1.
- Is compatible with Windows 95, when configured with at least 8MB of RAM on the DOS Compatibility Card.
- Lets you share files, folders, and disks between operating systems, as well as cut, copy, and paste between Mac OS, MS-DOS 6.2, and Windows 3.1 software-based applications.
- Lets you easily expand the multimedia and communications capabilities of your system. 📞 64
- Provides 16-bit stereo playback, and includes support for Sound Blaster 16 audio output.
- Lets you use Macintosh-compatible printers, modems, and other peripherals with both operating systems.

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### Other Macintosh models to consider

For even greater performance, you should consider the Power Macintosh 6100/66 DOS Compatible, which offers:

- The faster PowerPC processor architecture.
- More memory expansion capability.
- Built-in support for two displays, so you can dedicate one to the Mac OS and one to MS-DOS 6.2 and Windows 3.1 software-based applications.



# Macintosh Performa 580

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## At a glance

- The Macintosh Performa 580 has an all-in-one design, is optimized for multimedia, and can be upgraded to take advantage of the PowerPC processor. [Note: This computer is not sold in the same channels worldwide as the Macintosh LC 580.]

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**Specifications** *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** 68LC040 with 32-bit data bus
- **Speed:** 66/33 megahertz
- **Memory:** 5MB or 8MB of RAM, expandable to 52MB—4MB on logic board, one 1MB or 4MB SIMM, and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 250MB or 500MB hard disk drive
  - Internal CD-ROM drive (most configurations)
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; supports six SCSI devices
- **Ports:** Two serial ports, ADB port, optional video connector that can support connection to another display or the Apple Presentation System, high-performance SCSI port, sound-input/output ports
- **Displays:** Built-in 14-inch (diagonal) high-resolution display; supports 32,768 colors
- **Networking ports:** Built-in LocalTalk; optional Ethernet (requires Ethernet card)

- *Dimensions (HWD)*: 17.9 by 13.5 by 16.5 inches (45.5 by 34.3 by 41.9 cm)
- *Weight*: 40.5 lb. (18.3 kg)—will vary based on internal devices installed
- *Other features*:  
—Comes with a variety of third-party applications and CDs (CD configurations only)

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### **Key features**

- Provides the power of a Motorola 68LC040 processor.
- Can be upgraded to take advantage of the PowerPC processor.
- Offers advanced multimedia capabilities in a convenient all-in-one design.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### **Other Macintosh models to consider**

- The Macintosh Performa 630 series computers feature a modular design that lets you choose the monitor that best meets your needs.
- The Macintosh Performa 5200CD offers the power of the PowerPC processor in an innovative all-in-one design, and is optimized for multimedia.

# Macintosh Performa 630 Series

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## At a glance

- The Macintosh Performa 630 series computers are affordable Macintosh desktop systems designed to handle the user's multimedia needs.
- Their unique industrial design—including a modular logic board and special internal connectors—allows users to tailor the system to their needs by adding a PowerPC upgrade, a CD-ROM drive, or one of a range of multimedia kits.


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## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- *Processor:* 68LC040
- *Speed:* 66/33 megahertz
- *Memory:* 5MB or 8MB of RAM, expandable to 36MB—4MB on logic board and one 72-pin SIMM slot
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Internal 250MB or 350MB hard disk drive
  - Internal CD-ROM drive
- *Expansion capabilities:* Macintosh LC-compatible expansion slot; communications slot for Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports seven SCSI devices
- *Ports:* Two serial ports, ADB port, video-output port, SCSI port, stereo sound-input/output ports
- *Displays:* Comes with the Apple Performa Plus 14" Display or Apple Multiple Scan 15 Display

- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices installed
- *Other features:*
  - Headphone jack and sound controls located on front
  - Comes with an Apple display, keyboard, and mouse
  - Comes with a variety of Macintosh system software extensions and third-party applications

### **Key features**

- Provides the power of a Motorola 68LC040 processor.
- Can be upgraded to take advantage of the PowerPC processor.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

### **Other Macintosh models to consider**

If your tasks might require even greater performance and flexibility, you should consider the Macintosh Performa 6100 series, which offers:

- A faster processor architecture (60-megahertz PowerPC 601 processor).
- A NuBus slot.
- More memory expansion capability—up to 72MB.
- Built-in Ethernet capability.
- A configuration that takes advantage of Apple AV Technologies.

# Macintosh Performa 630 and 640CD DOS Compatible Systems

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## At a glance

- The Macintosh Performa 630 and 640CD DOS Compatible systems are affordable, compatible computers that offer advanced multimedia capabilities. [Note: These computers are not sold in the same channels worldwide as the Macintosh LC 630 DOS Compatible.]
- They are, essentially, two computers in one: built-in 68LC040 and 486DX2 processors enable them to run applications, games, and CD-ROM titles for MS-DOS 6.2 and Windows 3.1, as well as the Mac OS.

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## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*


- *Processors:* 68LC040 and 486DX2 with 32-bit data bus
- *Speed:* 66 megahertz for both processors
- *Memory:* 8MB of RAM, expandable to 52MB (Mac OS); 4MB expandable to 32MB (DOS and Windows environment)—4MB on logic board, one 4MB SIMM, and one 72-pin SIMM slot (Mac OS); one 4MB SIMM (DOS and Windows environment)
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB hard disk drive
  - Internal CD-ROM drive



- *Expansion capabilities:* Communications slot for Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports six external SCSI devices
- *Ports:* Two serial ports, ADB port, monitor port that can support connection to external video output, high-performance SCSI port, stereo sound-input/output ports, PC game port for DOS and Windows environment
- *Displays:* Supports Apple displays of up to 17 inches in size as well as VGA and SVGA displays
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card); ODI driver supports Novell NetWare IPX and TCP/IP (DOS and Windows environment)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices
- *Other features:*  
—Comes with a variety of third-party applications and CDs

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### Key features

- Comes with a 486DX2 processor, for hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications and CD-ROMs, and includes MS-DOS 6.22 and Windows 3.1.
- Is compatible with Windows 95, when configured with at least 8MB of RAM on the DOS Compatibility Card.
- Lets you share files, folders, and disks between operating systems, as well as cut, copy, and paste between Mac OS, MS-DOS 6.2, and Windows 3.1 software-based applications.
- Lets you easily expand the multimedia and communications capabilities of your system.  64
- Provides 16-bit stereo playback, and includes support for Sound Blaster 16 audio output.

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### Other Macintosh models to consider

- If your tasks might require higher performance and hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications, you should consider the Macintosh Performa 6100 series, which can accommodate the DOS Compatibility Card.



# Macintosh Performa 5200CD Series



## At a glance

- The Macintosh Performa 5200CD series computers combine the high performance of PowerPC technology with advanced multimedia capabilities—in an innovative and advanced all-in-one design. [Note: These computers are not sold in the same channels worldwide as the Power Macintosh 5200/75 LC.]
- Their RISC-based PowerPC 603 microprocessor provides the power needed to handle complex multimedia content.
- They offer a number of multimedia options, including an internal TV tuner to view television channels in a window on the computer screen and a video-input card to connect your video camera or VCR.


## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** PowerPC 603 RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 75 megahertz
- **Memory:** 8MB of RAM, expandable to 64MB  
—One 8MB SIMM and one 72-pin SIMM slot
- **Storage:**  
—Internal Apple SuperDrive floppy disk drive  
—Internal 500MB or 1GB hard disk drive  
—Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for Ethernet card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports five external SCSI devices

- *Ports:* Two serial ports\*, ADB port, optional video connector that can support connection to another display or the Apple Presentation System, SCSI port, sound-input port (mono), sound-output port (stereo)
- *Displays:* Built-in 15-inch flat, square multiple-scan RGB display (12.8-inch diagonal viewable image size)
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 17.5 by 15.1 by 16.0 inches (44.5 by 38.3 by 40.6 cm)
- *Weight:* 47.0 lb. (21.2 kg)—will vary based on internal devices installed
- *Other features:*
  - Headphone jack and push-button sound and brightness controls located on front
  - Comes with a modem and a variety of third-party applications

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### Key features

- Features the RISC-based PowerPC 603 processor, which provides unprecedented power for your Performa computer.
- Offers impressive—and flexible—multimedia capabilities in an innovative and advanced all-in-one design.
- Lets you adjust the display for maximum viewing convenience, using its tilt-and-swivel base and multiple-scan technology.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add an Ethernet card.
- Includes an expansion bay for an optional TV tuner.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Other Macintosh models to consider

- If your tasks might require higher performance and hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications, you should consider the Macintosh Performa 6100 series, which can accommodate the DOS Compatibility Card.

\* Only one serial port available in configurations with an internal modem.

# Macintosh Performa 5300CD Series

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## At a glance

- The Macintosh Performa 5300CD series computers combine the high performance of PowerPC technology with advanced multimedia capabilities—in an innovative and convenient all-in-one design. [Note: These computers are not sold in the same channels worldwide as the Power Macintosh 5300/100 LC.]
- Their RISC-based 100-megahertz PowerPC 603e microprocessor brings a new level of power to an all-in-one system, making it easier than ever to create, handle, and play back complex multimedia content.
- They include an internal TV tuner to view television channels in a window on the screen and a video-capture card to record input from a video camera or VCR (Europe and Pacific only).

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## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** PowerPC 603e RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 100 megahertz
- **Memory:** 16MB of RAM, expandable to 64MB
  - One 16MB SIMM and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1.2GB hard disk drive
  - Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay

for TV-tuner module (comes with tuner installed); supports five external SCSI devices

- *Ports:* Two serial ports, ADB port, optional video connector that supports connection to another display or the Apple Presentation System, SCSI port, sound-input port (mono), sound-output port (stereo)

25★

- *Displays:* Built-in 15-inch flat, square multiple-scan RGB display (12.8-inch diagonal viewable image size)

- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)

- *Dimensions (HWD):* 17.5 by 15.1 by 16.0 inches (44.5 by 38.3 by 40.6 cm)

- *Weight:* 47.0 lb. (21.2 kg)—will vary based on internal devices installed

- *Other features:*

—Headphone jack and push-button sound controls located on front

—Comes with a variety of third-party applications and CDs

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## Key features

- Features the RISC-based PowerPC 603e processor, which provides unprecedented power for your Performa computer.

- Offers impressive—and flexible—multimedia capabilities in an innovative and advanced all-in-one design.

- Lets you adjust for maximum viewing convenience, using its tilt-and-swivel base and multiple-scan technology.

- Includes a video-capture card for video input from video cameras or VCRs and a built-in TV tuner for viewing television input in a window on the screen (Europe and Pacific only).

- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.

- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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## Other Macintosh models to consider

- If you want the flexibility of a modular design so you can select your own display, consider the Macintosh Performa 6300CD.



# Macintosh Performa 6100 Series

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## At a glance

- The Macintosh Performa 6100 series computers have a RISC-based PowerPC 601 microprocessor, which makes them ideal for handling all of your tasks with exceptional speed.

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## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache
- **Speed:** 60 megahertz
- **Memory:** 8MB of RAM, expandable to 72MB  
—8MB on logic board and two 72-pin SIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 250MB, 350MB, or 500MB hard disk drive
  - Optional internal CD-ROM drive
- **Expansion capabilities:** Internal expansion slot for one processor-direct card or one 7-inch NuBus expansion card (requires adapter); supports seven SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, SCSI port, stereo sound-input/output ports
- **Displays:** Includes a 14-inch color display with built-in speakers
- **Networking ports:** Built-in LocalTalk and Ethernet
- **Dimensions (HWD):** 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- **Weight:** 19.0 lb. (8.6 kg)—will vary based on internal devices installed



- *Other features:*

- Comes with a 14.4-kbps fax/data modem, keyboard, and mouse
- Comes with a variety of Macintosh system software extensions and third-party applications, depending on the configuration

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**Key features**

- Features the RISC-based PowerPC 601 processor, which provides unprecedented power.
- Has built-in Ethernet, for faster data transfer over a network.
- Comes with DRAM video support, providing up to 32,768 colors on 14-inch display (included).
- Provides 16-bit, CD-quality sound-input/output capabilities.
- Accommodates Apple's DOS Compatibility Card, for compatibility with MS-DOS 6.2 and Windows 3.1 software.

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**Other Macintosh models to consider**

- For faster performance and advanced multimedia capabilities, consider the Macintosh Performa 6200CD series. These computers come with a 75-megahertz PowerPC processor and a video slot for a multimedia kit.

# Macintosh Performa 6200CD Series

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## At a glance

- The Macintosh Performa 6200CD series computers combine the high performance of PowerPC technology with advanced multimedia capabilities—in a flexible modular design.
- Their RISC-based PowerPC 603 microprocessor provides the power needed to create and handle complex multimedia content quickly and easily.
- They offer a number of multimedia options, including an internal TV tuner to view television channels in a window on the computer screen.

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**Specifications** *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** PowerPC 603 RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 75 megahertz
- **Memory:** 8MB of RAM, expandable to 64MB
  - One 8MB SIMM and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1GB hard disk drive
  - Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports five external SCSI devices

- *Ports:* Two serial ports\*, ADB port, monitor port, SCSI port, sound-input port (mono), sound-output port (stereo)
- *Displays:* Built-in support for Apple displays of up to 15 inches in size
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices installed
- *Other features:*  
—Headphone jack and push-button sound controls located on front  
—Comes with a variety of third-party applications and CDs

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### Key features

- Features the RISC-based PowerPC 603 processor, which provides unprecedented power for your Performa computer.
- Offers impressive multimedia capabilities in a flexible modular design.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Includes an expansion bay for an optional TV tuner.
- Provides 16-bit, CD-quality sound-output capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Other Macintosh models to consider

- If you want the convenience of an all-in-one system, you should consider the Macintosh Performa 5200CD, which provides the multimedia features of the Macintosh Performa 6200CD in an innovative design.

\* Only one serial port available in configurations with an internal modem.

# Macintosh Performa 6300CD

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## At a glance

- The Macintosh Performa 6300CD combines the high performance of PowerPC technology with advanced multimedia capabilities—in a flexible modular design.
- Its powerful RISC-based 100-megahertz PowerPC 603e microprocessor makes it easier than ever to create, handle, and play back complex multimedia content.

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## Specifications *(Note: Macintosh Performa model numbers, configurations, and availability may vary worldwide.)*

- **Processor:** PowerPC 603e RISC with integrated math coprocessor and 32K on-chip cache; 256K level 2 cache
- **Speed:** 100 megahertz
- **Memory:** 16MB of RAM, expandable to 64MB
  - One 16MB SIMM and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1.2GB hard disk drive
  - Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports five external SCSI devices
- **Ports:** Two serial ports, ADB port, monitor port, SCSI port, sound-input port (mono), sound-output port (stereo)

- *Displays:* Built-in support for Apple displays of up to 15 inches in size
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices installed
- *Other features:*  
—Headphone jack and push-button sound controls located on front  
—Comes with a variety of third-party applications and CDs

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### Key features

- Features the RISC-based PowerPC 603e processor, which provides unprecedented power for your Performa computer.
- Offers impressive multimedia capabilities in a flexible modular design.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot. (Some configurations may include a fax/data modem.)
- Includes an expansion bay for an optional TV tuner. (Configurations in some countries may include a TV tuner.)
- Provides 16-bit, CD-quality sound-output capabilities.

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### Other Macintosh models to consider

- If you want the convenience of an all-in-one system, you should consider the Macintosh Performa 5300CD series, which provides the multimedia features of the Macintosh Performa 6300CD in an innovative design. (The Macintosh Performa 5300CD series is not available in all geographies and locations.)



# The Power Macintosh Advantage

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## **Power Macintosh computers offer unprecedented levels of performance**

With the introduction of the PowerPC 601 RISC (Reduced Instruction Set Computing) processor in Macintosh computers, Apple created the Power Macintosh line, the first personal computers to integrate the PowerPC processor with an industry-standard operating system. Today, desktop computers based on the PowerPC 603 and 604 have joined the Power Macintosh line, offering up to twice the performance of previous models.

Apple computers based on PowerPC processors offer these key advantages:

- *Breakthrough price/performance value.* In processor comparisons, the RISC-based PowerPC 601 and 604 have demonstrated a price/performance advantage over competitors based on CISC (Complex Instruction Set Computing) technology. Power Macintosh and Apple's other PowerPC processor-based computers are designed to provide faster performance than CISC-based computers at the same price.
- *High-performance applications.* Software developers have designed more than 700 applications specifically to take advantage of the performance capabilities of the PowerPC processor.

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## **Power Macintosh computers are highly expandable**

- The newest Power Macintosh computers feature PCI (Peripheral Component Interconnect) expansion slots rather than the NuBus slots used by previous Macintosh computers. PCI offers three main advantages: higher performance (up to three times faster), more solutions, and lower cost.
- The Power Macintosh 7500/100, 8500/120, 9500/120, and 9500/132 offer an important new feature: processor upgradability.

These computers house the processor on a processor card, which can be easily and affordably swapped for a card with a higher-performance processor.

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**Power Macintosh computers are the most compatible systems available****33**

- Power Macintosh computers run virtually all your existing Macintosh software with no modification whatsoever. And Power Macintosh computers are compatible with existing cables, system software extensions, and networking hardware and software.
- The Power Macintosh 6100/66 DOS Compatible runs applications for MS-DOS 6.2 and Windows 3.1, in addition to applications for the Mac OS. This computer comes with a built-in 66-megahertz 80486DX2 processor. And Apple's DOS Compatibility Card can be purchased separately for installation in Power Macintosh 6100 and Macintosh Performa 6100 series computers.
- Several third-party products also provide DOS and Windows compatibility for Power Macintosh. Through SoftWindows software (available from Insignia Solutions), Power Macintosh computers can run standard-mode MS-DOS 6.2 and Windows 3.1 software-based applications at speeds comparable to those of entry-level PCs based on the 80386 and 80486 processors.

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**Power Macintosh computers can run hundreds of applications at an exceptionally fast rate**

- Software developers worldwide are redesigning applications—and creating new ones—to take advantage of the performance of the PowerPC processor, resulting in the largest library of mainstream applications designed for a RISC platform.
- Computation-intensive applications for tasks such as three-dimensional modeling and scientific visualization offer much higher performance on Power Macintosh computers than on CISC-based computers.
- The high performance of the PowerPC processor also enables developers to add new features to these applications. In this way, PowerPC technology advances the boundaries of software capabilities and opens the doors to innovation.

# Power Macintosh 5200/75 LC

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## At a glance

- The Power Macintosh 5200/75 LC combines the high performance of PowerPC technology with advanced multimedia capabilities in an innovative all-in-one design. [Note: This Macintosh computer is not sold in the same channels worldwide as the Macintosh Performa 5200CD series; it is available to U.S. education customers only.]
- Its RISC-based PowerPC 603 microprocessor provides the power needed to create and handle complex multimedia content quickly and easily.
- It offers a number of multimedia options, including an internal TV tuner to view television channels in a window on the computer screen and a video-input card to connect your video camera or VCR.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 603 RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 75 megahertz
- **Memory:** 8MB of RAM, expandable to 64MB  
—One 8MB SIMM and one 72-pin SIMM slot
- **Storage:**  
—Internal Apple SuperDrive floppy disk drive  
—Internal 500MB hard disk drive  
—Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports five external SCSI devices

- *Ports:* Two serial ports, ADB port, optional video connector that can support connection to another display or the Apple Presentation System, SCSI port, sound-input port (mono), sound-output port (stereo)
- *Displays:* Built-in 15-inch flat, square multiple-scan RGB display (12.8-inch diagonal viewable image size)
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 17.5 by 15.1 by 16.0 inches (44.5 by 38.3 by 40.6 cm)
- *Weight:* 47.0 lb. (21.2 kg)—will vary based on internal devices installed
- *Other features:*  
—Headphone jack and push-button sound and brightness controls located on front

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### Key features

- Features the RISC-based PowerPC 603 processor, which provides unprecedented power for your Power Macintosh computer.
- Offers impressive—and flexible—multimedia capabilities in an innovative and advanced all-in-one design.
- Lets you adjust the display for maximum viewing convenience, using its tilt-and-swivel base and multiple-scan technology.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Includes an expansion bay for an optional TV tuner.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Other Macintosh models to consider

- The Power Macintosh 7100/80 features a faster processor in a flexible modular design.
- The Power Macintosh 6100/66 DOS Compatible provides hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications.



# Power Macintosh 5300/100 LC

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## At a glance

- The Power Macintosh 5300/100 LC combines the high performance of PowerPC technology with impressive built-in multimedia capabilities—in an innovative and convenient all-in-one design. [Note: This Macintosh is not sold in the same channels worldwide as the Macintosh Performa 5300CD series; it is available to U.S. education customers only.]
- Its RISC-based 100-megahertz PowerPC 603e microprocessor brings a new level of power to an all-in-one system, making it easier than ever to create, handle, and play back complex multimedia content.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 603e RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 100 megahertz
- **Memory:** 16MB of RAM, expandable to 64MB
  - One 16MB SIMM and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1.2GB hard disk drive
  - Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module (comes with tuner installed); supports five external SCSI devices



- *Ports:* Two serial ports, ADB port, video connector that supports connection to another display, SCSI port, sound-input port (mono), sound-output port (stereo)
- *Displays:* Built-in 15-inch flat, square multiple-scan RGB display (12.8-inch diagonal viewable image size)
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 17.5 by 15.1 by 16.0 inches (44.5 by 38.3 by 40.6 cm)
- *Weight:* 47.0 lb. (21.2 kg)—will vary based on internal devices installed
- *Other features:*
  - Headphone jack and push-button sound controls located on front
  - Built-in video-capture card and TV tuner

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### Key features

- Features the RISC-based PowerPC 603e processor, which provides unprecedented power for your Power Macintosh computer.
- Offers impressive—and flexible—multimedia capabilities in an innovative and advanced all-in-one design.
- Lets you adjust for maximum viewing convenience, using its tilt-and-swivel base and multiple-scan technology.
- Includes a video-capture card for video input from video cameras or VCRs and a built-in TV tuner for viewing television input in a window on the screen.
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Other Macintosh models to consider

If your tasks might require more power and flexibility, you should consider the Power Macintosh 8500/120, which offers:

- A faster processor (120-megahertz PowerPC 604, as opposed to the 100-megahertz PowerPC 603e).
- More expansion capabilities (three PCI slots).

# Power Macintosh 6100/66

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## At a glance

- The Power Macintosh 6100/66 provides industry-leading price/performance value in a personal computer.
- Its RISC-based PowerPC 601 microprocessor makes it ideal for handling even complex business tasks.
- It offers performance increases of up to 30 percent over the previous 6100 models.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 256K level 2 cache
- **Speed:** 66 megahertz
- **Memory:** 8MB or 16MB of RAM, expandable to 72MB—8MB on logic board and two 72-pin SIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 350MB or 500MB hard disk drive
  - Supports one half-height 5.25-inch internal peripheral, such as a hard disk drive, a CD-ROM drive, or a magneto-optical drive
- **Expansion capabilities:** Internal expansion slot for one processor-direct card or one 7-inch NuBus expansion card (requires adapter); supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, high-performance SCSI port, stereo sound-input/output ports
- **Displays:** Built-in support for most Apple displays
- **Networking ports:** Built-in LocalTalk and Ethernet

- *Dimensions (HWD)*: 3.4 by 16.3 by 15.6 inches (8.6 by 41.1 by 39.6 cm)
- *Weight*: 14.0 lb. (6.3 kg)—will vary based on internal devices installed

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### Key features

- Features the RISC-based PowerPC 601 processor.
- Offers built-in, high-performance SCSI for faster data transfer.
- Has built-in Ethernet, for faster data transfer over a network.
- Comes with DRAM video support, providing up to 32,768 colors on 14-inch displays.
- Can be upgraded to support Apple AV Technologies.
- Provides 16-bit, CD-quality sound-input/output capabilities.
- Accommodates Apple's DOS Compatibility Card, for compatibility with MS-DOS 6.2 and Windows 3.1 software.

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### Upgrade information

- The Macintosh Centris 610 and 660AV and the Macintosh Quadra 610 and 660AV can be upgraded to the Power Macintosh 6100/60 with the purchase of the Power Macintosh 6100/60 Logic Board Upgrade.

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### Other Macintosh models to consider

If your tasks might require greater speed or more expansion options, you should consider the Power Macintosh 7100/80, which offers:

- A faster processor architecture (80 megahertz, compared with 66 megahertz for the Power Macintosh 6100/66).
- More expansion options than the Power Macintosh 6100/66—three NuBus slots (as opposed to one).
- More memory expansion capability—up to 136MB.
- Greater video RAM expansion capability and dual-display support.

# Power Macintosh 6100/66

## DOS Compatible



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### At a glance

- The Power Macintosh 6100/66 DOS Compatible is the most compatible Power Macintosh available; it can run more software packages than any other mainstream personal computer.
- It includes a 486DX2 processor, providing compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications.

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### Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processors:** PowerPC 601 RISC with integrated math coprocessor, 32-bit data cache, and 256K level 2 cache; 486DX2 with 32-bit data bus
- **Speed:** 66 megahertz for both processors
- **Memory:** 8MB or 16MB of RAM, expandable to 72MB; DOS Compatibility Card can share system RAM or use local RAM on the card (72-pin SIMM, up to 32MB)  
—8MB on logic board and two 72-pin SIMM slots; one 72-pin SIMM slot on DOS Compatibility Card
- **Storage:**  
—Internal Apple SuperDrive floppy disk drive  
—Internal 500MB hard disk drive  
—Supports one half-height 5.25-inch internal peripheral, such as a hard disk drive, a CD-ROM drive, or a magneto-optical drive
- **Expansion capabilities:** Supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, high-performance SCSI port, stereo sound-input/output ports, PC game port

- *Displays:* Built-in support for most Apple displays; supports VGA and SVGA displays (may require separate adapter)
- *Networking ports:* Built-in LocalTalk and Ethernet
- *Dimensions (HWD):* 3.4 by 16.3 by 15.6 inches (8.6 by 41.4 by 39.6 cm)
- *Weight:* 16.2 lb. (3.3 kg)—will vary based on internal devices installed

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### Key features

- Features the RISC-based PowerPC 601 processor.
- Comes with a 486DX2 processor, for hardware-level compatibility with MS-DOS 6.2 and Windows 3.1.
- Is compatible with Windows 95, when configured with at least 8MB of RAM on the DOS Compatibility Card.
- Includes MS-DOS 6.22 and Windows 3.1.
- Has built-in Ethernet, for faster data transfer over a network; supports Novell NetWare IPX and TCP/IP protocols in DOS and Windows environments using built-in Ethernet and an ODI driver.
- Comes with DRAM video support, providing up to 32,768 colors on 14-inch displays (Mac OS environment); 512K of RAM for video (DOS and Windows environment).
- Provides 16-bit, CD-quality sound-input/output capabilities, and includes support for Sound Blaster 16 playback.
- Features built-in support for one or two displays.

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### Upgrade information

- The Power Macintosh 6100 can be upgraded to the Power Macintosh 6100/66 DOS Compatible with the purchase of the DOS Compatibility Card.

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### Other Macintosh models to consider

- If your tasks might require higher performance when running software for the Mac OS, you should consider the Power Macintosh 7100/80 or 8100/110, which offer faster processors (80 megahertz and 110 megahertz, respectively), and can be configured with third-party options to provide MS-DOS 6.2 and Windows 3.1 compatibility.



# Power Macintosh 6200/75

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## At a glance

- The Power Macintosh 6200/75 combines the high performance of PowerPC technology with advanced multimedia capabilities—in a flexible modular design.
- Its RISC-based PowerPC 603 microprocessor provides the power needed to create and handle complex multimedia content quickly and easily.
- It offers a number of multimedia options, including an internal TV tuner to view television channels in a window on the computer screen.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*


- **Processor:** PowerPC 603 RISC with integrated math coprocessor and 16K on-chip cache; 256K level 2 cache
- **Speed:** 75 megahertz
- **Memory:** 8MB of RAM, expandable to 64MB
  - One 8MB SIMM and one 72-pin SIMM slot
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB hard disk drive (minimum configuration)
  - Internal quadruple-speed CD-ROM drive
- **Expansion capabilities:** Macintosh LC-compatible processor-direct slot; communications slot for either Ethernet or modem card; video slot for NTSC, PAL, or SECAM video-input card; bay for TV-tuner module; supports five external SCSI devices
- **Ports:** Two serial ports\*; ADB port, monitor port, SCSI port, sound-input port (mono), sound-output port (stereo)

\* Only one serial port available in configurations with an internal modem.

- *Displays:* Built-in support for Apple displays of up to 15 inches in size
- *Networking ports:* Built-in LocalTalk; optional Ethernet (requires Ethernet card)
- *Dimensions (HWD):* 4.3 by 12.6 by 16.5 inches (10.9 by 32.0 by 41.9 cm)
- *Weight:* 19.0 lb. (8.6 kg)—will vary based on internal devices installed
- *Other features:*
  - Headphone jack and push-button sound controls located on front
  - Remote-control sensor

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### Key features

- Features the RISC-based PowerPC 603 processor, which provides unprecedented power for your Power Macintosh computer.
- Offers impressive multimedia capabilities in a flexible modular design.
- Lets you easily expand the multimedia capabilities of your system to include MPEG playback or by connecting one of a variety of multimedia kits.  64
- Lets you add either an Ethernet card or a high-speed fax/data modem, through its communications slot.
- Includes an expansion bay for an optional TV tuner.
- Provides 16-bit, CD-quality sound-output capabilities.

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### Other Macintosh models to consider

If your tasks might require more power and flexibility, you should consider the Power Macintosh 7100/80, which offers:

- A faster processor (80-megahertz PowerPC 601).
- More expansion capabilities (three NuBus slots).

# Power Macintosh 7100/80

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## At a glance

- The Power Macintosh 7100/80 provides the speed of the PowerPC 601 processor and a variety of expansion options.
- It's designed to handle business tasks using productivity applications, as well as tasks such as page layout, data retrieval, and work with complex spreadsheets.
- It offers performance increases of up to 40 percent over the previous 7100 models.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 256K level 2 cache
- **Speed:** 80 megahertz
- **Memory:** 8MB or 16MB of RAM, expandable to 136MB—8MB on logic board and four 72-pin SIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB or 700MB hard disk drive
  - Supports one half-height 5.25-inch internal peripheral, such as a hard disk drive, a CD-ROM drive, or a magneto-optical drive
- **Expansion capabilities:** Three NuBus slots; supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, video-output port for a second display, monitor port, high-performance SCSI port, stereo sound-input/output ports
- **Displays:** Built-in support for all Apple displays
- **Networking ports:** Built-in LocalTalk and Ethernet

- *Dimensions (HWD)*: 6.0 by 13.0 by 16.5 inches (15.2 by 33.0 by 41.9 cm)
- *Weight*: 25.0 lb. (11.3 kg)—will vary based on internal devices installed

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### **Key features**

- Features the RISC-based PowerPC 601 processor.
- Has built-in Ethernet, for faster data transfer over a network.
- Has three NuBus slots, so you can add the capabilities you want to your computer.
- Comes with 1MB of video RAM for extensive video support.
- Allows you to expand video RAM to 2MB, so you can work with as many as 16.7 million colors on the Apple Multiple Scan 1705 Display.
- Optional configuration supports Apple AV Technologies.
- Provides 16-bit, CD-quality sound-input/output capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### **Upgrade information**

- The Macintosh IIfx and IIfx, Macintosh Centris 650, Macintosh Quadra 650, and Macintosh Performa 600 can be upgraded to the Power Macintosh 7100/66 with the Power Macintosh 7100/66 Logic Board Upgrade.

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### **Other Macintosh models to consider**

If your tasks require exceptional computing speed and greater storage capacity, you should consider the Power Macintosh 8100/100 or 8100/110, which offers:

- A faster processor (100 or 110 megahertz, compared with 80 megahertz for the Power Macintosh 7100/80).
- Greater storage capacity—larger hard disk drives and space for two additional 3.5-inch storage devices.
- More memory expansion capability—up to 264MB.
- Greater video RAM expansion capability—video support for up to 16.7 million colors on the Apple Multiple Scan 20 Display.

# Power Macintosh 7200/75 and 7200/90

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## At a glance

- The Power Macintosh 7200/75 and 7200/90 combine power and flexibility with affordability, providing industry-leading price/performance value.
- Three PCI slots enable you to tailor the system to your needs, while the PowerPC 601 processor provides the power needed to boost your productivity.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; optional level 2 cache (256K or 512K)
- **Speed:** 75 or 90 megahertz
- **Memory:** 8MB of RAM, expandable to 256MB
  - Four 168-pin DIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB hard disk drive
  - Internal quadruple-speed CD-ROM drive
  - Supports one additional 3.5-inch storage device
- **Expansion capabilities:** Three PCI expansion slots; supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, high-performance SCSI port, 16-bit stereo sound-input/output ports, DB-15 graphics connector
- **Displays:** Built-in support for most Apple displays; supports resolutions of up to 1,280 by 1,024 pixels (with 4MB of VRAM)
- **Networking ports:** Built-in LocalTalk and Ethernet (10Base-T and AAUI)



- *Dimensions (HWD)*: 6.2 by 14.4 by 16.9 inches (15.7 by 36.6 by 42.9 cm)
- *Weight*: 22.0 lb. (9.9 kg)—will vary based on internal devices installed

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### **Key features**

- Features the RISC-based PowerPC 601 processor.
- Provides three PCI expansion slots, for flexibility in configuring the system to provide additional capabilities.
- Features a new enclosure that makes it easy to service and upgrade the system.
- Includes built-in Ethernet (10Base-T/AAUI), for faster data transfer over a network.
- Comes with 1MB of VRAM, expandable to 4MB.
- Supports 24 bits per pixel on 16-inch color monitors (with 2MB of VRAM).
- Supports 24 bits per pixel on 21-inch color monitors (with 4MB of VRAM).
- Supports Local-Bus 32-bit graphics (1MB of VRAM) or 64-bit graphics (2MB of VRAM).
- Is upgradable to the Power Macintosh 7500/100.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### **Other Macintosh models to consider**

If your tasks might require higher performance and larger storage capacity, you should consider the Power Macintosh 7500/100, which offers:

- A faster processor (100 megahertz, compared with 75 or 90 megahertz for the Power Macintosh 7200 models).
- Easy processor upgradability—so you can move to a faster processor as needed.
- Video-input capability.
- More memory expansion capability—up to 512MB.

# Power Macintosh 7500/100

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## At a glance

- The Power Macintosh 7500/100 is a powerful, expandable computer that preserves your investment now and for the future.
- The RISC-based PowerPC 601 processor running at 100 megahertz gives you the power you need to handle everything from spreadsheets to video teleconferencing.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; optional level 2 cache (256K or 512K)
- **Speed:** 100 megahertz
- **Memory:** 8MB of RAM, expandable to 512MB
  - Eight 168-pin DIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 500MB SCSI hard disk drive
  - Internal quadruple-speed CD-ROM drive
  - Supports one additional 3.5-inch storage device
- **Expansion capabilities:** Three PCI expansion slots; supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, video-input port (composite and S-video), DAV connector, audio line input/output ports, dual-channel high-performance SCSI port, 16-bit stereo sound-input/output ports
- **Displays:** Built-in support for most Apple displays; supports resolutions of up to 1,280 by 1,024 pixels
- **Networking ports:** Built-in LocalTalk and Ethernet (10Base-T and AAUI)

- *Dimensions (HWD)*: 6.2 by 14.4 by 16.9 inches (15.7 by 36.6 by 42.9 cm)
- *Weight*: 22.0 lb. (9.9 kg)—will vary based on internal devices installed

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### Key features

- Features the RISC-based PowerPC 601 processor.
- Allows for easy processor upgrades to the PowerPC 604.
- Provides three PCI expansion slots, for flexibility in configuring the system to provide additional capabilities.
- Features a new enclosure that makes it easy to service and upgrade the system.
- Offers built-in, high-performance SCSI for faster data transfer.
- Includes built-in Ethernet (10Base-T/AAUI), for faster data transfer over a network.
- Comes with 2MB of VRAM, expandable to 4MB.
- Supports 24 bits per pixel on 20-inch color monitors.
- Supports Local-Bus 64-bit graphics.
- Provides built-in digital video-input capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Upgrade information

The Power Macintosh 7200/75 and 7200/90 can be upgraded to the Power Macintosh 7500/100 with the Power Macintosh 7500/100 Logic Board Upgrade.

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### Other Macintosh models to consider

If your tasks might require higher performance and larger storage capacity, you should consider the Power Macintosh 8500/120, which offers:

- A faster processor architecture (120-megahertz PowerPC 604, compared with a 100-megahertz PowerPC 601 for the Power Macintosh 7500/100).
- Greater storage capacity—larger hard disk drives (up to 2GB).
- Video-output capability.
- Level 2 cache standard.

# Power Macintosh 8100/100 and 8100/110

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## At a glance

- The Power Macintosh 8100/100 and 8100/110 offer high performance, along with ample storage capacity and expansion capabilities to handle your work now—and in the future.
- The RISC-based PowerPC 601 processor running at 100 or 110 megahertz makes these computers ideal for work that involves computation-intensive tasks, such as professional color publishing, computer-aided design, scientific visualization, and three-dimensional modeling.
- The Power Macintosh 8100 computers provide performance increases of up to 30 percent over the previous 8100 models.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 256K level 2 cache
- **Speed:** 100 or 110 megahertz
- **Memory:** 8MB or 16MB of RAM, expandable to 264MB—8MB on logic board and eight 72-pin SIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 700MB, 1GB, or 2GB hard disk drive
  - Supports two additional 3.5-inch peripherals and one half-height 5.25-inch internal peripheral, such as a hard disk drive, a CD-ROM drive, or a magneto-optical drive
- **Expansion capabilities:** Three NuBus slots; dual SCSI buses support up to six SCSI devices

- *Ports:* Two GeoPort-compatible serial ports, ADB port, video-output port for a second display, monitor port, high-performance SCSI port, stereo sound-input/output ports
- *Displays:* Built-in support for all Apple displays
- *Networking ports:* Built-in LocalTalk and Ethernet
- *Dimensions (HWD):* 14.2 by 8.9 by 16.0 inches (36.1 by 22.6 by 40.6 cm)
- *Weight:* 25.3 lb. (11.4 kg)—will vary based on internal devices installed
- *Other features:*  
—“Mini-tower” design allows vertical use on a floor or desktop

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### **Key features**

- Features the RISC-based PowerPC 601 processor.
- Has built-in Ethernet, for faster data transfer over a network.
- Has three NuBus slots, so you can add the capabilities you want to your computer.
- Supports up to four internal storage devices, so you can configure your system the way you want—without sacrificing desk space.
- Allows you to expand video RAM up to 4MB, so you can use up to 16.7 million colors on the Apple Multiple Scan 20 Display.
- Is available in a configuration with Apple AV Technologies.
- Provides 16-bit, CD-quality sound-input/output capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### **Upgrade information**

- The Macintosh Quadra 800 and 840AV can be upgraded to the Power Macintosh 8100/80 with the Power Macintosh 8100/80 Logic Board Upgrade.

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### **Other Macintosh models to consider**

- If your tasks require higher performance, you should consider the Power Macintosh 8500/120, which offers a faster processor and three PCI expansion slots.



# Power Macintosh 8500/120

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## At a glance

- The Power Macintosh 8500/120 is a powerful, feature-rich system that enables you to integrate media easily.
- The RISC-based PowerPC 604 processor running at 120 megahertz gives this computer the power it needs to perform complex tasks rapidly.
- The Power Macintosh 8500/120 includes features such as digital video input/output and communications capabilities that make it ideal for media authoring or content creation.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 604 RISC with integrated math coprocessor and 32K on-chip cache; 256K level 2 cache
- **Speed:** 120 megahertz
- **Memory:** 16MB of RAM, expandable to 512MB
  - Eight 168-pin DIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1GB or 2GB FAST SCSI hard disk drive
  - Internal quadruple-speed CD-ROM drive
  - Supports one additional 3.5-inch storage device
- **Expansion capabilities:** Three PCI expansion slots; supports six SCSI devices
- **Ports:** Two GeoPort-compatible serial ports, ADB port, monitor port, DAV connector, video-input/output ports (composite and S-video), audio line input/output ports, dual-channel high-performance SCSI port, 16-bit stereo sound-input/output ports
- **Displays:** Built-in support for most Apple displays; supports resolutions of up to 1,280 by 1,024 pixels

- *Networking ports:* Built-in LocalTalk and Ethernet (10Base-T and AAUI)
- *Dimensions (HWD):* 14.2 by 7.7 by 15.8 inches (36.3 by 19.6 by 40.1 cm)
- *Weight:* 25.0 lb. (11.3 kg)—will vary based on internal devices installed

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### Key features

- Features the RISC-based PowerPC 604 processor, which provides unprecedented power for your Power Macintosh computer.
- Allows for easy processor upgrades as faster processors become available.
- Features three PCI expansion slots, for flexibility in configuring the system to provide additional capabilities.
- Offers built-in, high-performance SCSI for faster data transfer.
- Includes built-in Ethernet (10Base-T/AAUI), for faster data transfer over a network.
- Comes with 2MB of VRAM, expandable to 4MB.
- Supports 24 bits per pixel on 20-inch color monitors.
- Supports Local-Bus 64-bit graphics.
- Provides built-in digital video-input/output capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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### Upgrade information

- The Macintosh Quadra 800 and 840AV and the Power Macintosh 8100/80, 8100/100, and 8100/110 can be upgraded to the Power Macintosh 8500/120 with the Power Macintosh 8500/120 Logic Board Upgrade.

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### Other Macintosh models to consider

For even greater performance and flexibility, you should consider the Power Macintosh 9500/132, which offers:

- A faster processor (132 megahertz, compared with 120 megahertz for the Power Macintosh 8500/120).
- Twice the flexibility—six PCI expansion slots, as opposed to three for the Power Macintosh 8500/120.
- Up to 768MB of DRAM expansion.

# Power Macintosh 9500/120 and 9500/132

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## At a glance

- The Power Macintosh 9500/120 and 9500/132 are the most flexible, expandable, high-performance desktop computers from Apple.
- The RISC-based PowerPC 604 processor running at 120 or 132 megahertz is exceptionally suited to computation-intensive tasks such as media authoring, publishing, software development, and a variety of technical uses.
- The outstanding performance of these computers brings new capabilities—such as real-time manipulation of complex three-dimensional images—to the desktop.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 604 RISC with integrated math coprocessor and 32K on-chip cache; 512K level 2 cache
- **Speed:** 120 or 132 megahertz
- **Memory:** 16MB of RAM, expandable to 768MB
  - Twelve 168-pin DIMM slots
- **Storage:**
  - Internal Apple SuperDrive floppy disk drive
  - Internal 1GB or 2GB FAST SCSI hard disk drive
  - Internal quadruple-speed CD-ROM drive
  - Supports two additional 3.5-inch storage devices
- **Expansion capabilities:** Six PCI expansion slots; supports six SCSI devices

- *Ports:* Two GeoPort-compatible serial ports, ADB port, monitor port, dual-channel high-performance SCSI port, 16-bit stereo sound-input/output ports
- *Displays:* Support for most Apple displays via PCI graphics card; supports resolutions of up to 1,280 by 1,024 pixels
- *Networking ports:* Built-in LocalTalk and Ethernet (10Base-T and AAUI)
- *Dimensions (HWD):* 16.9 by 7.7 by 15.8 inches (42.9 by 19.6 by 40.1 cm)
- *Weight:* 28.0 lb. (12.6 kg)—will vary based on internal devices installed

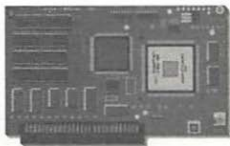
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### Key features

- Features the RISC-based PowerPC 604 processor, which provides unprecedented power for your Power Macintosh computer.
- Allows for easy processor upgrades as faster processors become available.
- Features six PCI expansion slots, for outstanding flexibility in configuring the system to provide additional capabilities.
- Offers built-in, high-performance SCSI for faster data transfer.
- Has built-in Ethernet (10Base-T/AAUI), for faster data transfer over a network.
- Comes with an accelerated graphics card designed to meet the needs of high-end publishers (Power Macintosh 9500/120 only; ATI mach64 card with 2MB of VRAM, expandable to 4MB).
- Supports 24 bits per pixel on 20-inch color monitors.

# Desktop System Upgrades

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## Upgrades for PowerPC performance

There are several products available for current Macintosh owners who want to move up to the speed and power of Power Macintosh computers without sacrificing their previous investments. Currently, upgrades are available for the following models:


- Macintosh LC 475, 520, 550, 575, and 630
- Macintosh Quadra 605, 610, 630, 650, 660AV, 700, 800, 840AV, 900, and 950
- Macintosh Centris 610, 650, and 660AV
- Macintosh Ilvx and Ilvi
- Macintosh Performa 470 series, 550, 560, 570 series, 600, and 630 series
- Workgroup Servers 60, 80, and 95

There are three different upgrades: The Power Macintosh Upgrade Card, the Macintosh Processor Upgrade, and the Power Macintosh Logic Board Upgrade.

- *Power Macintosh Upgrade Card.* This low-cost card, which can be installed in the 68040 processor-direct slot of a Macintosh Quadra or Macintosh Centris using only a screwdriver, allows your computer to run applications optimized for the performance capabilities of the PowerPC processor up to six times faster than standard applications for Macintosh.
- *Macintosh Processor Upgrade.* This upgrade, appropriate for select Macintosh Quadra, Macintosh LC, and Macintosh Performa computers, must be installed by an authorized Apple reseller or service provider. It provides the same capabilities as the Power Macintosh Upgrade Card.



- *Power Macintosh Logic Board Upgrade.* This upgrade, which must be installed by an authorized Apple reseller or service provider, gives your computer capabilities identical to those of the particular Power Macintosh model to which you are upgrading. It comes in two versions, one of which supports Apple AV Technologies.

For specific information on the upgrades appropriate for a particular system, see your Apple reseller.  178

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- **DOS Compatibility Card for Power Macintosh 6100 or Macintosh Performa 6100 series computers**

This user-installable card turns your Power Macintosh 6100 or Macintosh Performa 6100 series computer into one of the most flexible, versatile systems available. It features a 486DX2 processor, which provides hardware-level compatibility with MS-DOS 6.2 and Windows 3.1 software-based applications. When configured with at least 8MB of RAM, the DOS Compatibility Card also provides Windows 95 compatibility. Because the card works with a Power Macintosh or Macintosh Performa 6100 series computer, you can also run software for the Mac OS as well as applications optimized for the PowerPC processor. You can even instantly switch between the Mac OS and MS-DOS 6.2 and Windows 3.1 environments. The DOS Compatibility Card supports MS-DOS 6.2 and Windows 3.1 network applications and services using Novell NetWare IPX or TCP/IP protocols over the built-in Ethernet network connection and an ODI-compliant driver (network client software not included). It also supports Sound Blaster 16-compatible multimedia and entertainment applications.

# Desktop System Accessories

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## **General Macintosh accessories**

- Macintosh 1MB, 2MB, 4MB, 8MB, and 16MB Memory Expansion Kits
- *Apple Multimedia Kit for Macintosh*. Includes AppleDesign Powered Speakers II, Apple Headphones, AppleCD 600e quad-speed external CD-ROM player, cables, CD-ROM setup software, and a selection of CD-ROM titles.

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## **Macintosh LC 580 and LC 630 DOS Compatible; Macintosh Performa 580, 630 series, 5200CD, 5300CD series, 6200CD series, and 6300CD; and Power Macintosh 5200/75 LC and 6200/75**

- Apple Video System
- Apple TV/Video System (except Macintosh LC 580 and Macintosh Performa 580)
- Apple Presentation System
- Ethernet cards (Macintosh Ethernet CS Thin Coax Card, Ethernet CS Twisted-Pair Card, and Ethernet CS AAUI Card)
- External Video Connector (Macintosh LC 580 and Macintosh Performa 580 only)

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## **Power Macintosh 6100/66, 7100/80, and 8100/100**

- Power Macintosh 6100/60 NuBus Adapter Card
- Apple Ethernet Cable System
- PlainTalk for Power Macintosh
- Apple PlainTalk Microphone
- Power Macintosh Display Adapter
- Power Macintosh 7100/66 1MB VRAM Upgrade Kit
- Power Macintosh 8100/80 2MB VRAM Upgrade Kit

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## **Power Macintosh 7200/75, 7200/90, 7500/100, 8500/120, and 9500/120**

- VRAM Upgrade Kit for Power Macintosh with PCI

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### **GeoPort Telecom Adapter Kit**

The GeoPort Telecom Adapter Kit takes advantage of Apple's GeoPort architecture and the Macintosh Telephony Architecture to turn your Power Macintosh (or Macintosh Quadra 660AV or 840AV) into an intelligent telephone, digital answering machine, fax, and high-speed modem. It consists of the following components:

- GeoPort Telecom Adapter
- Apple Telecom 2.1 software
- MegaPhone software from Cypress Research, Inc.
- SITcomm software from Aladdin Systems, Inc.

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### **Apple MPEG Media System**

The Apple MPEG Media System lets you watch full-screen, full-motion, high-resolution, VHS-quality video on your Macintosh. It lets you resize the video window up to the full size of your screen, and place it anywhere on the screen. And it gives you comprehensive control over your viewing of multimedia CDs, letting you play, pause, step forward, or reverse. [The MPEG standard, set by the Motion Picture Experts Group (MPEG), ensures that various hardware and software systems all use the same rules of compression and decompression, for consistently high-quality video display.] The Apple MPEG Media System works with Macintosh and Power Macintosh computers that are equipped with an LC processor-direct slot, a video slot, a CD-ROM drive, and the Apple Video System or Apple TV/Video System. The Apple MPEG Media System consists of the following components:

- Apple MPEG Card
- Apple Video Player software
- A selection of CD-ROMs, including games and interactive education titles
- Internal connector cable

# PCI Cards and Developers

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The Power Macintosh 7200/75, 7200/90, 7500/100, 8500/120, 9500/120, and 9500/132 computers are highly flexible and expandable, in part because they come with PCI slots. These slots can accommodate cards that offer advanced capabilities in a wide variety of areas, including graphics, communications, and storage. The following is a partial list of PCI cards available for Power Macintosh. A description of available cards can be found on the Internet; look on the Apple home page (<http://www.apple.com/>) under the Products and Support button.

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## Graphics Acceleration/Imaging

- *ATI XCLAIM GA*, from ATI Technologies Inc.
- *Butane MPEG Compression Card*, from Wired, Inc.
- *ColorQuick Scanner and RIP Interface*, from Electronic Imaging Systems, Inc.
- *Graphic Stealth 64 Pro*, from Diamond Multimedia Systems, Inc.
- *HYDRA*, from YARC Systems Corporation
- *IMAXX*, from Precision Digital Images
- *MacCTU*, from Linotype-Hell Company
- *miro Products Display Cards*, from miro Computer
- *PostScript RIP*, from YARC Systems Corporation
- *PowerShop/PCI*, from Adaptive Solutions, Inc.
- *QuickDraw 2D/3D Acceleration Card*, from Newer Technology
- *Radius Display Cards*, from Radius Inc.
- *Screamer*, from YARC Systems Corporation

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## Multimedia

- *Truevision TARGA 2000* and *TARGA 2000 Pro for Macintosh*, from Truevision, Inc.

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## Networking

- *Apple PCI Ethernet 100BaseTX Card* and *Apple PCI Token Ring Card*, from Apple Computer, Inc.
- *AsantéFAST 10/100 PCI Adapter*, from Asanté
- *EtherTech F10/100*, from Newer Technology
- *Farallon Fast EtherTX-10/100*, from Farallon Computing, Inc.
- *Hustler PCI*, from Creative Solutions, Inc.
- *Interphase 5515 PCI ATM Adapter*, from Interphase Corp.
- *Leonardo XL*, from Hermstedt GmbH
- *Mac IATE*, from InnoSys Incorporated
- *MeetMe PCI*, from SAT USA
- *Neutral ATM 155*, from Neutral Ltd.
- *PC Card for PCI*, from Newer Technology
- *Planet-ISDN PCI Card*, from SAT-Dpt Access Privilege
- *PowerLink PCI*, from Spectra Systems
- *Rockwell FDDI and Fast Ethernet Adapters*, from Rockwell Network Systems

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## SCSI

- *ExpressPCI*, from ATTO Technology, Inc.
- *Fast!SCSI MAC PCI Adapter Cards*, from QLogic Corporation
- *FWB PCI SCSI JackHammer* and *PCI SledgeHammer*, from FWB, Inc.
- *PCI SmartCache SCSI Host Adapters* and *PCI SmartRAID Controller*, from DPT

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## Storage

- *MicroNet Raven Professional PCI Disk Arrays*, from MicroNet Technology, Inc.

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## NuBus and MS-DOS Compatibility

- *Second Wave PCI-to-NuBus Bridge*, from Second Wave, Inc.
- *Orange PC 400 Series MS-DOS and OS/2 Coprocessors*, from Orange Micro, Inc.

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## Data Acquisition and Instrument Control

- *National Instruments Data Acquisition and Instrument Control Products*, from National Instruments



# Apple Keyboards and Mouse

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## AppleDesign Keyboard

- Sleek, ergonomically designed keyboard for use with any Macintosh computer
- Adjustable keyboard slope
- Includes function keys, a numeric keypad, cursor arrow keys, and special screen-editing keys
- Dual-legend keycaps represent some of the most common functions of the MS-DOS environment



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## Apple Extended Keyboard II

- Includes function keys, a numeric keypad, cursor arrow keys, and special screen-editing keys
- Adjustable keyboard slope
- Ideal for running alternate operating systems or terminal-emulation programs

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## Apple Desktop Bus Mouse II

- Round shape fits the contour of the palm of the hand
- Large button allows easy clicking and dragging
- Front ball design allows finer movements with ease



# Multimedia Products

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# The Apple Multimedia Advantage

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## **Macintosh computers were designed with multimedia in mind**

Unlike many other personal computers, all Macintosh computers come with SCSI expansion ports, for simple, plug-in connection of a CD-ROM drive. They also offer advanced sound capabilities as a standard feature. And some Macintosh computers offer such features as video-in/out connectors and expansion bays for TV-tuner modules that permit the viewing of television input in a window right on the Macintosh display.

In addition, many Macintosh computers are designed to accommodate affordable, user-installable multimedia kits, so you can tailor your Macintosh to provide the specific multimedia capabilities you need. The kits are as follows:

- *Apple Video System.* This multimedia solution comes with a user-installable video card and software that lets you easily add still video images to the documents and presentations you create on your Macintosh computer. The video card allows you to connect a VCR, camcorder, laserdisc player, or other video source to your computer with a single cable.
- *Apple TV/Video System.* This kit gives your computer the capabilities of the Apple Video System, and more—it also allows you to watch television programs in a window on your Macintosh, and work on documents simultaneously. The Apple TV/Video System comes with a video card, TV Tuner card, remote control, and software.
- *Apple Presentation System.* This kit makes it easy for you to create a presentation on your Macintosh, then display it to an audience on a large television screen exactly as it appears on your Macintosh display. Or connect your Macintosh to a VCR and record your presentation on videotape for easy and inexpensive

distribution. The Apple Presentation System comes with software, cables, and video converter box.

- *Apple Multimedia Kit for Macintosh*. Adds a CD-ROM player, speakers, and headphones to your Macintosh. 📺 58
- *Apple MPEG Media System*. For watching full-screen, full-motion video on your Macintosh. 📺 59

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## **The Mac OS includes advanced multimedia software**

The performance of PowerPC processor technology enables Apple to provide software-only solutions in areas such as graphics and video. The current version of the Mac OS includes the following:

- *QuickDraw 3D*. QuickDraw 3D integrates three-dimensional graphics technology into the Mac OS to let users create, manipulate, and incorporate these images into their documents and presentations as easily as they do two-dimensional graphics today.
- *QuickTime*. QuickTime is Apple's system-level approach to multimedia. It is a complete architecture and API for controlling all types of time-based media, including high-quality, full-motion video and high-fidelity sound. The current version of QuickTime includes advanced image compression capabilities and supports industry standards such as JPEG, MPEG, and MIDI.
- *QuickTime VR*. QuickTime VR (VR stands for virtual reality) is Apple's standard for highly realistic photographic or rendered representations of a scene. It supports two kinds of user experiences: a panoramic technology that enables them to explore 360-degree scenes, and an interaction technology that allows users to pick up and interact with objects. It is the first mainstream technology to enable immersion experiences based on real-world scenes. QuickTime VR is designed to run on Macintosh, Power Macintosh, and even Windows software-based PCs.

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## **Apple is the industry leader in multimedia**

Given the Macintosh computer's integrated hardware and system software support for multimedia, it's not surprising that a 1995 study by Dataquest named Apple the leading worldwide multimedia personal computer vendor. And according to a 1994 Dataquest study, 63 percent of multimedia developers use Macintosh computers to create their content.

# AppleCD 600i AppleCD 600e



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## At a glance

- The AppleCD 600e is an external quadruple-speed CD-ROM player that gives you fast access to the content on CD-ROM discs.
- It allows you to access QuickTime movies, Kodak Photo CD images, and the wide range of information stored on CD-ROM discs.
- The AppleCD 600i is the version that can be installed inside some Macintosh computers and Workgroup Servers.

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## Specifications

- *Data transfer rate:* 600 kilobytes per second; 256K cache buffer
- *Average data access time:* 167.5 milliseconds
- *Ports:* Two 50-pin SCSI connectors, two RCA jacks, headphone jack
- *Dimensions (HWD):* 2.3 by 6.2 by 12.7 inches (5.9 by 15.8 by 32.3 cm); AppleCD 600i—1.7 by 5.8 by 8.3 inches (4.3 by 14.8 by 21.0 cm)
- *Weight:* 5.7 lb. (2.6 kg); AppleCD 600i—2.1 lb. (.95 kg)

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## Key features

- Offers quadruple-speed (up to 684.4 kilobytes per second in mode 2) streaming data transfer rate.
- Provides a loading tray—just like an audio CD player.
- Provides full compatibility with any SCSI-equipped personal computer, including Macintosh (running System 7.1 or later) and Power Macintosh systems, Windows software-based computers, and UNIX workstations.
- Supports all major CD-ROM formats—including audio CDs and multisession Kodak Photo CDs.



# AppleDesign Powered Speakers



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## At a glance

- The AppleDesign Powered Speakers were specifically engineered to provide high-quality sound for computer use.
- They let you take advantage of CD-quality output from multimedia and audio compact discs.

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## Specifications

- *Amplifier:* Built-in dual channel
- *Ports:* Computer sound-input jack (stereo), CD sound-input jack (stereo); front-panel headphone jack
- *Dimensions (HWD):* 9.25 by 4.5 by 4.75 inches (23.5 by 11.4 by 12.1 cm)
- *Weight:* 4.8 lb. (2.2 kg)—pair
- *Other features:*
  - Tuned-port bass-reflex system for low-frequency response
  - Active equalization for best frequency response at all levels
  - Noise-reduction circuitry for audio clarity

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## Key features

- Can connect directly to any personal computer, CD player, cassette player, or television.
- Feature a dual-input mixer for mixing computer and audio sound tracks.
- Provide controlled sound dispersion so you can enjoy excellent sound quality while maintaining a private listening environment.
- Incorporate magnetic shielding, so you can use them near displays without distorting image quality.
- Provide convenient power, volume, and balance controls and a front headphone jack.

# AppleDesign Powered Speakers II



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## At a glance

• The extremely compact AppleDesign Powered Speakers II were designed to provide high-quality sound output from a personal computer—or a home stereo system.

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## Specifications

- *Amplifier:* Built-in dual channel
- *Ports:* Computer sound-input jack (stereo), CD sound-input jack (stereo); front-panel headphone jack
- *Dimensions (HWD):* 6.9 by 4.2 by 4.0 inches (17.5 by 10.7 by 10.1 cm)
- *Weight:* 2.7 lb. (1.2 kg)—pair
- *Other features:*
  - Tuned-port bass-reflex system for low-frequency response
  - Active equalization for best frequency response at all levels
  - Noise-reduction circuitry for audio clarity

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## Key features

- Can connect directly to any personal computer, as well as to a CD player, cassette player, or television, with a simple cable (included).
- Feature a dual-input mixer for mixing computer and audio sound tracks.
- Provide controlled sound dispersion, so you can enjoy excellent sound quality while maintaining a private listening environment.
- Incorporate magnetic shielding, so you can use them near displays without distorting image quality.
- Provide convenient volume controls and a front headphone jack.

# Portable Computers

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# *The Macintosh PowerBook Advantage*

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## **The Macintosh PowerBook advantage: Truly portable computing**

- Apple understands the difference between portable computing and desktop computing. That's why Macintosh PowerBook computers are not just miniature desktop computers—they were designed to fit the specific lifestyle and usage patterns of mobile computer users. Although PowerBook computer systems use the Mac OS, the same system software as the Macintosh desktop systems—providing a familiar, easy-to-use graphical user interface for all of your computing tasks—their unique design and carefully selected features make PowerBook computers very personal machines, designed to be part of your life.
- Since you'll probably use your PowerBook when you're away from your desk, the features you'll need to be productive are built in. Many PowerBook computers now feature PowerPC processor technology, and most come equipped with both PC Card slots and an expansion bay, so you can customize your system to meet your needs. In addition, all PowerBook computers comply with the Environmental Protection Agency's Energy Star guidelines for energy conservation, utilizing power-saving features to enable you to work where you want to, when you want to.
- PowerBook computers are available in three series: the PowerBook 5000 series, the PowerBook 2000 series, and the PowerBook 100 series. Each offers a unique set of capabilities, allowing PowerBook computers to meet a range of needs.

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## **The PowerBook 5000 series: PowerPC technology in a full-featured notebook design**

The Macintosh PowerBook 5300 computers, the first in our next-generation PowerBook 5000 series, unite the performance of



the RISC-based PowerPC processor with a number of advanced features. They offer the following:

- *High performance.* PowerBook 5300 computers provide exceptional performance through their PowerPC 603e processor, running at speeds up to 117 megahertz. This not only gives them the power to handle even the most complex tasks easily, it also enables them to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.

- *Innovative design.* The PowerBook 5300 computers feature an innovative design that includes a range of display types, from a 9.5-inch passive-matrix gray-scale display to a large, 10.4-inch active-matrix color SVGA display. They also feature PC Card slots that can accommodate two Type I or Type II PC Cards or one Type III PC Card, as well as an expansion bay for third-party solutions such as an additional hard disk drive, a magneto-optical drive, or an internal AC adapter. These models include a full-size keyboard with function keys and integrated palm rest; an Apple trackpad; 16-bit, CD-quality stereo sound; and an integrated microphone.

- *Easy and versatile communications capabilities.* The PowerBook 5300 computers feature infrared technology for easy file sharing. They also include a LocalTalk serial port, and their PC Card slots make it easy to add a wired or wireless modem, or Ethernet networking capabilities. And they come with a variety of communications software, including Apple IR File Exchange, Apple Remote Access, PowerTalk, and eWorld, so you can keep in touch from any location.

- *Multimedia support.* The full-featured design and high-performance PowerPC processor of the PowerBook 5300 computers make these systems highly capable in the realm of multimedia. Two of the four models feature active-matrix displays that allow viewing of up to thousands of colors, and all models come with 8-bit video-out capability (upgradable to greater bit depth) for easy connection to a large-screen display or a second monitor. Their expansion bay can be used for removable, rewritable media such as third-party hard disk drives or magneto-optical drives. Their 16-bit, CD-quality stereo sound is ideal for working with audio, and QuickTime system software makes it easy to integrate



not only sound, but also still images, video, and animation into computer-based presentations.

- *Preinstalled productivity software.* Like all Apple PowerBook computers, the PowerBook 5300 computers come with the PowerBook Mobility Bundle, a combination of communications, power-management, security, compatibility, and entertainment software designed to enhance mobile computing.

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### **Macintosh PowerBook 2000 series—All the features you need in a subnotebook computer**

For users who value exceptionally small size and light weight in a portable computer, the Macintosh PowerBook Duo 2300c/100 is an excellent choice. It's the first computer in our next-generation PowerBook 2000 series, providing PowerPC performance and a range of features in a product that weighs less than 5 pounds. The PowerBook Duo 2300c/100 computer shows particular strength in several key areas:

- *High performance in a lightweight design.* PowerBook Duo 2300c/100 users don't have to compromise power or ease of use to benefit from the convenient design of a subnotebook computer. The PowerBook Duo 2300c/100 computer offers exceptional performance through its 100-megahertz PowerPC 603e processor, which provides the power to handle even the most complex tasks easily, and enables the PowerBook Duo 2300c/100 to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.

- *Easy-to-use mobile computing solution.* The PowerBook 2300c/100 computer offers features that make it an excellent system for when you're away from the office, including a high-capacity nickel-metal-hydride battery and battery-management software, as well as a built-in modem slot and a LocalTalk serial port. It comes with the PowerBook Mobility Bundle software installed. And it can also be used with a variety of docking products from Apple and third-party vendors for incredible flexibility.

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## **Macintosh PowerBook 100 series—Affordable now, expandable for the future**

The PowerBook 190/66 and 190cs/66 are the newest members of the PowerBook 100 series. These computers are affordable yet highly capable notebook computers that can be upgraded to the advanced capabilities of the PowerBook 5300c/100. They're excellent systems for users in homes and schools. Also available is the PowerBook 150, which is a good choice for users who are cost-conscious in their search for a portable computer.

The PowerBook 190 computers offer these advantages:

- *Innovation at an affordable price.* The PowerBook 190 computers feature an innovative design that includes a large display; an improved Apple trackpad; a full-size keyboard with function keys and integrated palm rest; 16-bit, CD-quality stereo output; and an integrated microphone. Yet they are priced for affordability.
- *Expandability.* With their PC Card slots that can accommodate two Type I or Type II PC Cards or one Type III PC Card, the PowerBook 190 computers can be expanded in any number of ways, including the addition of wired or wireless modems, storage, and Ethernet networking capabilities. They also include an expansion bay for connection of third-party solutions such as a second hard disk drive, a magneto-optical storage device, an internal AC adapter, or other devices.
- *A complete solution.* The PowerBook 190 computers are designed to provide a complete solution right out of the box. They come with ClarisWorks integrated software, as well as eWorld on-line services software and the PowerBook Mobility Bundle, a combination of communications, power-management, security, compatibility, and entertainment software designed to enhance mobile computing.
- *Upgradability.* As users' needs grow, the capabilities of the PowerBook 190 computers can grow to meet them. Upgrade options include a PowerPC logic board upgrade, a 10.4-inch active-matrix color display (requires PowerPC upgrade), infrared technology, and 8-bit video-out capabilities.

# Macintosh PowerBook 150



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## At a glance

- The Macintosh PowerBook 150 is the most affordable PowerBook computer.
- It comes with all of the features that made the original PowerBook computers so popular, including an Apple SuperDrive, an integrated high-quality display, SCSI and serial ports, and a modem port—incorporated in the award-winning PowerBook design.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- *Processor:* 68030
- *Speed:* 33 megahertz
- *Memory:* 4MB of RAM, expandable to 40MB  
—4MB on logic board and one memory expansion slot
- *Storage:*  
—Internal Apple SuperDrive floppy disk drive  
—Internal 250MB hard disk drive
- *Expansion capabilities:* Two internal expansion slots—one for RAM, one for a modem
- *Ports:* Serial port, power adapter port, SCSI port—supports six SCSI devices
- *Display:* 9.5-inch (diagonal) backlit passive-matrix display (640 by 480 pixels; 4-level gray scale)
- *Battery:* Nickel-cadmium; average life: 2 to 4 hours
- *Networking:* Built-in LocalTalk port
- *Dimensions (HWD):* 2.25 by 11.25 by 9.3 inches (5.8 by 28.7 by 23.6 cm)
- *Weight:* 5.5 lb. (2.5 kg)
- *Internal modem:* Optional fax/data modem

- *Other features:*

- Backup application included on hard disk drive
- Restore application included on System Tools disk
- Preinstalled software: ClarisWorks, eWorld, and the PowerBook Mobility Bundle (includes Apple Remote Access)

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## **Key features**

- Offers an award-winning design—provides a palm rest and a convenient trackball that can be used equally well by left- and right-handed users.
- Comes with the PowerBook Mobility Bundle—preinstalled software that makes mobile computing even easier.
- Weighs only 5.5 pounds.
- Comes with a built-in, industry-standard 9.5-inch gray-scale display.
- Offers a SCSI port for expandability.
- Takes advantage of Apple Remote Access software.
- Runs thousands of applications for Macintosh—and comes with ClarisWorks software.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

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## **Other PowerBook models to consider**

- The PowerBook 190/66 includes a passive-matrix display that shows 16 levels of gray, PC Card slots, and an expansion bay, and can accommodate many upgrade options.
- The PowerBook 190cs/66 provides a color display, PC Card slots, and an expansion bay, and is highly upgradable.

# Macintosh PowerBook 190/66



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## At a glance

- The Macintosh PowerBook 190/66 is Apple's most affordable PowerBook model based on the 68LC040 processor.
- Already a powerful, capable computer, it is designed to let you upgrade features as your needs change.

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**Specifications** *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** 68LC040
- **Speed:** 66/33 megahertz
- **Memory:** 4MB or 8MB of RAM, expandable to 36MB or 40MB—4MB or 8MB on logic board and one memory expansion slot
- **Storage:**
  - Apple SuperDrive floppy disk drive (removable)
  - Internal 500MB hard disk drive
- **Expansion capabilities:** Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- **Ports:** Serial port, ADB port, video-output port (optional), power adapter port, SCSI port
- **Display:** 9.5-inch (diagonal) backlit passive-matrix display (16-level gray scale)
- **Battery:** Nickel-metal-hydride; average life: 3 to 5 hours; power adapter included
- **Sound:** Output port (stereo); integrated microphone and speaker
- **Networking:** Built-in LocalTalk port; optional infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards



- *Dimensions (HWD)*: 2.0 by 11.5 by 8.5 inches (5.1 by 29.2 by 21.6 cm)
- *Weight*: 6.0 lb. (2.7 kg)
- *Security*: Security slot for locking (requires third-party cable; secures battery and expansion bay); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and improved Apple trackpad
  - Preinstalled software: ClarisWorks, eWorld, and the PowerBook Mobility Bundle (includes Apple Remote Access)

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### **Key features**

- Features the Motorola 68LC040 processor.
- Has a 9.5-inch passive-matrix display (16 levels of gray).
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Features 16-bit, CD-quality stereo sound output.
- Offers an improved Apple trackpad that lets you use the trackpad to select, open, close, and drag without using the trackpad button.
- Incorporates a full-size keyboard with function keys.
- Comes with ClarisWorks integrated productivity software and the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Can be upgraded to take advantage of PowerPC processor technology, active-matrix display technology (requires PowerPC upgrade), infrared technology, and 8-bit video-out capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 190cs/66 comes with a larger, color display.
- The PowerBook 5300/100 provides the high performance of PowerPC technology at an affordable price.

# Macintosh PowerBook 190cs/66



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## At a glance

- The Macintosh PowerBook 190cs/66 is Apple's most affordable color PowerBook.
- Already a powerful, capable computer, it is designed to let you upgrade features as your needs change.

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**Specifications** (*Note: Configurations and availability may vary worldwide.*)

- *Processor:* 68LC040
- *Speed:* 66/33 megahertz
- *Memory:* 4MB or 8MB of RAM, expandable to 36MB or 40MB—4MB or 8MB on logic board and one memory expansion slot
- *Storage:*
  - Apple SuperDrive floppy disk drive (removable)
  - Internal 500MB hard disk drive
- *Expansion capabilities:* Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- *Ports:* Serial port, ADB port, video-output port (optional), power adapter port, SCSI port
- *Display:* 10.4-inch (diagonal) backlit dual-scan color display (256 colors)
- *Battery:* Nickel-metal-hydride; average life: 2.5 to 4.5 hours; power adapter included
- *Sound:* Output port (stereo); integrated microphone and speaker
- *Networking:* Built-in LocalTalk port; optional infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards

- *Dimensions (HWD)*: 2.2 by 11.5 by 8.5 inches (5.6 by 29.2 by 21.6 cm)
- *Weight*: 6.3 lb. (2.9 kg)
- *Security*: Security slot for locking (requires third-party cable; secures battery and expansion bay); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and improved Apple trackpad
  - Preinstalled software: ClarisWorks, eWorld, and the PowerBook Mobility Bundle (includes Apple Remote Access)

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### **Key features**

- Features the high-performance Motorola 68LC040 processor.
- Has a built-in, 10.4-inch backlit dual-scan display that supports 256 colors.
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Features 16-bit, CD-quality stereo sound output.
- Offers an improved Apple trackpad that lets you use the trackpad to select, open, close, and drag without using the trackpad button.
- Incorporates a full-size keyboard with function keys.
- Comes with ClarisWorks integrated productivity software and the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Can be upgraded to take advantage of PowerPC processor technology, active-matrix display technology (requires PowerPC upgrade), infrared technology, and 8-bit video-out capabilities.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 5300cs/100 provides the high performance of PowerPC technology in an affordable color system.

# Macintosh PowerBook Duo 2300c/100



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## At a glance

- The Macintosh PowerBook Duo 2300c/100 is Apple's smallest, lightest PowerBook computer, providing the performance of the RISC-based PowerPC processor in a sleek, compact system that weighs less than 5 pounds.
- Its large, active-matrix display shows up to thousands of colors.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- *Processor:* PowerPC 603e with integrated math coprocessor and 16K data cache and 16K instruction cache
- *Speed:* 100 megahertz
- *Memory:* 8MB or 20MB of RAM, expandable to 56MB—8MB on logic board and one memory expansion slot
- *Storage:*
  - Optional external Apple SuperDrive floppy disk drive
  - Internal 750MB or 1.1GB hard disk drive
- *Expansion capabilities:* Two slots—one for optional modem, one for RAM
- *Ports:* Serial port, docking connector, power adapter port, modem port; integrated microphone and speakers
- *Display:* 9.5-inch (diagonal) backlit active-matrix color display with two display modes:
  - 256 colors at 640- by 480-pixel resolution
  - Thousands of colors at 640- by 400-pixel resolution
- *File-transfer options:*
  - LocalTalk cables or serial cable and System 7 file sharing
  - Fax/data modem (optional) and Apple Remote Access software
  - External floppy disk drive (optional)

- *Battery*: High-capacity Type III nickel-metal-hydride; average life: 2 to 4 hours; power adapter included
- *Networking*: Built-in LocalTalk port
- *Dimensions (HWD)*: 1.5 by 10.9 by 8.5 inches (3.8 by 27.7 by 21.6 cm)
- *Weight*: 4.8 lb. (2.2 kg)
- *Other features*:
  - Large keyboard, palm rest, and improved Apple trackpad
  - PowerBook Mobility Bundle (includes Apple Remote Access) and eWorld software

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### **Key features**

- Features the PowerPC 603e processor, which enables the PowerBook Duo 2300c/100 to handle even the most complex tasks easily, as well as to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.
- Features a sleek design that's small and lightweight—just 4.8 pounds.
- Has a built-in, 9.5-inch backlit active-matrix display that supports up to thousands of colors.
- Offers an improved Apple trackpad that lets you use the trackpad to select, open, close, and drag without using the trackpad button.
- Is compatible with all Apple docking products and PowerBook Duo accessories (including memory expansion kit, modem, and batteries), as well as with third-party docking products, for a variety of expansion solutions.
- Comes with the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 5300c/100 is a high-performance notebook computer that offers a larger active-matrix color display.
- The PowerBook 5300ce/117 features a 117-megahertz PowerPC 603e processor, a 10.4-inch active-matrix color SVGA display, and a 1.1GB hard disk drive.



# Macintosh PowerBook 5300/100



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## At a glance

- The Macintosh PowerBook 5300/100 provides the high performance of PowerPC technology at the most affordable price.
- It's ideal for mainstream productivity applications such as word processing, spreadsheets, and communications software.

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**Specifications** *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 603e with integrated math coprocessor and 16K data cache and 16K instruction cache
- **Speed:** 100 megahertz
- **Memory:** 8MB of RAM, expandable to 64MB  
—8MB on logic board and one memory expansion slot
- **Storage:**  
—Apple SuperDrive floppy disk drive (removable)  
—Internal 500MB hard disk drive
- **Expansion capabilities:** Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- **Ports:** Serial port, ADB port, power adapter port, SCSI port, video-output port
- **Display:** 9.5-inch (diagonal) backlit passive-matrix display (16-level gray scale)
- **Battery:** Nickel-metal-hydride; average life: 3 to 5 hours; power adapter included
- **Sound:** 16-bit audio line input port (stereo), 16-bit sound-output port (stereo); integrated microphone and speaker
- **Networking:** Built-in LocalTalk port; built-in infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards

- *Dimensions (HWD)*: 2.0 by 11.5 by 8.5 inches (5.1 by 29.2 by 21.6 cm)
- *Weight*: 6.1 lb. (2.8 kg); 5.7 lb. (2.6 kg) using PC Card storage tray (included)
- *Security*: Security slot for locking battery and expansion bay (requires third-party cable); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and Apple trackpad
  - PowerBook Mobility Bundle (includes Apple Remote Access) and eWorld software

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### **Key features**

- Features the PowerPC 603e processor, which enables the PowerBook 5300/100 to handle even the most complex tasks easily, as well as to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.
- Has a built-in, 9.5-inch backlit passive-matrix display that supports 16 levels of gray.
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Includes infrared technology and Apple IR File Exchange software for easy, wireless file sharing.
- Provides 8-bit color video-out capability, upgradable to greater bit depth (requires third-party product).
- Features 16-bit, CD-quality stereo sound.
- Comes with the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 5300cs/100 provides the high performance of PowerPC technology in an affordable color system.

# Macintosh PowerBook 5300cs/100



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## At a glance

- The Macintosh PowerBook 5300cs/100 provides the high performance of PowerPC technology in a color system.
- It's a versatile system, suitable for everything from word processing to desktop publishing.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- *Processor:* PowerPC 603e with integrated math coprocessor and 16K data cache and 16K instruction cache
- *Speed:* 100 megahertz
- *Memory:* 8MB or 16MB of RAM, expandable to 64MB—8MB or 16MB on logic board and one memory expansion slot
- *Storage:*
  - Apple SuperDrive floppy disk drive (removable)
  - Internal 500MB or 750MB hard disk drive
- *Expansion capabilities:* Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- *Ports:* Serial port, ADB port, power adapter port, SCSI port, video-output port
- *Display:* 10.4-inch (diagonal) backlit dual-scan color display (256 colors)
- *Battery:* Nickel-metal-hydride; average life: 2.5 to 4.5 hours; power adapter included
- *Sound:* 16-bit audio line input port (stereo), 16-bit sound-output port (stereo); integrated microphone and speaker
- *Networking:* Built-in LocalTalk port; built-in infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards

- *Dimensions (HWD)*: 2.2 by 11.5 by 8.5 inches (5.6 by 29.2 by 21.6 cm)
- *Weight*: 6.4 lb. (2.9 kg); 6.0 lb. (2.7 kg) using PC Card storage tray (included)
- *Security*: Security slot for locking battery and expansion bay (requires third-party cable); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and Apple trackpad
  - PowerBook Mobility Bundle (includes Apple Remote Access) and eWorld software

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### **Key features**

- Features the PowerPC 603e processor, which enables the PowerBook 5300cs/100 to handle even the most complex tasks easily, as well as to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.
- Has a built-in, 10.4-inch backlit dual-scan color display that supports 256 colors.
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Includes infrared technology and Apple IR File Exchange software for easy, wireless file sharing.
- Provides 8-bit color video-out capability, upgradable to greater bit depth (requires third-party product).
- Features 16-bit, CD-quality stereo sound.
- Comes with the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 5300c/100 provides the high performance of PowerPC technology with an active-matrix color display.

# Macintosh PowerBook 5300c/100



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## At a glance

- The Macintosh PowerBook 5300c/100 provides PowerPC technology and the highest-quality color display.
- An advanced color display makes the PowerBook 5300c/100 ideal for working with graphics or presentations.

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## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 603e with integrated math coprocessor and 16K data cache and 16K instruction cache
- **Speed:** 100 megahertz
- **Memory:** 8MB or 16MB of RAM, expandable to 64MB  
—8MB or 16MB on logic board and one memory expansion slot
- **Storage:**  
—Apple SuperDrive floppy disk drive (removable)  
—Internal 500MB or 750MB hard disk drive
- **Expansion capabilities:** Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- **Ports:** Serial port, ADB port, power adapter port, SCSI port, video-output port
- **Display:** 10.4-inch (diagonal) backlit active-matrix color display (256 or thousands of colors, depending on configuration)
- **Battery:** Nickel-metal-hydride; average life: 2.5 to 4.5 hours; power adapter included
- **Sound:** 16-bit audio line input port (stereo), 16-bit sound-output port (stereo); integrated microphone and speaker
- **Networking:** Built-in LocalTalk port; built-in infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards



- *Dimensions (HWD)*: 2.2 by 11.5 by 8.5 inches (5.6 by 29.2 by 21.6 cm)
- *Weight*: 6.4 lb. (2.9 kg); 6.0 lb. (2.7 kg) using PC Card storage tray (included)
- *Security*: Security slot for locking battery and expansion bay (requires third-party cable); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and Apple trackpad
  - PowerBook Mobility Bundle (includes Apple Remote Access) and eWorld software

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### **Key features**

- Features the PowerPC 603e processor, which enables the PowerBook 5300c/100 to handle even the most complex tasks easily, as well as to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.
- Has a built-in, 10.4-inch active-matrix display. (Available in two configurations: one with 512K of video RAM, for 256 colors; the other with 1MB of video RAM, for thousands of colors.)
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Includes infrared technology and Apple IR File Exchange software for easy, wireless file sharing.
- Provides 8-bit color video-out capability, upgradable to greater bit depth (requires third-party product).
- Features 16-bit, CD-quality stereo sound.
- Comes with the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Qualifies for the EPA Energy Star rating (U.S.A.).

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### **Other PowerBook models to consider**

- The PowerBook 5300ce/117 provides PowerPC technology in the ultimate PowerBook computer.

# Macintosh PowerBook 5300ce/117



## At a glance

- The Macintosh PowerBook 5300ce/117 provides the high performance of PowerPC technology in the highest-quality, highest-resolution color PowerBook.
- It features a 117-megahertz PowerPC 603e processor, 32MB of RAM, and a large-capacity, 1.1GB hard disk drive, offering outstanding performance—equal to or surpassing that of many desktop systems.
- It's the ultimate PowerBook for power users.

## Specifications *(Note: Configurations and availability may vary worldwide.)*

- **Processor:** PowerPC 603e with integrated math coprocessor and 16K data cache and 16K instruction cache
- **Speed:** 117 megahertz
- **Memory:** 32MB of RAM, expandable to 64MB  
—16MB on logic board and one memory expansion slot
- **Storage:**  
—Apple SuperDrive floppy disk drive (removable)  
—Internal 1.1GB hard disk drive
- **Expansion capabilities:** Memory expansion slot; PC Card slots for two Type I or Type II PC Cards or one Type III PC Card; expansion bay for third-party solutions
- **Ports:** Serial port, ADB port, power adapter port, SCSI port, video-output port
- **Display:** 10.4-inch (diagonal) active-matrix color SVGA display (thousands of colors); 800- by 600-pixel resolution
- **Battery:** Nickel-metal-hydride; average life: 2.5 to 4.5 hours; power adapter included

- *Sound*: 16-bit audio line input port (stereo), 16-bit sound-output port (stereo); integrated microphone and speaker
- *Networking*: Built-in LocalTalk port; built-in infrared technology supports AppleTalk protocol; Ethernet networking through PC Cards
- *Dimensions (HWD)*: 2.2 by 11.5 by 8.5 inches (5.6 by 29.2 by 21.6 cm)
- *Weight*: 6.4 lb. (2.9 kg); 6.0 lb. (2.7 kg) using PC Card storage tray (included)
- *Security*: Security slot for locking battery and expansion bay (requires third-party cable); password security software
- *Other features*:
  - Full-size keyboard with function keys, palm rest, and Apple trackpad
  - PowerBook Mobility Bundle (includes Apple Remote Access) and eWorld software

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### Key features

- Features the PowerPC 603e processor, which enables the PowerBook 5300ce/117 to handle even the most complex tasks easily, as well as to run Insignia Solutions' SoftWindows software for MS-DOS 6.2 and Windows 3.1 compatibility.
- Has a built-in, 10.4-inch active-matrix color SVGA display that supports thousands of colors.
- Lets you add Ethernet networking, a wired or wireless modem, storage, or other capabilities through PC Cards.
- Includes an expansion bay for third-party solutions such as an additional hard disk, a magneto-optical storage device, an internal AC adapter, or other devices.
- Includes infrared technology and Apple IR File Exchange software for easy, wireless file sharing.
- Provides 8-bit color video-out capability, upgradable to greater bit depth (requires third-party product).
- Features 16-bit, CD-quality stereo sound.
- Comes with the PowerBook Mobility Bundle—preinstalled communications, power-management, security, compatibility, and entertainment software that makes mobile computing even easier.
- Qualifies for the EPA Energy Star rating (U.S.A.).

# PowerBook Duo Docking Products

## **PowerBook Duo Dock Plus**

• The PowerBook Duo Dock Plus provides easy-to-use expansion capabilities for PowerBook Duo computers.



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• Inserting your PowerBook Duo notebook computer into the PowerBook Duo Dock Plus gives

you access to a complete Macintosh desktop system.

• The PowerBook Duo Dock Plus physically supports external displays weighing up to 85 pounds—including the Apple Multiple Scan 20 Display.

• The dock is compatible with all PowerBook Duo computers.

• PowerLatch docking technology provides:

—Easy connection between the PowerBook Duo computer and the dock; there are no cables to hook up.

—Automatic insert and eject, which makes inserting a PowerBook Duo computer into a PowerBook Duo Dock Plus as easy as inserting a videotape into a VCR.

—Manual eject if power is out.

—Data protection. You can't accidentally lose your work-in-progress by ejecting your PowerBook Duo while it is docked.

## **Specifications**

• *Storage:*

—Internal Apple SuperDrive floppy disk drive

—Bay for 3.5-inch hard disk drive

• *Expansion capabilities:* Two NuBus slots; supports six SCSI devices

- **Ports:** Two serial ports, ADB port, SCSI port, video-output port, pass-through port for modem, sound-input port (mono), sound-output port (mono)
- **Video support:** Comes with 1MB of video RAM, providing built-in support for up to 32,768 colors on the Apple Multiple Scan 1705 Display, and up to 256 colors on the Apple Multiple Scan 20 Display; supports some third-party VGA and SVGA displays
- **Networking ports:** Built-in LocalTalk; Ethernet
- **Dimensions (HWD):** 5.1 by 12.5 by 16.3 inches (13.0 by 31.8 by 41.4 cm)
- **Weight:** 13.5 lb. (6.1 kg)

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### **PowerBook Duo Floppy Adapter**

- The PowerBook Duo Floppy Adapter gives you access to an external floppy disk drive with any PowerBook Duo.
- Its ADB port lets you connect a mouse or an extended keyboard.
- Its security slot helps ensure that the system cannot be removed from your work space.
- It can be used in conjunction with the Macintosh HDI-20 External 1.4MB Floppy Disk Drive.



### **Specifications**

- **Ports:** External floppy disk drive port; ADB port
- **Dimensions (HWD):** 1.5 by 5.0 by 2.6 inches (3.8 by 12.7 by 6.6 cm)
- **Weight:** 0.3 lb. (0.14 kg)

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### **Macintosh HDI-20 External 1.4MB Floppy Disk Drive**

- This external Apple SuperDrive floppy disk drive enables you to use floppy disks with your PowerBook Duo computer. Connects to the computer through the PowerBook Duo Floppy Adapter.

### **Specifications**

- **Dimensions (HWD):** 1.1 by 4.5 by 7.0 inches (2.8 by 11.4 by 17.8 cm)
- **Weight:** 1.44 lb. (0.65 kg)



# Portable System Upgrades

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## Upgrades for PowerPC performance

Several products are available for current Macintosh PowerBook owners who want to move up to the speed and power of PowerPC processor technology without sacrificing their previous investments. Currently, upgrades are available for the following models:

- Macintosh PowerBook 190/66 and 190cs/66
- Macintosh PowerBook Duo 210, 230, 250, 270c, 280, and 280c (all previous PowerBook Duo systems)
- Macintosh PowerBook 520, 520c, 540, and 540c

There are three different upgrades: two Macintosh PowerBook Logic Board Upgrade Kits, and the Macintosh PowerBook Processor Card Upgrade Kit.

- *Macintosh PowerBook Logic Board Upgrade Kits.* Logic board upgrades are available for both the PowerBook 190 computers and the PowerBook Duo 200 series computers. They let your computer run applications optimized for the performance capabilities of the PowerPC processor up to six times faster than standard applications for Macintosh. The upgrades include a 100-megahertz PowerPC 603e processor, 8 megabytes of RAM and 4 megabytes of ROM, and installation of Macintosh system software version 7.5.2 on the computer's hard disk.

- *Macintosh PowerBook Processor Card Upgrade Kit.*

This upgrade replaces the 68LC040 processor card in current PowerBook 500 series models. With the upgrade installed, customers with these computers will receive the same high-performance PowerPC 603e processor found in the PowerBook 5300 computers, as well as the same features as the logic board upgrade (RAM, ROM, and system software).

No matter which upgrade is appropriate for you, you can be assured that your system will still be able to use existing accessories such as power adapters, batteries, and modems—and, in the case of the PowerBook Duo systems, docking products. Along with hardware compatibility, you'll also enjoy new levels of software compatibility: The high performance of the PowerPC processor will enable you to run not only your existing applications for Macintosh, but also applications optimized for Power Macintosh, and, with Insignia Solutions' SoftWindows software, even applications for MS-DOS 6.2 and Windows 3.1.

Installation of either upgrade must be performed by an authorized Apple reseller. Your upgraded computer will retain your existing display, hard disk drive, and RAM.

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### **Additional PowerBook upgrades**

Several other upgrades are available for the PowerBook 190 computers, allowing them to provide the capabilities of the feature-rich PowerBook 5300 systems.

- Macintosh PowerBook Infrared Upgrade Kit
- Macintosh PowerBook 8-bit Color Video-out Upgrade Kit
- Macintosh PowerBook 10.4-inch Active-Matrix Color Display Upgrade Kit (for PowerBook 190 computers, requires PowerPC upgrade; also compatible with the PowerBook 5300/100 and 5300cs/100)

# Portable Computer Accessories

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## **Macintosh PowerBook computers (all models)**

- Apple HDI-30 SCSI System Cable
- Apple HDI-30 SCSI Disk Adapter

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## **Macintosh PowerBook 150**

- PowerBook AC Adapter
- PowerBook Rechargeable Battery
- PowerBook Battery Recharger

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## **Macintosh PowerBook 190 and 5300 computers**

- Macintosh PowerBook Power Adapter
- Macintosh PowerBook 8MB RAM Expansion Card

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## **PowerBook Duo accessories**

- PowerBook Duo Dock Plus
- PowerBook Duo Floppy Adapter
- Macintosh HDI-20 External 1.4MB Floppy Disk Drive
- PowerBook Duo Express Modem
- PowerBook Duo Rechargeable Battery
- PowerBook Duo Battery Recharger
- PowerBook Duo AC Adapter

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## **Apple Mobile Message System**

With the Apple Mobile Message System, you can join the ranks of mobile professionals who are easily accessible to their colleagues via wireless communications.

- *PageCard wireless message receiver with LCD screen from Socket Communications.* Works as a stand-alone unit or fits

into the PCMCIA Expansion Module of your PowerBook 500 series computer.

- *Apple Notification Service.* This service lets your clients and colleagues use your personal 800 number to reach you from any phone, fax machine, or computer equipped with a modem. You'll get immediate notification of the faxes and voice messages you've received, and can also receive short and long wireless text messages, including messages from the Internet. All notifications and messages are relayed to your PageCard, where you can read them on its LCD screen. You can also insert the PageCard into the PCMCIA Expansion Module to view your messages on the PowerBook, store them, and transfer them into applications.
- *Update! receive software and Notify! send software from Ex Machina.* Automatically transfers wireless messages received by the PageCard to your computer.
- *Macintosh System 7.5 with PowerTalk*
- *Gateway software.* Turns PowerTalk into a universal mailbox for pages, faxes, CompuServe mail, QuickMail, and Internet mail.
- *Aldus DateBook and Adobe TouchBase Pro Bundle software*

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### **GSM Connection Kit for PowerBook**

*(Currently available in Germany, the United Kingdom, Sweden, Denmark, Norway, and Finland; subsequent adaptations for other markets in both European and non-European countries will depend on the availability and range of GSM data services.)*

This kit lets you connect your notebook computer to the GSM and DCS 1800 networks via the Nokia 2110 and 2140 handsets and the Nokia Cellular Data Card. It also provides mobile users with access to a full range of communications services when on the road, including fax capabilities and connection to services such as AppleLink and eWorld, as well as wireless connection to office networks via Apple Remote Access and gateways to networks such as X.25, ISDN, and VideoText.





# Apple Software

# Apple Software

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## System Software and Related Products

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### Macintosh System 7.5

Macintosh System 7.5 is the latest version of the popular Mac OS—the Macintosh operating system. It not only gives you the best graphical user interface available, but also provides advanced capabilities in productivity, printing, collaboration, document layout, and multimedia. Important features include the following:

- *Enhanced Finder.* Improved Find File commands, security features such as application and System Folder locking, and Drag and Drop of text and graphics between applications and the Finder are just a few of the productivity improvements in this version. In addition, the new Window Shade feature reduces screen clutter by letting you collapse windows to access other windows behind them, without closing documents. And the new Stickies feature lets you create on-screen reminder messages.
- *Apple Guide.* This interactive on-screen help feature actually leads you through tasks step by step, so you can master the processes, procedures, and capabilities of your Macintosh and the applications running on it.
- *Macintosh PC Exchange and Macintosh Easy Open.* These utilities allow you to work with DOS-formatted disks as though they were Mac OS disks. You can open and edit Mac OS, MS-DOS 6.2, and Windows 3.1 files even when you don't have the original application. (Appropriate file translators are required.)
- *QuickDraw GX.* This new printing and graphics architecture lets you create portable “print and view” documents from any application. It provides enhanced printer control through desktop printer icons. It incorporates Apple's ColorSync technology for maintaining consistent color from scanned document to displayed image to printed result. In addition, it supports Apple TrueType

and Adobe Type Manager GX font technologies, and is optimized for enhanced performance on Power Macintosh systems.

- *PowerTalk*. PowerTalk provides a universal desktop mailbox for all electronic mail, fax, and Internet correspondence, and allows you to exchange mail with other PowerTalk users either without a server or through a PowerShare Collaboration Server (available separately). The DigiSign digital signature feature offers you and your colleagues the efficiency and security of signing off projects electronically and complies with the RSA Public Key Cryptography System.

- *PowerBook utilities*. These features let you easily designate which files and folders to synchronize between your desktop Macintosh and your PowerBook—over a network, locally, or by using a floppy disk. They provide improved battery life by offering automatic backlight dimming, persistent RAM disks, and sleep keys, so your PowerBook battery will last longer. A Control Strip gives you convenient access to AppleTalk on/off, battery monitor, file sharing, hard disk spin-down, power management, sound volume, and more. And these utilities let you designate files to be printed the next time you connect to a printer.

- *AppleScript*. You can create custom solutions by linking and automating functions from different applications—and from the Finder.

- *MacTCP*. This feature prepares your Macintosh for connection to other systems using the industry-standard Transmission Control Protocol/Internet Protocol (TCP/IP) networking protocols.

- *QuickTime*. This industry-standard multimedia technology enables you to edit and play back digital video. It's optimized for enhanced performance on Power Macintosh computers, and through its cross-platform file format, you can play back Macintosh QuickTime files on Windows software-based systems by using QuickTime for Windows.

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## Macintosh Application Environment

Macintosh Application Environment (MAE)—the virtual Macintosh for open systems—is an innovative software product that allows users of UNIX RISC-based workstations to run Macintosh 680x0

applications right on their system. A complete Macintosh environment in an X Window, MAE brings the functionality and ease of use of the Macintosh computer to Sun Microsystems SPARCstations running the SunSoft Solaris operating system, as well as to Hewlett-Packard Series 700 workstations running HP-UX.

- *Is a virtual Macintosh.* MAE provides the familiar Macintosh graphical user interface and desktop in an X Window. Based on the Macintosh System 7.1 Finder (and incorporating several features of Macintosh System 7.5), MAE lets you open UNIX files (including NFS-mounted volumes), access UNIX applications through the Macintosh user interface, and use systems services (such as PostScript printers on the UNIX network).
- *Runs Macintosh applications.* MAE lets you use the most popular off-the-shelf Macintosh software on your UNIX workstation. It provides one consistent interface for all Macintosh applications, complete with icons, menus, windows, and outline fonts. It even reads Macintosh high-density floppy disks and CD-ROMs.
- *Integrates smoothly with UNIX.* MAE is fully integrated with the standard UNIX file system and allows you to copy and paste text and graphics between the UNIX and Macintosh environments. MAE organizes UNIX files and applications, and allows use of the control panels from the Macintosh desktop to configure your keyboard, mouse, and monitor settings.
- *Makes networking easy.* Through built-in support for AppleTalk, you can easily share documents, electronic mail, and printers with other MAE and Macintosh users, allowing for tighter integration between UNIX workstations and Macintosh-based administrative systems. And support for MacTCP enables you to access the Internet and TCP/IP-based applications.

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### **At Ease 3.0: Feel good about sharing your family Macintosh**

With At Ease 3.0 software, you can manage your shared Macintosh and make your Macintosh even easier to use. It's perfect for home use (especially if you have young children), offices, classrooms, and training centers. At Ease offers a choice of two interfaces



that you can easily customize for every age and level of computer experience. For young children and novice users, there's the simple At Ease desktop, which features large buttons and folders. Or you can set up the familiar Macintosh Finder interface for older children, teens, or more experienced users. Whichever interface you choose, the security features of At Ease protect your files and applications. Version 3.0 offers several significant improvements over the previous version of At Ease:

- *Security within the Finder interface.*
- *Separate At Ease panels for CD-ROMs and floppy disks.* Makes it easier to access multimedia titles, and also lets you decide which CD titles and contents are appropriate for your children.
- *Simplified setup and configuration.* Streamlines the process of installing and configuring your At Ease software.
- *Support for up to 40 users.* Lets you create customized environments for up to 40 different people on non-networked computers, such as an entire school class.

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### **At Ease for Workgroups 3.0: Controls access to applications and files in networked environments**

Ideal for schools and universities, At Ease for Workgroups 3.0 software lets you easily manage a group of shared Macintosh computers on a network. You can create customized working environments for different ages, levels of computing experience, and needs—choosing from the simple At Ease desktop or the familiar Macintosh Finder interface. The security features of At Ease for Workgroups protect your files and applications. Version 3.0 offers a number of enhancements over the previous version:

- *Easy customization.* Supports up to 200 different configurations and 4,000 users.
- *Separate At Ease panels for CD-ROMs and floppy disks.* Makes it easier to access multimedia titles, and also lets you decide which CD titles and contents are appropriate for students.
- *A new security level.* Allows for minor administrative tasks, such as control of user passwords and application access, to be handled by someone other than the administrator (such as instructors).



- *Shared-access and drop-box folders.* Makes it easy for groups to share files, and for students to submit assignments electronically.
- *Support for multiple servers.* Lets you use At Ease for Workgroups on a network with more than one server.

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## **Apple Personal Diagnostics**

Apple Personal Diagnostics software helps you keep your Macintosh trouble-free by performing comprehensive diagnostic tests on your logic board, hard disk, floppy disk drive, system software, and display. It also provides information about your system configuration. The Automated Diagnostics feature allows you to test your Macintosh automatically when you aren't using it. You'll be alerted to problems and given simple steps to correct them. Apple Personal Diagnostics supports more than 140 Macintosh models, from the Macintosh Plus through the Power Macintosh 9500/132.

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## *Learning and Entertainment*

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### **Apple CD-ROM Collection**

The Apple CD-ROM Collection is designed to help users get the most from their multimedia computers, by offering affordable bundles of CD-ROM-based titles. The collection currently consists of 14 CD-ROM title packs—each containing three high-quality CD-ROMs. Each pack also includes the Xpand Xpo CD, which features demos of all the available CD-ROM titles as well as thousands of other Macintosh-related products.

- *Children's learning and entertainment titles.* Packs designed for young users include Smart Fun for Kids, Creative Activities for Kids, and Adventures for Kids.
- *Adult entertainment and reference titles.* Packs designed for adults include Sports and Humor, Encyclomedia, and Learning for Adults.

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## Apple Home Learning Series

Apple Home Learning products are designed to encourage learning beyond the classroom by building bridges between school and home. By providing powerful, playful, and engaging experiences, our products will inspire children's love of learning. These products are built on rich curriculum-focused content, giving students a head start in school. Titles are based on the best thinking on how children learn and how technology can foster their learning. Apple Home Learning Series products are available in both Mac OS and Windows versions.

- *Earth Explorer*. Take a multimedia tour of the environment. With Earth Explorer, children will discover a fascinating new way to understand our planet through hundreds of interactive articles, games, puzzles, videos, and more. Supported by the National Science Foundation, Earth Explorer is designed to develop critical-thinking skills through engaging games that highlight vital environment issues.

- *WiggleWorks Story Packs 1 & 2*. Developed by Scholastic, a leading educational publisher, WiggleWorks is the classroom-proven software that has helped thousands of children learn to read and write. Each WiggleWorks Story Pack combines three engaging and educational stories that encourage children to explore creative reading and writing activities on their own or with a parent. WiggleWorks is designed to be fun yet challenging, while allowing kids to learn at their own pace. Parents can customize the WiggleWorks setup for various reading and writing skill levels, making it ideal for multiple-child households. With WiggleWorks, children are also able to write and print their own books and record their voices.

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## Compatibility and Communications

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### NewtonMail

NewtonMail software make it easy for Apple MessagePad users to exchange text messages with one another and with anyone who can be reached on popular on-line information services.

- *Internet access.* Provides access to on-line information systems accessible via the Internet, including CompuServe, America Online, MCI Mail, AppleLink, SprintMail, and EasyLink.
- *Newton-to-Newton information exchange.* Allows 24-hour-per-day, 7-day-per-week electronic exchange of Newton information—such as notepad messages and graphics, business cards, and calendar appointments—between NewtonMail subscribers. Users can send mail from any Newton application.
- *Ease of use.* Incorporates metaphors consistent with other built-in Newton applications, such as the InBox and OutBox functions.

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### **eWorld: Apple's on-line service**

eWorld is Apple's on-line service for Macintosh computers. It's an easy-to-use collection of electronic information and services for customers in Apple's key markets—home, education, publishing, and multimedia. eWorld offers one-click access to the Internet and the World Wide Web, as well as to direct on-line support from Apple. In addition, eWorld offers a robust electronic-mail system and a variety of real-time interactive communications capabilities, such as lectures, forums, and Town Meetings. eWorld provides:

- *Easy navigation through cyberspace.* Apple has made using an on-line service easy. eWorld lets you simply point and click through the system's friendly, graphical Town Square to get to the information you need. Information is organized sensibly in colorfully illustrated "buildings" that represent specific areas of interest—from home learning to computing.
- *Easy Internet access.* eWorld makes navigating through the vast, interconnected world of the Internet easy. With a simple click of the mouse, eWorld users can examine, explore, and put to advantage the tremendous range of information on the Internet and the World Wide Web. You can find helpful "how-to" information about the Internet in eWorld's Internet Resource Center, so your on-line journeys can be more productive.
- *Direct support from Apple.* One of the most popular areas in eWorld is the Computer Center, where eWorld users can get direct on-line support from Apple. In the "Ask Apple" area, you simply type in any question about using your Macintosh—and

you'll receive a speedy, personal reply from Apple's support professionals.

The information and services on eWorld have been carefully chosen to meet a wide variety of needs. You'll find a wealth of information about home learning, working at home, graphic design, publishing, education, and multimedia. And there are plenty of activities for the casual computer user, including playing games, viewing movie clips, and downloading shareware.

Many people find eWorld's community to be the friendliest in cyberspace, with its carefully structured on-line conferences and discussions. With eWorld, Apple has created a cyberspace community that's inviting and respectful.

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### ★ **MacX: Apple's high-performance X Window System solution for the Mac OS**

MacX 1.5 software makes it easy to access network-based X applications from your Macintosh or Power Macintosh computer. Accelerated for Power Macintosh and supporting the latest X Window System industry standard—X11 Release 5—MacX 1.5 lets you run the latest X applications side by side with your favorite software for the Mac OS. You can even cut and paste text and graphics between the two environments. And users in multivendor environments will appreciate the MacX support for standard networking protocols, including AppleTalk, TCP/IP, and DECnet. Simple to set up and use, MacX is the easiest way to connect your Macintosh to the X Window System.

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## *Publishing and Document Enhancement*

### **Japanese Language Kit**

The Japanese Language Kit contains everything you need to create, edit, and print documents in Japanese. Whether you're a native speaker or just learning the language, the kit lets you easily produce Japanese or bilingual business documents, presentations, and educational materials. You can also use the Japanese Language Kit to work with files created using KanjiTalk or to run Japanese applications on your Macintosh computer.



- *TrueType fonts.* Includes three Kanji TrueType fonts for high-quality output.
- *Easy input.* Features Kotoeri, the same easy-to-use, in-line input method used with KanjiTalk 7.

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### **Chinese Language Kit**

The Chinese Language Kit contains everything you need to add Chinese text to your documents. It can be used with your Apple Macintosh, PowerBook, or PowerPC processor-based computer to run Chinese applications and to include Chinese text in letters, presentations, and reports.

- *Bilingual instruction.* Comes with bilingual manuals.
- *TrueType fonts.* Includes scalable Chinese TrueType fonts.
- *Traditional or Simplified Chinese.* Provides easy-to-install Traditional and Simplified character sets.
- *Variety of input methods.* Includes Pinyin, Zhuyin, Cangjie, and others.

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### **Arabic Language Kit**

- ★ The Arabic Language Kit contains everything you need to create, edit, and print documents in Arabic or Persian. This kit can be used with your Macintosh, PowerBook, or PowerPC processor-based computer to run Arabic or Persian applications and to include Arabic or Persian in letters, presentations, and reports.

- *TrueType fonts.* Includes six Arabic TrueType fonts and five Persian TrueType fonts, which support Apple's QuickDraw GX technology and are highly scalable.
- *Learning aids.* Comes with keyboard labels, a user guide, and demo applications on CD-ROM.

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### ★ **Cyrillic Language Kit**

The Cyrillic Language Kit contains everything you need to create, edit, and print documents in Bulgarian, Russian, and Ukrainian. This kit makes it easy to work with files that have been created using the Bulgarian, Russian, or Ukrainian system software for the Macintosh and to include Bulgarian, Russian, or Ukrainian in letters, presentations, and reports. (You can also create documents in Belorussian, Macedonian, and Serbian.)



- *TrueType and PostScript fonts.* Includes three scalable Cyrillic fonts.
- *Learning aids.* Comes with keyboard labels, a user guide, and demo applications on CD-ROM.

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### ★ **Hebrew Language Kit**

The Hebrew Language Kit contains everything you need to create, edit, and print documents in Hebrew or Yiddish. This kit can be used with your Apple Macintosh, PowerBook, or PowerPC processor-based computer to run Hebrew applications and to include Hebrew or Yiddish in letters, presentations, and reports.

- *TrueType fonts.* Includes six scalable Hebrew TrueType fonts—with Yiddish characters.
- *Learning aids.* Comes with keyboard labels, a user guide, and demo applications on CD-ROM.

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## *Programming and Media Production*

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### ★ **Oracle Power Objects**

Oracle Power Objects software is designed to offer the simplest way to create powerful, cross-platform database applications.

It is available in two versions (stand-alone and client/server) for both the Mac OS and Windows software platforms, for a total of four products. By combining the database power of Oracle with Apple's ease of use, Oracle Power Objects makes complex data-management functionality automatic—so you can focus on the unique requirements of your application, not on coding details.

- *Drag and Drop Objects.* Oracle Power Objects streamlines the process of creating reusable application components by letting you work visually, using Drag and Drop Objects.
- *Familiar technologies.* The Oracle Power Objects scripting language, Oracle Basic, leverages the popular BASIC syntax. And you can extend your applications with industry standards such as OCX and OLE 2. You can also call .DLLs under Windows 3.1.
- *Cross-platform development capabilities.* With Oracle Power Objects, the applications you develop on Mac OS-based systems can run unmodified on Windows software-based systems and

vice versa, so you can support all of your users by maintaining only a single set of source code.

- *Scalable solutions.* The applications you create using Oracle Power Objects can scale seamlessly from the Local Database to the most popular relational database servers, including Oracle7, Sybase SQL Server, and Microsoft SQL Server.

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## **AppleScript**

AppleScript is the first truly integrated scripting, or macro, language developed for a personal computer. Its convenient natural-language syntax makes it easy to learn and use and enables you to automate routine and complex tasks to increase personal productivity. Dialects are provided for English, French, and Japanese. Tasks that can be automated include creating backups, filing files, accessing mainframes, and downloading mail.

AppleScript comes with built-in commands that make it easy to develop useful solutions. There are dozens of popular third-party applications that support and can be controlled by AppleScript. Thus, AppleScript is an ideal tool for integrating and harnessing the power of existing general-purpose applications to meet your specific needs.

AppleScript includes FaceSpan, an interface builder that lets you quickly put together custom applications with familiar Macintosh interface elements—all tied together by AppleScript commands. These commands can be entered manually or “recorded” in macros.

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## **HyperCard 2.3**

HyperCard is an easy-to-use development tool for creating a wide range of custom software solutions. It lets you organize information through the metaphor of “stacks” of “cards” through which you can navigate and search for information. By simply clicking on a button, you can view related text, graphics, or QuickTime movies, as well as listen to sounds. Although it’s simple enough for use by nonprogrammers, it also provides a robust prototyping and development environment for professional developers, with powerful scripting tools (including built-in AppleScript support), a modeless script editor, hypertext support, debugging tools,

and more. HyperCard 2.3 is designed to take advantage of the PowerPC processor, and is optimized for high performance on 680x0-based Macintosh computers.

- *Color and media integration tools.* The previous set of color tools has been enhanced to enable 24-bit color painting. And a complete suite of multimedia utilities for morphing and adding QuickTime movies has been included.
- *Ease of use.* HyperCard lets you integrate QuickTime movies, graphics, sounds, and spoken text within your stacks easily—no scripting experience is required.
- *New interface feature.* As part of the move from passive to active interface, HyperCard text can now be read aloud by your computer.

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## **Apple Media Tool**

The Apple Media Tool is a visual, object-based authoring environment that lets creative designers integrate media elements—such as QuickTime movies, PICT files, text, and sound files—and then make them interact through a direct manipulation interface to create interactive multimedia titles, support and training modules, and other similar projects. Also available is the Apple Media Tool Programming Environment, which allows programmers to customize interactive multimedia projects in a new object-based language called the Apple Media Language. (Products are sold separately.)

- *Collaboration aid.* Frees creative team members to work simultaneously on various aspects of the same project—programmers can spend their time developing media elements or “objects,” while designers use Apple Media Tool to make these elements interact and build a project.
- *Separate storage formats.* Stores media separately from the application—which reduces application size, and lets you replace work-in-progress with finished content without losing any of the relationships set up between objects.
- *QuickTime integration.* Takes advantage of Apple’s industry-standard QuickTime technology.
- *Cross-platform development.* Lets you deliver interactive multimedia projects on both Macintosh and Windows software-based

systems using the same content. The Apple Media Tool Programming Environment gives programmers access to both Macintosh and Windows toolboxes through a C language interface.

- *Runtime tool.* Includes Runtime Maker, which lets you create finished files and publish them on CD-ROM discs for Macintosh computers or for computers running Windows 3.1. Creates projects native to both PowerPC and 680x0 processor-based computers.

# Printers, Displays, & Imaging Products



# *The Apple Printer Advantage*

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## **Apple printers come complete**

All essential features are built in. So there's no need to buy interface cards, additional RAM, or special printer drivers.

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## **They're incredibly easy to set up and use**

Setting up any Apple printer is a simple matter of connecting a cable from the back of your Macintosh to the back of the printer. And connecting a printer to a network is just as simple.

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## **They're compatible**

If you can create it on a Macintosh screen, you can print it on an Apple printer. Our printers can be used with all Macintosh, Power Macintosh, and PowerBook computers. And some printers can even be used in mixed workgroup environments.

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## **They're versatile**

No matter which printer you choose, you'll get great printed results. All Apple printers let you use fonts in a wide range of sizes. And most let you print on a variety of materials.

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## **They offer excellent print quality, through Apple's core technologies**

Apple has developed seven key technologies that not only make scanning simpler and printing crisper, but also make adding images to your work easier than ever.

- *TrueType*. With Apple's TrueType outline font technology, even the most affordable Apple printers can exceed the type quality of most printers currently on the market. All TrueType fonts produce type that's perfect at any size.



- *FinePrint*. Apple laser printers with FinePrint technology print dots of different widths, producing precise, smooth text and line art.
- *PhotoGrade*. PhotoGrade makes it possible for some Apple laser printers to generate images with as many as 91 shades of gray, producing printed photographs that closely resemble the originals.
- *Color PhotoGrade*. This innovative printing technology dramatically increases the number of shades of color and the amount of detail in text, graphics, or images.
- *GrayShare*. GrayShare technology is part of Apple printers that use QuickDraw software. It gives them gray-scale printing and printer sharing capabilities.
- *ColorShare*. Like GrayShare, this technology allows you to share your color printer with other users on a network. It includes “scatter” or diffusion halftoning for better print quality.
- *ColorSync 2.0*. Apple’s ColorSync software is a color-matching solution that works behind the scenes with Macintosh applications, making sure that colors are consistent across input, display, and output devices.



## Apple printers are Energy Star compliant

All Apple printers qualify for the EPA Energy Star rating (U.S.A.) as energy-efficient products, making them more affordable to use.

## There's a printer for every task—and budget

With a family of nine printers to choose from, you can be certain that there's an Apple printer that meets your needs. You can also rest assured that your Apple printer will continue to do so for a long time to come: All of our printers are designed to provide years of dependable service.

# ImageWriter II



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## At a glance

- The ImageWriter II is a dot-matrix printer well suited for classroom, personal, and professional use.
- It's ideal for printing on continuous-feed paper, such as payroll checks or preprinted forms.

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## Specifications

- *Resolution:* 144 dots per inch
- *Printing speed:* 0.5 page per minute (best mode); 2 pages per minute (draft mode)
- *Processor:* Uses the computer's processor
- *Supported languages:* QuickDraw, QuickDraw GX
- *Fonts:* Built-in character sets for English, Italian, Danish, German, Swedish, French, and Spanish
- *Paper handling:* Supports both cut-sheet and fanfold continuous paper (3 to 10 inches in width); prints forms, labels, envelopes
- *Connectivity and networking:* Serial port; optional LocalTalk connector supports AppleTalk protocol
- *Dimensions (HWD):* 5.0 by 17.0 by 12.0 inches (12.7 by 43.2 by 30.5 cm)
- *Weight:* 15.0 lb. (6.8 kg)
- *Recommended number of users:* One to three (with LocalTalk option)
- *Other features:*
  - Capable of printing color documents (requires color ribbon)
  - Can be equipped with a cut-sheet feeder, which holds as many as 100 single-sheet pages of cut-sheet paper
  - Energy Star compliant

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**Key features**

- Prints dot-matrix format, so it's good for drafts, and can handle multipart forms.
- Has tractor-feed feature, which allows it to print on continuous-feed paper.
- Prints in two modes—draft mode and best mode.
- Can print on envelopes and labels.
- Can print in color (requires color ink ribbon).
- Is compatible with Apple II and Macintosh computers.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# StyleWriter 1200



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## At a glance

- The StyleWriter 1200 is an ink-jet printer that offers laser-quality printing at a very affordable price.
- It takes advantage of Apple's GrayShare software—which allows printer sharing and gray-scale printing for sharp printed graphics.
- Its compact design lets you use it in even the smallest of work spaces, such as a dorm room or a one-person office.

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## Specifications

- *Resolution:* 720 by 360 dots per inch with edge smoothing for black and white; 360 by 360 dots per inch for gray scale
- *Printing speed:* 3 pages per minute (black-and-white normal mode); 2 pages per minute (best mode)
- *Processor:* Uses the computer's processor
- *Memory:* 128K of RAM
- *Supported languages:* QuickDraw, QuickDraw GX
- *Fonts:* 64 scalable TrueType fonts
- *Paper tray size:* 100 sheets; automatically feeds up to 15 envelopes
- *Paper handling:* Supports U.S. letter, U.S. legal, A4, envelopes, labels, and transparencies
- *Connectivity and networking:* Serial port; GrayShare software allows printer sharing on LocalTalk, Ethernet, and Token Ring networks
- *Dimensions (HWD):* 7.0 by 13.6 by 7.9 inches (17.8 by 34.5 by 20.1 cm)
- *Weight:* 6.6 lb. (3.0 kg)
- *Recommended number of users:* One; supports multiple users through GrayShare



- *Other features:*
    - Energy Star compliant
    - Cable included
- 

### **Key features**

- Provides laser-quality printing in a compact design.
- Can print on a variety of materials, including envelopes and transparencies.
- Supports printing of two or four reduced-sized pages on a single sheet.
- Lets you easily print watermarks.
- Takes advantage of GrayShare software, which allows printer sharing and gray-scale printing for sharp printed graphics.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# Color StyleWriter 2200



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## At a glance

- The Color StyleWriter 2200 is an innovative ink-jet printer that provides outstanding quality for both color and black-and-white printing.
- Although it offers the performance of a desktop printer, it weighs only 3 pounds and is designed to be truly portable, making it the perfect complement for any PowerBook computer.

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## Specifications

- *Resolution:* 720 by 360 dots per inch for black and white; 360 by 360 dots per inch for color and gray scale
- *Printing speed:* 5 pages per minute for black and white; 0.33 page per minute for color
- *Processor:* Uses the computer's processor
- *Memory:* 40K input buffer
- *Supported languages:* QuickDraw, QuickDraw GX
- *Fonts:* 64 scalable TrueType fonts
- *Paper tray size:* Multipurpose tray holds up to 30 sheets or 5 envelopes
- *Connectivity and networking:* Serial port; ColorShare software allows printer sharing on LocalTalk, Ethernet, and Token Ring networks
- *Dimensions (HWD):* 2.2 by 11.8 by 6.2 inches (5.6 by 30.0 by 15.7 cm)
- *Weight:* 3.1 lb. (1.4 kg)
- *Recommended number of users:* One; can support multiple users through ColorShare

- *Other features:*

- Energy Star compliant
- One color ink cartridge; separate black ink cartridge
- ColorSync 2.0 support
- Cable included

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### **Key features**

- Is designed for true portability: weighs only 3 pounds and fits in an average briefcase.
- Uses separate ink cartridges—one for color inks and one for black ink—so you can replace the black ink (which is most commonly used) without wasting remaining ink in the color tanks.
- Has ColorSync 2.0 color-matching technology, so the colors you see on the screen will match the colors on the printed page.
- Supports printing of two or four reduced-size pages on a single sheet.
- Lets you easily print watermarks.
- Has ColorShare software, so you can share your printer with others on a network.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# Color StyleWriter 2400



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## At a glance

- The Color StyleWriter 2400 is an economical, compact ink-jet printer that produces vibrant colors and crisp text.
- Its exceptional print quality and affordable price make the Color StyleWriter 2400 ideal for families, educators, and small-business owners.

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## Specifications

- *Resolution:* 720 by 360 dots per inch for black and white; 360 by 360 dots per inch for color and gray scale
- *Printing speed:* 5 pages per minute (black and white); 0.33 page per minute (color)—depends on computer's processor
- *Processor:* Uses the computer's processor
- *Memory:* 62K input buffer
- *Supported languages:* QuickDraw, QuickDraw GX
- *Fonts:* 64 scalable TrueType fonts
- *Paper tray size:* Multipurpose tray holds up to 100 sheets of paper or 15 envelopes
- *Connectivity and networking:* Serial port; ColorShare software allows printer sharing on LocalTalk, Ethernet, and Token Ring networks; optional LocalTalk module supports AppleTalk protocol
- *Dimensions (HWD):* 8.3 by 14.4 by 8.4 inches (21.1 by 36.5 by 21.5 cm)
- *Weight:* 7.9 lb. (3.6 kg)
- *Recommended number of users:* One; can support multiple users through ColorShare

- *Other features:*
    - Energy Star compliant
    - One color ink cartridge; separate black ink cartridge
    - ColorSync 2.0 support
    - Cable included
- 

## **Key features**

- Has a compact design, making it ideal for dormitories or small work spaces.
- Uses separate ink cartridges—one for color inks and one for black ink—so you can replace the black ink (which is most commonly used) without wasting remaining ink in the color tanks; uses fade- and water-resistant inks.
- Has ColorSync color-matching technology, so the colors you see on the screen will match the colors on the printed page.
- Supports a variety of paper formats: plain paper, premium paper, transparencies, and coated papers.
- Supports printing of two or four reduced-size pages on a single sheet.
- Lets you easily print watermarks.
- Has ColorShare software, so you can share your printer with others on a network.
- Provides high-quality printing at a low cost per page.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.



# Personal LaserWriter 300



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## At a glance

- The Personal LaserWriter 300 is Apple's most affordable laser printer.
- Its gray-scale capability enables the Personal LaserWriter 300 to offer sharp graphics printing.
- It's a compact, energy-efficient laser printer that's perfect for home use.

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## Specifications

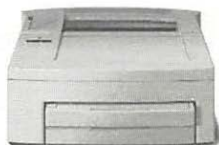
- *Resolution:* 300 dots per inch
- *Printing speed:* 4 pages per minute
- *Processor:* Uses the computer's processor
- *Memory:* 512K of RAM (can operate as though it has 2MB of RAM)
- *Supported languages:* QuickDraw, QuickDraw GX
- *Fonts:* 39 scalable TrueType fonts
- *Paper tray size:* Multipurpose tray holds 100 sheets
- *Paper handling:* Manual feed supports straight-through paper path
- *Connectivity and networking:* Serial port; GrayShare software allows printer sharing on LocalTalk, Ethernet, and Token Ring networks
- *Dimensions (HWD):* 6.3 by 15.2 by 14.9 inches (16.0 by 38.6 by 37.9 cm)
- *Weight:* 15.0 lb. (6.8 kg)
- *Recommended number of users:* One to three
- *Other features:*
  - Energy Star compliant

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**Key features**

- Most affordable, most compact Apple laser printer.
- Has a compact design and quiet operation, which makes it perfect for home use.
- Provides password-protected printer sharing and gray-scale printing through GrayShare printer driver software.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# LaserWriter 4/600 PS



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## At a glance

- The Apple LaserWriter 4/600 PS is an affordable PostScript laser printer that offers a number of advanced print capabilities.
- It's ideal for individual home, education, and small-business users who require professional print quality and PostScript capability and who desire future RAM expansion options.

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## Specifications

- *Resolution:* 600 dots per inch
- *Printing speed:* 4 pages per minute
- *Processor:* 16-megahertz AMD 29200 RISC
- *Memory:* 2MB, expandable to 6MB with Adobe Memory Booster technology
- *Supported languages:* Adobe PostScript Level 2
- *Fonts:* 64 scalable TrueType and 35 PostScript fonts
- *Paper tray size:* 100-sheet universal cassette
- *Paper handling:* Manual feed supports straight-through paper path
- *Connectivity and networking:* LocalTalk port supports AppleTalk protocol; LaserWriter Bridge 2.0 software allows printer sharing on Ethernet and Token Ring networks
- *Dimensions (HWD):* 6.3 by 15.2 by 14.9 inches (16.1 by 38.5 by 37.9 cm)
- *Weight:* 15.4 lb. (7.0 kg)
- *Recommended number of users:* One to three
- *Other features:*
  - Energy Star compliant

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## Key features

- Prints at 600-dot-per-inch resolution, providing exceptional print quality at your desk.
- Comes with a RISC processor so you can print at a quick 4 pages per minute.
- Can connect to Ethernet networks through Macintosh software (included).
- Supports a 4MB RAM Upgrade, which expands both the printer's memory cache and its ability to print documents that contain large numbers of downloadable fonts.
- Features a unique energy-saving design with no On/Off switch; the printer simply "wakes up" when a document is sent to it, operating the rest of the time in an energy-saving standby mode.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# LaserWriter Select 360



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## At a glance

- The award-winning LaserWriter Select 360 is Apple's 600-dot-per-inch laser printer for small and medium-size workgroups that use Macintosh and Windows software-based computers.
- It's a high-speed printer for handling complicated jobs quickly.
- With an optional internal fax card that incorporates PostScript technology, it can work with your computer to send, receive, and print plain-paper faxes at up to 600-dot-per-inch resolution.

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## Specifications

- *Resolution:* 600 dots per inch
- *Printing speed:* 10 pages per minute
- *Processor:* 16-megahertz AMD 29200 RISC
- *Memory:* 7MB, expandable to 16MB
- *Supported languages:* Adobe PostScript Level 2, PCL 5; autoemulation switching between PostScript and PCL 5
- *Fonts:* 64 scalable TrueType and 35 PostScript fonts
- *Paper tray size:* Built-in 50- and 250-sheet trays (can hold envelopes); 250- or 500-sheet tray optional
- *Connectivity and networking:* Serial port; parallel port; LocalTalk port supports AppleTalk protocol; LaserWriter Bridge 2.0 software allows printer sharing on Ethernet and Token Ring networks
- *Dimensions (HWD):* 8.0 by 15.0 by 18.3 inches (20.3 by 38.1 by 46.5 cm)
- *Weight:* 26.0 lb. (11.7 kg)
- *Recommended number of users:* Two to six
- *Other features:*
  - Energy Star compliant



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## Key features

- Prints at 600-dot-per-inch resolution, providing exceptional print quality at your desk.
- Lets you use your printer as a plain-paper fax machine (requires optional fax card).
- Prints at 10 pages per minute, so you can print long documents quickly.
- Can connect to Ethernet networks through software (included).
- Fits easily into both Macintosh and Windows computing environments.
- Provides autoemulation switching between PostScript and PCL 5.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# LaserWriter 16/600 PS



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## At a glance

- The Apple LaserWriter 16/600 PS is a high-performance laser printer with exceptional print quality, speed, network compatibility, and expansion options that cannot be matched by other printers in its price range.
- It provides built-in support for Ethernet networks for AppleTalk, TCP/IP, and Novell NetWare IPX protocols.
- It can be used in networks of Macintosh computers, networks of Windows software-based computers, or mixed workgroup environments that include both.
- With an optional internal fax card, users can send, receive, and print plain-paper faxes at up to 600-dot-per-inch resolution.

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## Specifications

- **Resolution:** 600 dots per inch standard with FinePrint; PhotoGrade (requires minimum 12MB of RAM)
- **Printing speed:** 16 pages per minute (A4-size paper); 17 pages per minute (letter-size paper)
- **Processor:** 25-megahertz 29030 AMD RISC processor; 80C186 I/O processor
- **Memory:** 8MB, expandable to 32MB
- **Supported languages:** Adobe PostScript Level 2, PCL 5; autoemulation switching between PostScript and PCL 5
- **Fonts:** 64 scalable TrueType and 35 PostScript fonts
- **Paper tray size:** 250-sheet cassette and 100-sheet multipurpose tray (can hold envelopes); optional 500-sheet feeder and 75-envelope feeder

- *Connectivity and networking:* Ethernet port supports AppleTalk, TCP/IP, and Novell NetWare IPX protocols; LocalTalk port supports AppleTalk protocol; bidirectional parallel port; internal and external SCSI ports for hard disk storage
  - *Dimensions (HWD):* 12.1 by 16.7 by 16.9 inches (30.7 by 42.4 by 42.9 cm)
  - *Weight:* 40.0 lb. (18.0 kg)
  - *Recommended number of users:* Can accommodate workgroups of 10 or more
  - *Other features:*
    - Energy Star compliant
- 

### **Key features**

- Can be connected to Mac OS and Windows software-based computers over Ethernet networks supporting a variety of protocols, which makes it an ideal solution for a multivendor environment.
- Prints at 600-dot-per-inch resolution, providing exceptional print quality at your desk.
- Offers PhotoGrade upgrade for superior gray-scale image quality.
- Offers an optional fax card that incorporates PostScript technology and lets you send faxes from your computer and receive faxes at your printer—at up to 600-dot-per-inch resolution.
- Lets you add hard disk drives via SCSI ports to store a variety of fonts.
- Provides autoemulation switching between PostScript and PCL 5.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.

# Color LaserWriter 12/600 PS



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## At a glance

- The Apple Color LaserWriter 12/600 PS is a high-performance PostScript laser printer that provides outstanding results for both color and black-and-white printing.
- It's ideal for anyone who requires easy-to-use, convenient, superior-quality color printing capabilities at an affordable price.

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## Specifications

- *Resolution:* 600 dots per inch with Color PhotoGrade
- *Printing speed:* 12 pages per minute for black and white; 3 pages per minute for color; 1 page per minute for color transparencies
- *Processor:* 30-megahertz AMD 29030 RISC
- *Memory:* 12MB, expandable to 40MB with Apple Contone Compression technology
- *Supported languages:* Adobe PostScript Level 2
- *Fonts:* 64 scalable TrueType and 39 scalable PostScript fonts
- *Paper tray size:* Standard 250-sheet feeder and 100-sheet multipurpose tray; optional universal 250-sheet feeder
- *Connectivity and networking:* Ethernet port supports AppleTalk, TCP/IP, and Novell NetWare IPX protocols; LocalTalk port supports AppleTalk protocol; IEEE 1284 bidirectional parallel port; internal and external SCSI ports for hard disk storage
- *Dimensions (HWD):* 18.0 by 21.0 by 23.0 inches (45.7 by 53.3 by 58.4 cm)
- *Weight:* 110 lb. (49.5 kg)
- *Recommended number of users:* Can accommodate workgroups of 10 to 20

- *Other features:*
    - Energy Star compliant
    - All ports active
    - ColorSync 2.0 support
    - Color PhotoGrade support
- 

### **Key features**

- Provides high-quality color printing at an affordable price.
- Can be connected to Mac OS and Windows software-based computers over Ethernet networks supporting a variety of protocols, which makes it an ideal solution for a multivendor environment.
- Prints at 600-dot-per-inch resolution, providing exceptional print quality at your desk.
- Has ColorSync 2.0 color-matching technology, so the colors you see on the screen will match the colors on the printed page.
- Takes advantage of Color PhotoGrade technology to provide excellent color image quality.
- Lets you add hard disk drives via SCSI ports to store a variety of fonts.
- Qualifies for the EPA Energy Star rating (U.S.A.) as an energy-efficient product.



# *Apple Printer Supplies and Accessories*

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## **ImageWriter II**

- ImageWriter I and II Black Ribbon (six ribbons per box)
- ImageWriter II Color Ribbon (six ribbons per box)
- ImageWriter II/LQ LocalTalk Option
- ImageWriter II Cut Sheet Feeder
- ImageWriter II 32K Memory Option

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## **StyleWriter 1200**

- StyleWriter Series Ink Cartridge

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## **Color StyleWriter 2200**

- Color StyleWriter 2200 High-Capacity Black Ink Cartridge
- Color StyleWriter 2200 Black Ink Tank
- Color StyleWriter 2200 High-Capacity Black Ink Tank
- Color StyleWriter 2200 Color Ink Cartridge (color and black ink tanks)
- Color StyleWriter 2200 Color Ink Tank
- Color StyleWriter 2200 Battery Attachment
- For media, see listings under Color StyleWriter 2400.

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## **Color StyleWriter 2400**

- Color StyleWriter 2400 Color Ink Cartridge (color and black ink tanks)
- Color StyleWriter 2400 Replacement Ink Tanks
- Color StyleWriter 2400 Black Ink Cartridge
- Apple Color Ink-Jet Premium Coated Paper (A4, LTR)
- Apple Color Ink-Jet Transparency Film (A4, LTR)
- Apple Color Ink-Jet Back-Print Film (A4, LTR)
- Apple Color Ink-Jet Glossy Paper (A4, LTR)
- Color StyleWriter 2400 LocalTalk Option

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### **Personal LaserWriter 300**

- LaserWriter Toner Cartridge for Personal LaserWriter 300 Series
- Personal LaserWriter 300 Series Universal Cassette

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### **LaserWriter 4/600 PS**

- LaserWriter Toner Cartridge for LaserWriter 4/600 PS
- LaserWriter 100-Sheet Universal Cassette
- LaserWriter 4MB Memory Card

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### **LaserWriter Select 360**

- Apple Toner Cartridge
- LaserWriter Bridge software for Ethernet
- LaserWriter Select 500-Sheet Feeder with Letter Cassette
- LaserWriter Select 250-Sheet Legal Cassette
- LaserWriter Select 250-Sheet Feeder with Cassette (supports letter, A4, and B5 paper)
- LaserWriter Select 30-Envelope Cassette
- LaserWriter Select 360 PostScript Fax Card
- LaserWriter Select Multipurpose Tray

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### **LaserWriter 16/600 PS**

- LaserWriter Toner Cartridge for LaserWriter 16/600 PS
- LaserWriter 16/600 PS Fax Card (United States only)
- LaserWriter 16/600 PS Fax Kit (international)
- LaserWriter 16/600 PS Internal Hard Disk Drive
- LaserWriter 16/600 PS Envelope Feeder (75-envelope capacity)
- LaserWriter 500-Sheet Universal Cassette

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### **Color LaserWriter 12/600 PS**

- Color LaserWriter Toner Cartridges (separate C, M, Y, K)
- Color LaserWriter Photoconductor Replacement Kit
- Color LaserWriter Fuser Oil
- Color LaserWriter Transparencies (Letter)
- Color LaserWriter 12/600 PS 250-Sheet Feeder
- Color LaserWriter 12/600 PS Universal Cassette
- Color LaserWriter 12/600 PS Internal Hard Disk Drive

# *The Apple Display Advantage*

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## **Great computers deserve great displays**

The original Macintosh set the standard for display quality with its innovative screen—it was the first computer to display text and graphics just as they'd appear when printed. And as the needs of Macintosh users have become more sophisticated, so have Macintosh displays.

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## **Five Macintosh displays to choose from**

Apple offers five displays for Macintosh computers—in a range of sizes. All of our displays are known for their unprecedented brightness, clarity, and fidelity. Their flat screens have sharp focus and virtually no distortion, even at the edges. And our displays meet even the strict Swedish specifications for magnetic-field emissions.

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## **Easy to connect**

Apple displays are easy to install and configure. To connect one to your Macintosh, all you have to do is take a single cable and plug one end into the back of your display and the other into the back of your Macintosh. When you turn on your Macintosh, it will automatically adjust to the size and type of Apple display you're using.

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## **Easy to add a second display**

With Macintosh, you can use multiple displays simultaneously. For instance, you might want to use a color display to view graphics and a full-page display to view word processing documents—simultaneously. It's a cost-effective way to increase your on-screen work area.

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### **Energy efficient**

All Apple displays meet the requirements for the Environmental Protection Agency's Energy Star rating. This means that they won't waste energy—and they *will* save you money on your electric bill.

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### **Multiple-scan display technology**

Apple has incorporated multiple-scan technology into all of its current displays. This technology enables the displays to provide multiple resolution modes, for flexible viewing. You can switch among viewing modes to optimize your viewing area and resolution for presentations, publishing, two-page layouts, or enlarged page layouts.

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### **Compatibility with PCs running Windows**

All Apple displays can also be used with Windows software-based systems—so everyone in your office or school can take advantage of their excellent quality. And two displays—the Apple Multiple Scan 1705 and AppleVision 1710AV—are compatible with Windows 95 software.

# Apple Multiple Scan 14 Display



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## At a glance

- This is Apple's most affordable yet feature-rich color display, with stereo speakers and an easy-access headphone jack, to complement today's multimedia applications.
- It's a good match for entry-level desktop systems.

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## Specifications

- *Screen size:* 14 inches (diagonal)
- *Viewable image size:* 12.4 inches (diagonal)
- *Resolution/screen refresh rate:* 640 by 480 pixels and 800 by 600 pixels at 60 hertz, 640 by 480 pixels at 67 hertz, and 832 by 624 pixels at 75 hertz (Mac OS)\*; 640 by 480 pixels and 800 by 600 pixels at 60 hertz (Windows)
- *Dot/stripe pitch:* 0.28-mm dot pitch
- *Picture tube:* Shadow mask
- *Dimensions (HWD):* 14.9 by 14.4 by 15.2 inches (37.8 by 36.5 by 38.6 cm)
- *Weight:* 25.0 lb. (11.3 kg)

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## Key features

- Supports multiple-scan technology for flexible viewing options.
- Lets you change viewing modes without restarting your system.
- Incorporates front-panel stereo speakers and a headphone jack.
- Works with both Macintosh systems and PCs running Windows.
- Features a tilt-and-swivel base for adjustable viewing.
- Qualifies for the EPA Energy Star rating (U.S.A.).

\* Resolutions supported vary by computer.



# Apple Multiple Scan 15 Display



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## At a glance

- This is an ideal entry-level color display, offering superb image quality on a flat screen and digital controls for precise adjustments.
- It's a good match for the Power Macintosh 6200/75 and Performa 6200CD series computers, as well as for the Power Macintosh 7200/75 and 7200/90.

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## Specifications

- *Screen size:* 15 inches (diagonal)
- *Viewable image size:* 13.3 inches (diagonal)
- *Resolution/screen refresh rate:* 640 by 480 pixels and 800 by 600 pixels at 60 hertz, 640 by 480 pixels at 67 hertz, 800 by 600 pixels at 72 hertz, and 832 by 624 pixels at 75 hertz (Mac OS)\*; 640 by 480 pixels and 1,024 by 768 pixels at 60 hertz, and 800 by 600 pixels at 72 hertz (Windows)
- *Dot/stripe pitch:* 0.28-mm dot pitch
- *Picture tube:* Flat, square, shadow mask
- *Dimensions (HWD):* 16.7 by 15.9 by 17.8 inches (42.4 by 40.5 by 45.2 cm)
- *Weight:* 31.0 lb. (14.0 kg)\*\*

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## Key features

- Supports multiple-scan technology for flexible viewing options.
- Lets you change viewing modes without restarting your system.
- Includes integrated stereo speakers and a headphone jack.
- Works with both Macintosh systems and PCs running Windows.
- Features a tilt-and-swivel base for adjustable viewing.
- Qualifies for the EPA Energy Star rating (U.S.A.).

\* Resolutions supported vary by computer.

\*\* Two designs available worldwide—dimensions and weight may vary.

# Apple Multiple Scan 1705 Display



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## At a glance

- The Multiple Scan 1705 is Apple's most affordable full-page color display.
- It's a good match for midrange systems, and highly appropriate for users who have been using a 15-inch display and want to move up to a larger screen affordably.

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## Specifications

- *Screen size:* 17 inches (diagonal)
- *Viewable image size:* 15.8 inches (diagonal)
- *Resolution/screen refresh rate:* 640 by 480 pixels at 67 hertz, and 832 by 624 pixels and 1,024 by 768 pixels at 75 hertz (Mac OS); 640 by 480 pixels, 800 by 600 pixels, 1,024 by 768 pixels, and 1,280 by 1,024 pixels at 60 hertz, and 640 by 480 pixels at 75 hertz (Windows)
- *Dot/stripe pitch:* 0.28-mm dot pitch
- *Picture tube:* Flat, square, shadow mask
- *Dimensions (HWD):* 17.2 by 16.5 by 18.8 inches (43.7 by 41.9 by 47.8 cm)
- *Weight:* 45.2 lb. (20.3 kg)

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## Key features

- Features a high-quality shadow mask screen for clear, crisp, sharp images.
- Supports multiple-scan technology for flexible viewing options.
- Lets you change viewing modes without restarting your system.
- Works with both Macintosh systems and PCs running Windows.
- Features a tilt-and-swivel base for adjustable viewing.
- Qualifies for the EPA Energy Star rating (U.S.A.).

# AppleVision 1710AV Display



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## At a glance

- This full-page color display is an exceptional tool for multi-media—it combines multiple-scan technology with built-in stereo speakers and a microphone.
- It's ideal for systems that are used to work with a variety of media, such as the Power Macintosh 8500/120.

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## Specifications

- *Screen size:* 17 inches (diagonal)
- *Viewable image size:* 16.1 inches (diagonal)
- *Resolution/screen refresh rate:* 640 by 480 pixels at 67 hertz, and 832 by 624 pixels, 1,024 by 768 pixels, 1,152 by 870 pixels, and 1,280 by 1,024 pixels at 75 hertz (Mac OS); 640 by 480 pixels, 1,024 by 768 pixels, and 1,280 by 1,024 pixels at 60 hertz, and 800 by 600 pixels at 75 hertz (Windows)
- *Dot/stripe pitch:* 0.26-mm stripe pitch
- *Picture tube:* Next-generation Sony Trinitron
- *Dimensions (HWD):* 19.7 by 15.8 by 17.6 inches (50.7 by 40.5 by 45.2 cm)
- *Weight:* 60.0 lb. (27.0 kg)

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## Key features

- Features a “next-generation” Sony Trinitron picture tube for outstandingly clear, crisp, sharp images.
- Uses Apple DigitalColor technology for accurate color.
- Incorporates CD-quality stereo speakers and a voice-recognition-capable microphone.
- Supports multiple-scan technology for flexible viewing options.
- Works with both Macintosh systems and PCs running Windows.
- Qualifies for the EPA Energy Star rating (U.S.A.).

# Apple Multiple Scan 20 Display



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## At a glance

- This color display introduces a new high-quality CRT design and is ideal for publishing professionals who need to be able to view up to two full pages clearly.
- It's a good match for Power Macintosh 9500 computers.

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## Specifications

- *Screen size:* 20 inches (diagonal)
- *Viewable image size:* 19.1 inches (diagonal)
- *Resolution/screen refresh rate:* 640 by 480 pixels at 67 hertz, and 832 by 624 pixels, 1,024 by 768 pixels, 1,152 by 870 pixels, and 1,280 by 1,024 pixels at 75 hertz (Mac OS); 640 by 480 pixels, 800 by 600 pixels, 1,024 by 768 pixels, and 1,280 by 1,024 pixels at 60 hertz (Windows)
- *Dot/stripe pitch:* 0.26-mm aperture grille pitch
- *Picture tube:* Next-generation Sony Trinitron
- *Dimensions (HWD):* 18.7 by 18.7 by 19.7 inches (47.5 by 47.5 by 50.0 cm)
- *Weight:* 66.0 lb. (29.7 kg)

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## Key features

- Provides unprecedented image quality for a monitor of this size, by using a "next-generation" Sony Trinitron tube.
- Supports multiple-scan technology for flexible viewing options.
- Lets you change viewing modes without restarting your system.
- Enables two-page viewing with minimal document scrolling for increased productivity.
- Works with both Macintosh systems and PCs running Windows.
- Features a tilt-and-swivel base for adjustable viewing.
- Qualifies for the EPA Energy Star rating (U.S.A.).

# Apple Color OneScanner



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## At a glance

- The Apple Color OneScanner offers high-quality scanning and single-button simplicity—in color.
- It comes with Ofoto 2.0 software, for outstanding clarity and fidelity to the original image—and features ColorSync support, background processing, and an easy-to-use interface.

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## Specifications

- *Color capabilities:* 16.7 million colors
- *Scanning resolution:* 75 to 1,200 dots per inch (300-dpi optical resolution) in 1-dot-per-inch increments through software interpolation
- *Maximum scan area:* 8.5 by 14 inches (21.6 by 35.6 cm)
- *Interface:* SCSI
- *File formats:* Supports PICT, TIFF, EPS, and MacPaint formats
- *System requirements:* System software version 7.0 or later, HyperCard 2.0 or later to use HyperScan 2.0 software
- *Dimensions (HWD):* 4.4 by 13.6 by 21.8 inches (11.2 by 34.5 by 55.4 cm)
- *Weight:* 23.0 lb. (10.4 kg)

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## Key features

- Features high-quality rotation and scaling algorithms for flexible image manipulation without loss of quality.
- Provides high-speed, single-pass scanning.
- Offers a trilinear charge-coupled device, stabilizing the color and maximizing color registration.
- Provides a color-correction ASIC.
- AutoScan feature automatically adjusts brightness, contrast, cropping, alignment, and sharpening of scanned images.



# QuickTake 150



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## At a glance

- The QuickTake 150 for Macintosh and QuickTake 150 for Windows are lightweight digital cameras that allow you to take 24-bit color pictures without using film—and quickly import them directly into your Macintosh or Windows software-based computer.
- They include a close-up lens, with built-in features designed to make close-up work easy.
- They come with software that allows you to download images directly into a personal computer; display those images in up to 16.7 million colors; and rotate, crop, scale, and zoom in on images as you edit them for use in your documents (PhotoFlash 2.0 for Macintosh version; QuickTake 1.5 and PhotoNow! TWAIN driver for Windows version).
- They can run either on AA lithium or nickel-cadmium batteries or by plugging them into a standard wall outlet (AC adapter not included).

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## Specifications

- *Image resolution:* 640 by 480 pixels for all images
- *Color resolution:* 24-bit color (millions of colors)
- *Memory:* 1MB of Flash EPROM stores up to 32 standard-quality images, 16 high-quality images, or a combination for more than one year
- *Shutter speed:*  $\frac{1}{30}$  to  $\frac{1}{175}$  seconds; self-timer—10 seconds automatic
- *Aperture range:* f2.8 to f16 automatic
- *Focus range:* 4 feet to infinity for standard lens; 10 to 14 inches for close-up lens

- *Flash*: Built-in automatic or manual; flash range from 4 feet to 9 feet; diffused with close-up lens system
- *Battery*: Runs on three rechargeable AA lithium batteries (included with camera); supports three 1.5-volt AA, R6P, LR-6, or SUM-3 nickel-cadmium or lithium batteries
- *File formats*: Macintosh—EPS, PICT, TIFF, JPEG, QuickTake; Windows—BMP, PCX, JPEG, TIFF, QuickTake
- *Image transfer*: Built-in high-speed serial interface, with appropriate serial cable for connection to Macintosh systems or PCs running Windows
- *Dimensions (HWD)*: 2.0 by 5.0 by 6.0 inches (5.08 by 12.7 by 15.2 cm)
- *Weight*: 0.9 lb. (0.41 kg)

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### **Key features**

- Lets you quickly download digital images into your computer for use in documents you create.
- Lets you open images directly in most business productivity, graphics, and desktop publishing applications.
- Offers easy one-step use for taking pictures and importing them into your files—with easy-reading icons for monitoring flash and battery status, resolution, self-timer settings, and more.
- Lets you store 32 standard-quality images, 16 high-quality images, or a combination.

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### **Accessories**

- QuickTake Battery Booster Pack
- QuickTake AC Adapter
- QuickTake Travel Case
- QuickTake Connection Kit for Windows
- QuickTake Connection Kit for Macintosh



# Personal Digital Assistants

# Apple MessagePad 120



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## At a glance

- The Apple MessagePad 120 puts easy-to-use communications, productivity, and desktop connectivity solutions in the palm of your hand, no matter where you happen to be—in a meeting or on the road.
- It also provides significantly more power to the PC Card slot, expanding your choice of PCMCIA communications and peripheral products, and features vastly expanded user storage space.
- When you write on its built-in screen with a MessagePad stylus, the MessagePad 120 converts your printed or cursive handwritten notes into typed text. It also keeps track of your calendar, stores names and addresses in your card file, and organizes your to-do list. If you prefer, an on-screen keyboard lets you “type” your notes.

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## Specifications

- *Processor:* ARM 610 RISC
- *Speed:* 20 megahertz
- *Memory:* 1MB or 2MB of RAM, 4MB of ROM; 385K or 1,361K of nonvolatile user RAM
- *Storage:* Expandable with the Newton 2MB Flash Storage Card or 4MB Flash Storage Card
- *Expansion:* Slot for one Type II PC Card with 325 mA capacity
- *Ports:* AC power port, serial port
- *Display:* 3.8- by 2.8-inch low-power reflective LCD
- *Battery:* Four AA alkaline batteries (included); optional MessagePad Rechargeable Battery Pack (nickel-cadmium), MessagePad Battery Booster Pack (requires eight AA alkaline batteries), Apple MessagePad Charging Station



- *Communications:*

- Built-in LocalTalk port; point-to-point infrared data exchange

- *Dimensions (HWD):* 1.2 by 4.0 by 8.0 inches

- (3.0 by 10.2 by 20.3 cm)

- *Weight:* 1.0 lb. (0.45 kg)

- *Other features:*

- Apple MessagePad Telescoping Pen

- Operating-system enhancements and additional NewtonMail features

- Includes an assortment of information and productivity tools

- Comes with Pocket Quicken 1.0 and Notion 1.1 software

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## **Key features**

- Can connect to Macintosh computers and PCs running Windows (requires Newton Connection Kit 2.0).

- Offers an extensive range of wireless communications, including cellular, pocket radio, wireless LAN (IR/RF), and paging. Its communications capabilities allow you to send faxes; receive messages; “beam” information to other Newton devices through point-to-point infrared technology; connect to your desktop computer and its network to take advantage of files, printers, or network services; and connect directly to a wide range of printers.

- Provides built-in printer support for PostScript-equipped LaserWriter printers and StyleWriter II printers.

- Supports popular desktop applications, including ACT! (for the Mac OS and Windows) and Now Contact and Now Up•to•Date (for the Mac OS and Windows).

- Lets you upgrade the ROM to the next generation of the Newton operating system.

# Apple MessagePad Accessories

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## Apple MessagePad 120

- Newton Connection Kit
- Newton Messaging Card
- Apple Mobile Message System (also available for PowerBook 500 series computers; for description  94)
- GSM Connection Kit for Newton (also available for PowerBook 500 series computers; for description  95)
- MessagePad Fax Modem
- Newton PCMCIA Fax Modem Card
- Newton 2MB Flash Storage Card and 4MB Flash Storage Card
- Newton Print Pack
- MessagePad Power Adapter
- MessagePad Battery Booster Pack
- MessagePad Rechargeable Battery Pack
- MessagePad Charging Station
- MessagePad Telescoping Pen
- Newton Carrying Case
- Newton Leather Carrying Case
- Newton Leather Carrying Case LC
- Newton Communications Case

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## Newton Toolkit 1.5

The Newton Toolkit is a complete, high-level object-oriented development system for the creation of applications for Newton devices. It combines rapid prototyping and interface building, a library of extensible components, and an interactive development model that enables you to see the results of your work in seconds. The Newton Toolkit runs on a Macintosh computer connected to a Newton device via serial or LocalTalk cables.

# Networking & Connectivity

# Workgroup Server 6150/66



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## At a glance

- The Workgroup Server 6150/66 is Apple's affordable, entry-level server system based on the high-performance PowerPC RISC processor.
- It's perfect for small workgroups or as an additional server on a network of Mac OS and Windows software-based computers.

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## Specifications

- *Processor:* PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 256K second-level memory cache
- *Speed:* 66 megahertz
- *Memory:* 16MB of RAM, expandable to 72MB—8MB on logic board and two 72-pin SIMM slots
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Internal 700MB hard disk drive
  - Internal quadruple-speed CD-ROM drive
- *Expansion capabilities:* Internal expansion slot for one processor-direct card or one 7-inch NuBus expansion card (requires adapter); supports seven SCSI devices
- *Ports:* Two serial ports, ADB port, video-output port, SCSI port, stereo sound-input/output ports
- *Displays:* Built-in support for all Apple displays; supports third-party VGA, SVGA, and 19-inch monitors
- *Networking ports:* Built-in LocalTalk and Ethernet; supports TCP/IP networking protocol
- *Dimensions (HWD):* 3.4 by 16.3 by 15.6 inches (8.6 by 41.4 by 39.6 cm)
- *Weight:* 14.0 lb. (6.3 kg)—will vary based on internal devices installed

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## **Key features**

- Features the PowerPC 601 RISC processor, which enables it to handle computation-intensive tasks with exceptional speed.
- Has on-board Ethernet capability.
- Offers built-in, high-performance SCSI for faster data transfer.
- Includes Apple RAID Software, for increased data protection and performance.
- Comes with AppleShare 4.1, which includes AppleShare Client for Windows, installed on the hard disk drive (selected configurations).
- Includes third-party software: Adobe Acrobat Reader, FileWave from Wave Research, Now Contact and Now Up•to•Date from Now Software, Server Manager from Santorini (with AppleShare configurations), and Viper Instant-Access from IT Design.

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## **Other models to consider**

If you need even more speed and expansion options, you should consider the Workgroup Server 8150/110, which offers:

- A faster processor (110 megahertz, compared with 66 megahertz for the Workgroup Server 6150/66).
- More than twice the memory expansion capability (up to 264MB) and more storage options (two 3.5-inch hard disk drives and an optional internal DAT drive).
- More expansion options—three NuBus slots (as opposed to one).



# Workgroup Server 8150/110



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## At a glance

- The Workgroup Server 8150/110 is Apple's versatile midrange server system based on the PowerPC 601 RISC processor.
- It's perfect for workgroups that require high performance and expansion options—at an attractive price.
- It can be used as a communications server for linking multiple AppleTalk networks and integrating Macintosh networks into a wide area network.

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## Specifications

- *Processor:* PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 256K second-level memory cache
- *Speed:* 110 megahertz
- *Memory:* 16MB of RAM, expandable to 264MB—8MB on logic board and eight 72-pin SIMM slots
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Space for two internal 1GB, 2GB, or 4GB hard disk drives
  - Internal DAT drive (selected configurations)
  - Internal quadruple-speed CD-ROM drive
- *Expansion capabilities:* Three NuBus slots and one processor-direct expansion slot; supports up to nine SCSI devices (internal and external)
- *Ports:* Two serial ports, ADB port, video-output port, two high-performance SCSI ports, stereo sound-input/output ports
- *Displays:* Built-in support for all Apple displays; supports third-party VGA, SVGA, and 19-inch monitors

- *Networking ports:* Built-in LocalTalk and Ethernet; supports TCP/IP networking protocol
- *Dimensions (HWD):* 14.2 by 8.9 by 16.0 inches (36.1 by 22.6 by 40.6 cm)
- *Weight:* 25.3 lb. (11.4 kg)—will vary based on internal devices installed

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## **Key features**

- Features the PowerPC 601 RISC processor, which enables it to handle computation-intensive tasks with exceptional speed.
- Selected configurations equipped with a DAT drive, for backup storage of 10GB to 14GB of data (using compression).
- Configurations with a DAT drive include Retrospect Remote software, for automatic backup of the server and clients.
- Has built-in Ethernet capability.
- Offers built-in, high-performance SCSI for faster data transfer.
- Includes Apple RAID Software, for increased data protection and performance.
- Comes with AppleShare 4.1, which includes AppleShare Client for Windows, installed on the hard disk drive (selected configurations).
- Includes third-party software (varies by configuration): Adobe Acrobat Reader, FileWave from Wave Research, Now Contact and Now Up•to•Date from Now Software, Retrospect Remote from Dantz Development, Server Manager from Santorini, and Viper Instant-Access from IT Design.
- Runs communications service applications, such as Apple Internet Router, SNA•ps, MacX25, and MacX.400.

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## **Upgrade information**

- The Workgroup Server 8150 can be upgraded to the Workgroup Server 8150/110 with a Workgroup Server 8150/110 Logic Board Upgrade.

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## **Other models to consider**

- If you need an exceptionally powerful server that provides extensive expansion options, you should consider the Workgroup Server 9150/120, which is Apple's fastest server.

# Workgroup Server 9150/120



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## At a glance

- The Workgroup Server 9150/120 is Apple's fastest and most expandable server system, offering extensive file, print, and communications services for large workgroups.
- It's ideal for workgroups that have demanding file- and print-sharing requirements, or that work with large database applications.

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## Specifications

- *Processor:* PowerPC 601 RISC with integrated math coprocessor and 32K on-chip cache; 1MB second-level memory cache
- *Speed:* 120 megahertz
- *Memory:* 16MB of RAM, expandable to 264MB
  - Eight 72-pin SIMM slots
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Space for five 1GB, 2GB, or 4GB internal hard disk drives
  - Internal DAT drive (selected configurations)
  - Internal quadruple-speed CD-ROM drive
- *Expansion capabilities:* Four NuBus slots and one processor-direct expansion slot; supports 14 SCSI devices
- *Ports:* Two serial ports, ADB port, video-output port, two high-performance SCSI ports, stereo sound-input/output ports
- *Displays:* Built-in support for all Apple displays; supports third-party VGA, SVGA, and 19-inch monitors
- *Networking ports:* Built-in LocalTalk and Ethernet; supports TCP/IP networking protocol

- *Dimensions (HWD)*: 18.6 by 8.9 by 20.6 inches (47.2 by 22.6 by 52.3 cm)
- *Weight*: 36.8 lb. (16.6 kg)—will vary based on internal devices installed

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### **Key features**

- Features the PowerPC 601 RISC processor, which enables it to handle computation-intensive tasks with exceptional speed.
- Selected configurations equipped with a DAT drive, for backup storage of 10GB to 14GB of data (using compression).
- Configurations with a DAT drive include Retrospect Remote software, for automatic backup of the server and clients on the network.
- Has space for five 1GB, 2GB, or 4GB internal hard disk drives.
- Offers built-in, high-performance SCSI for faster data transfer.
- Includes Apple RAID Software, for increased data protection and performance.
- Comes with AppleShare 4.1, which includes AppleShare Client for Windows, installed on the hard disk drive (selected configurations).
- Includes third-party software (varies by configuration): Adobe Acrobat Reader, FileWave from Wave Research, Now Contact and Now Up•to•Date from Now Software, Retrospect Remote from Dantz Development, Server Manager from Santorini, and Viper Instant-Access from IT Design.

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### **Upgrade information**

- The Macintosh Quadra 900 and 950 and Workgroup Server 9150 can be upgraded to the Workgroup Server 9150/120 with a Workgroup Server 9150/120 Logic Board Upgrade.

# The Apple Internet Server Solution for the World Wide Web




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## At a glance


- The Apple Internet Server Solution is the most affordable and easiest way to publish on the World Wide Web (WWW).
- It consists of a Workgroup Server 6150/66, 8150/110, or 9150/120, and a CD-ROM that contains all of the software you need to get started publishing on the Internet.
- It's the perfect solution for organizations in business, education, or publishing that want to make their information widely accessible on the Internet.

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## Specifications

- *Processor:* PowerPC 601 RISC
- *Speed:* 66, 110, or 120 megahertz
- *Memory:* 16MB of RAM, expandable to 72MB or 264MB
- Varies by model  150–155
- *Storage:*
  - Internal Apple SuperDrive floppy disk drive
  - Hard disk drive support varies by Workgroup Server model  150–155
  - Internal DAT drive (some Workgroup Server 9150/120 configurations)
  - Internal quadruple-speed CD-ROM drive
- *Expansion capabilities:* Varies by model  150–155
- *Ports:* Two serial ports, ADB port, video-output port, one or two SCSI ports, stereo sound-input/output ports
- *Displays:* Built-in support for all Apple displays; supports third-party VGA, SVGA, and 19-inch monitors
- *Networking ports:* Built-in LocalTalk and Ethernet; supports TCP/IP protocols



- *Dimensions (HWD) and weight:* Vary by model and based on internal devices installed  150–155
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## **Key features**

- Offers a choice of three Workgroup Servers, to precisely accommodate your performance needs.
- Features the RISC-based PowerPC 601 processor, which enables the Apple Internet Server to handle computation-intensive tasks with exceptional speed.
- Includes all of the software tools you need to publish on the WWW:
  - WebSTAR server software from StarNine
  - BBEdit HTML editor from Bare Bones Software
  - Netscape client software
  - AppleSearch and AppleSearch CGI
  - Apple MacDNS domain name server software
  - Clickable Maps CGI
  - Electronic-mail CGI
  - Adobe Acrobat Pro software
  - HyperCard database software
  - Claris FileMaker Pro software (run-time version)
  - Everyware Butler SQL software (run-time version)
  - Sample WWW pages
- Installs software with a single mouse-click.
- Comes with customizable examples and templates to get you started creating interactive WWW pages quickly.
- Lets you add servers as you increase capacity, to distribute the processing load for enhanced performance.

# Apple Networking Products

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## **You can easily connect your Macintosh to almost any kind of network or computing platform.**

- *The easy and consistent Macintosh approach.* Macintosh lets you connect to an IBM mainframe across town just as readily as to an AppleShare file server in the next room. Using AppleTalk, the networking system built into every Macintosh, any device on the network can appear as an icon on your screen. AppleTalk lets you navigate complex networks without special skills, and it readily adapts to different technologies.
- *Expanding the capacity of your AppleTalk network.* You can begin by connecting your Macintosh computers using LocalTalk cables that plug into any Macintosh. Should you require more speed, you can move to an Ethernet or Token Ring network. This will speed printing of documents, delivery of electronic mail, and transfer of large documents and QuickTime video segments. With the addition of the Apple LocalTalk Bridge, you can upgrade your Macintosh computers to a faster network while maintaining LocalTalk network connectivity.  162

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## **LocalTalk networks**

Every Macintosh comes with AppleTalk networking capability, including software and a LocalTalk networking port. A LocalTalk network costs little to install, is easy to maintain, and transmits information with high reliability at 230.4 kilobits per second.

- *LocalTalk Locking Connector Kit—DB-9.* This is used for connecting Macintosh 128K, 512K, and 512K Enhanced computers and original LaserWriter and LaserWriter Plus printers to a LocalTalk network. The kit contains one LocalTalk connector with a DB-9 plug, and two meters of LocalTalk cable.

- *LocalTalk Locking Connector Kit—DIN-8.* This is used for connecting Apple IIGs, Macintosh Plus, and newer Macintosh computers and LaserWriter printers to a LocalTalk network. The kit contains one LocalTalk connector with a circular 8-pin plug (DIN-8), and two meters of LocalTalk cable.
- *LocalTalk RJ-11 Connector.* This connector comes in two versions, sold separately. It connects any Macintosh computer or LaserWriter printer to a LocalTalk network using unshielded twisted-pair LocalTalk network cable (silver-satin phone cable).

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## **Ethernet networks**

Built-in Ethernet connectivity is provided through an Apple Ethernet port in the Macintosh Centris 650, most Macintosh Quadra computers, all Power Macintosh computers and Workgroup Servers, and several LaserWriter printers. Just choose the appropriate Apple Ethernet transceiver to match your cabling system. For all other Macintosh computers, Apple offers several interface cards that enable access to Ethernet networks. Apple also offers the portable, easy-to-install Apple Ethernet 10T/5 Workgroup Hub for creating or extending 10Base-T Ethernet networks. All Apple Ethernet solutions comply with IEEE 802.3 standards, include EtherTalk software, and support a variety of popular networking protocols.

- *Apple Ethernet 10T/5 Workgroup Hub.* This portable, 5-port IEEE 802.3-compliant Ethernet hub allows you to create or extend 10Base-T Ethernet networks quickly and easily. It comes with one Apple AUI (attachment unit interface) Connector and four RJ-45 connectors, and can be used with Apple's Ethernet twisted-pair products. An optional external power adapter is available. Any Macintosh, PowerBook, printer, or Ethernet card with an Apple AUI port can serve as a host to supply power and a network connection.
- *Apple Ethernet Twisted-Pair Transceiver.* This connects all Macintosh computers or Ethernet cards equipped with an Apple Ethernet port to a 10Base-T Ethernet network using industry-standard twisted-pair cable.

- *Apple Ethernet Thin Coax Transceiver.* This connects all Macintosh computers or Ethernet cards equipped with an Apple Ethernet port to Thin Coax Ethernet networks using thin coaxial cable.
- *Apple Ethernet AUI Adapter.* This adapter adds an IEEE 802.3 AUI to any Macintosh computer or Ethernet card equipped with an Apple Ethernet port, and can be used to connect to external transceivers for use with fiber-optic, thick coaxial, and other Ethernet media.
- *Apple Ethernet LC Card.* This card comes with an Apple Ethernet port and connects Macintosh Color Classic; Macintosh LC, LC II, LC III, LC 475, and LC 520; Macintosh Quadra 605; and most Macintosh Performa computers to any Ethernet network.
- *Apple Ethernet LC Twisted-Pair Card.* This card connects Macintosh Color Classic; Macintosh LC, LC II, LC III, LC 475, and LC 520; Macintosh Quadra 605; and most Macintosh Performa computers to IEEE 802.3 10Base-T Ethernet networks. It has a built-in RJ-45 connector, which allows you to connect directly to a 10Base-T hub. No transceiver required.
- *Apple Ethernet LC Thin Coax Connection.* This comes with an Apple Ethernet LC Card and a Thin Coax Transceiver in one convenient package and connects Macintosh Color Classic; Macintosh LC, LC II, LC III, LC 475, and LC 520; Macintosh Quadra 605; and most Macintosh Performa computers to a Thin Coax Ethernet network.
- *Apple Ethernet NB Twisted-Pair Card.* This card allows you to connect any Macintosh II or Macintosh Centris 610 computer to IEEE 802.3 10Base-T Ethernet networks. It has a built-in RJ-45 connector, which allows you to connect directly to an industry-standard 10Base-T hub. No transceiver required.
- *Apple Ethernet CS Twisted-Pair Card.* This card works with all Macintosh models that have a communications slot, such as the Macintosh LC 575, LC 580, and LC 630; the Macintosh Quadra 630; the Macintosh Performa 570, 580, 630 series, 5200CD series, 5300CD series, 6200CD series, and 6300CD; and the Power Macintosh 5200/75 LC, 5300/100 LC, and 6200/75. It has a built-in RJ-45 connector, which allows you to connect directly to an IEEE 802.3 10Base-T hub. No transceiver required.



- *Apple Ethernet CS Thin Coax Card.* This card works with all Macintosh models that have a communications slot. It has a built-in BNC connector, which allows you to connect to IEEE 802.3 thin coax networks using thin coaxial cable. No transceiver required.
- *Apple Ethernet CS AAUI Card.* This card comes with an Apple Ethernet port and works with all Macintosh models that have a communications slot. It can also serve as a host connection to the Apple Ethernet 10T/5 Workgroup Hub.
- *Apple PCI Ethernet 100BaseTX Card.* This card connects any Macintosh computer or Workgroup Server with a PCI slot, such as the Power Macintosh 9500/120 or 9500/132, to a high-speed IEEE 802.3u 100Base-TX Ethernet network. The card comes equipped with an RJ-45 connector and a 3-meter length of Category 5 twisted-pair cable for direct connection into a 100-megabit hub.
- *Apple PCI Ethernet 100VG-AnyLAN Card.* This card connects any Macintosh computer or Workgroup Server with a PCI slot, such as the Power Macintosh 9500/120 or 9500/132, to a high-speed IEEE 802.12 100VG-AnyLAN Ethernet network. The card comes equipped with an RJ-45 connector and a 3-meter length of Category 3 twisted-pair cable for direct connection into your 100VG hub.
- *Apple PCMCIA Ethernet Twisted-Pair Card.\** This card allows any PowerBook computer equipped with a PC Card slot, such as the PowerBook 190 and 5300 series models, to connect to an IEEE 802.3 10Base-T Ethernet network. A cable with an RJ-45 connector is supplied for direct connection to your hub or wall plate.
- *Apple PCMCIA Ethernet Thin Coax Card.\** This card allows any PowerBook computer equipped with a PC Card slot to connect to an IEEE 802.3 10Base-2 Ethernet network. A cable with a Thin Coax connector is supplied for connection into your Thin Coax network.

\* This is a Type II PC Card and requires Card Services software to function.



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## Token Ring networks

Token Ring networks often serve a mixture of personal computers, minicomputers, and mainframes. Software drivers and hardware for Token Ring networks are available for Macintosh II, Macintosh Centris, Macintosh Quadra, and Power Macintosh computers, as well as for the Workgroup Servers.

- *Apple Token Ring 4/16 NB Card.* This card connects any Macintosh computer with a full-size NuBus slot to an IEEE 802.5 Token Ring network at either 4 or 16 megabits per second, and is the ideal card for implementing gateway solutions.
- *Apple Token Ring NB/c Card.* This compact card connects any Macintosh computer with NuBus slots to an IEEE 802.5 Token Ring network at either 4 or 16 megabits per second.
- *Apple PCI Token Ring Card.* This compact card connects any Macintosh computer, Workgroup Server, or Power Macintosh computer equipped with a PCI slot (such as the Power Macintosh 9500/120 or 9500/132) to a IEEE 802.5 Token Ring network running at either 4 or 16 megabits. This high-performance card is suitable for both servers and client workstations.
- *Apple PCMCIA Token Ring Card.\** This card allows any PowerBook computer equipped with a PC Card slot to connect to an IEEE 802.5 Token Ring network. A cable with Type 3 interface (RJ-45 connector) is supplied for connection to any Token Ring network at either 4 or 16 megabits per second.

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## Integrating LocalTalk with other networks

- *Apple LocalTalk Bridge software.* This product enables you to extend the networking reach of your current system by bridging your LocalTalk network to Ethernet or Token Ring networks. You can gain access to shared resources on the Ethernet or Token Ring network, such as file servers, electronic mail, or mainframe systems, while maintaining a seamless connection to LocalTalk-based systems and LaserWriter printers.

\* This is a Type II PC Card and requires Card Services software to function.

# Network Services Software

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## ★ **The Apple Internet Connection Kit**

The Apple Internet Connection Kit is a collection of Apple and third-party software that allows a Macintosh user to connect directly to the Internet quickly and easily. Designed as an all-in-one solution, the kit facilitates registration with an Internet service provider, enabling you to get connected to the Internet immediately. It includes a “getting started” guide, Apple Guide on-line support, and the following Internet applications:

- *Apple Internet Dialer software for quick, on-line registration with a qualified Internet service provider*
- *Netscape Navigator World Wide Web browser software*
- *Claris Emailer Lite e-mail software*
- *Fetch FTP software for downloading files*
- *Aladdin Stuffit Expander decompression software*
- *NewsWatcher newsgroup browser software*
- *SLIP and PPP communications software*
- *NCSA Telnet for connecting to UNIX-based libraries and catalogs*
- *QuickTime VR Player multimedia viewer software*
- *Adobe Acrobat Reader to view PDF files*
- *Real Audio Player to play audio in real time over the Internet*

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## **Apple Remote Access**

Apple Remote Access lets you use a modem and telephone lines to connect a remote Macintosh or PowerBook computer to another Macintosh computer or to an entire AppleTalk network. The Apple Remote Access product family provides an easy-to-use, cost-effective, and secure solution for an entire range of Macintosh users—from individuals to workgroups to large organizations.

- *Apple Remote Access Personal Server*. Ideal for individuals or small organizations, this product provides remote access to a single Macintosh computer or an entire AppleTalk network over a single telephone line. It offers enhanced ease of use, productivity features, and security options, and includes Apple Remote Access Client for Macintosh software.
- *Apple Remote Access Client for Macintosh*. This allows you to connect to any Apple Remote Access-compatible server.
- *Apple Remote Access MultiPort Server*. This offers remote AppleTalk network access for large numbers of mobile professionals. When used in conjunction with Apple Remote Access Client software and the appropriate hardware, this software converts a single Macintosh or Workgroup Server into a server that can support four simultaneous connections. And, when combined with one or more Apple Remote Access MultiPort Server 4-Port Expansion Kits, your server can support up to 16 simultaneous connections.
- *Apple Remote Access MultiPort Server 4-Port Expansion Kit*. Expand your Apple Remote Access MultiPort Server with the Apple Remote Access MultiPort Server 4-Port Expansion Kit and get four more simultaneous connections with each expansion kit.
- *Apple Remote Access MultiPort X.25 Extension*. This software gives you the ability to connect Apple Remote Access clients to an Apple Remote Access MultiPort Server through public or private networks, taking advantage of the communications cost savings that X.25 offers (requires MacX25).

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## **Apple RAID**

Apple RAID Software version 1.0.1 provides RAID (Redundant Array of Independent Disks) technology to Apple's PowerPC processor-based Workgroup Servers, allowing them to offer better data reliability and greater performance. It supports two of the six primary levels of currently defined RAID technology: Levels 1 and 0, disk mirroring and striping, respectively.

- *Apple RAID Level 1: Mirroring*. Mirroring is a data-reliability technology that involves the simultaneous writing of data to two disks. If either disk fails, users can access data from the

surviving disk. Mirroring is particularly useful for situations in which downtime resulting from a disk failure is not acceptable.

- *Apple RAID Level 0: Striping.* Striping enables the server to store successive units of data across multiple hard disks. This allows a collection of smaller disks to store larger amounts of data. The data is stored in parallel on several disks, which can potentially yield increased performance for applications that are optimized to take advantage of this feature.

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## **AppleShare**

AppleShare software provides a range of file-, print-, and application-sharing capabilities to users of Mac OS-based and Windows software-based computers connected to an AppleTalk network. It enhances users' ability to work together on cross-platform networks by enabling them to work in the operating system environment with which they are most familiar—whether it's the Mac OS or Windows 3.1. The software includes a number of features that enable network managers to control centralized applications, data files, and printers effectively. It provides a variety of security features—such as launch-count limits on applications, minimum password length, password aging, automatic disconnect after a specified number of unsuccessful log-in attempts, and network administrator-controlled log-off capabilities. And it couples ease of use with a single, large block cache that provides increased performance for all users.

AppleShare 3.0.1 runs on any 68030-based Macintosh or earlier computer and supports up to 120 concurrent users. AppleShare 4.0.2 is almost five times faster than AppleShare 3 and supports up to 150 users simultaneously connected to the server (it runs on 68040-based Macintosh computers). AppleShare 4.2, which offers more than twice the performance of version 4.0.2, comes with selected PowerPC processor-based Workgroup Servers.

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## **PowerShare Collaboration Servers**

With PowerShare Collaboration Servers, network administrators can centralize PowerTalk services (built into Macintosh System 7.5) for workgroup access. PowerShare software provides mail



and catalog server capabilities optimized for group use, and includes an additional level of network security.

- *Server-based mail.* PowerShare stores all messages on a remote server, rather than on each user's computer. This makes it easy for network administrators to monitor disk allocation and use, and frees space on users' hard disks. PowerShare also enables retrieval of mail when using someone else's computer, and permits those sharing a computer to have private mailboxes.
- *Shared catalogs.* With PowerShare, a single administrator handles everything—there's no need for individual users to maintain personal address books separately. Centralizing catalog administration makes your communications system more reliable—and makes users more productive.
- *Enhanced network security.* PowerShare keeps communications confidential by encrypting messages as they move along the network.
- *Easy installation and management.* An Easy Setup utility allows the administrator to configure servers in a matter of minutes—just give the system a name and password, and Easy Setup takes care of the rest. All that's left is to add users. Subsequent server administration is performed using a remote administration program, allowing the network administrator to manage servers from any Macintosh computer on the network.
- Version 1.1 lets you import text-file information such as Internet addresses, phone numbers, and more. Internet addresses can reside in the PowerShare catalog, and then can be edited and maintained from within the PowerShare Administration Application. Also includes Apple Migration Tool for Microsoft Mail, which transfers information from a Microsoft Mail server to a PowerShare Server.

## **AppleSearch**

AppleSearch information access and retrieval software provides an easy-to-use, powerful way for users of Mac OS-based or Windows 3.1 software-based computers (on an AppleTalk network) to find text-based information within documents stored on file servers, whether they're local servers in your office or remote WAIS servers connected to the Internet. AppleSearch lets users conduct



concurrent, personalized searches on a server, and ranks the found documents in order of relevance. User-defined search criteria, called “reporters,” track topics of interest—including on-line news feeds—and automatically formats updates. Users can quickly find information on topics they specify, or they can let AppleSearch act as a personal agent that periodically provides updated information. AppleSearch processes natural-language queries, so users can ask for information in their own words.

- *AppleSearch server software.* Maintains a feature-rich search engine that processes the queries of AppleSearch client users.
- *AppleSearch client software.* Provides electronic reporters and newspaper-like updates as an intuitive way to retrieve information from the server. Lets users work in the operating system environment with which they are most familiar—whether it's the Mac OS or Windows 3.1.
- *AppleSearch Client Developer Kit.* Includes basic software for developers who want to write custom client interfaces to the AppleSearch server or to integrate AppleSearch functionality into other applications.

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## MacSNMP

MacSNMP is Apple's implementation of the industry-standard network management protocol. It allows easy management of Macintosh computers on a network using a variety of available third-party consoles. MacSNMP is supplied with all of the Connection for Macintosh products, including AppleTalk Connection for Macintosh and TCP/IP Connection for Macintosh.

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## Apple Internet Router

The Apple Internet Router implements the AppleTalk Update-based Routing Protocol (AURP), to substantially reduce network traffic over wide area networks (WANs) and to maximize use of network resources. It supports LocalTalk, Ethernet, and Token Ring connection, with wide-area linkage via dial-up modems, X.25, or TCP/IP.

- *Basic Connectivity Package.* Routes AppleTalk over local area networks (LANs) and dial-up modem connections.

- *AppleTalk/X.25 Wide Area Extension.* Routes AppleTalk over X.25 WANs.
- *AppleTalk/IP Wide Area Extension.* Routes AppleTalk over an IP internet via IP tunneling.

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### **The Apple IP Gateway**

With the Apple IP Gateway, Macintosh users with Apple Remote Access, LocalTalk, or any other AppleTalk network connection can connect easily to an Ethernet-based TCP/IP network to use the full range of Internet Protocol (IP) services—including the vast array of Internet services such as Telnet, File Transfer Protocol (FTP), Gopher, World Wide Web, and Wide Area Information Servers (WAIS).

- *Flexible configuration.* In conjunction with the Apple Internet Router software, the Apple IP Gateway provides IP access to any Macintosh computer that is part of the router's internet. When used in conjunction with an Apple Remote Access server, it provides access to remote or mobile users. Can be used as a stand-alone product, and can be installed on a wide range of Macintosh and Power Macintosh computers and Workgroup Servers.
- *Ease of setup, use, and administration.* Installs in minutes. Lets users transparently access TCP/IP and Internet resources.
- *Increased security.* Dynamic address assignment reduces the chance of entry from external networks. IP access can be restricted to specific AppleTalk networks.

# *Multivendor Connectivity Software*

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## **Connecting to mainframe database servers using Data Access Language (DAL)**

Data Access Language (DAL) lets users easily access information that resides on UNIX servers, minicomputers, or mainframes. DAL allows users to access a wide variety of relational databases, including Ingres, Informix/SQL, Oracle, Sybase, Rdb/VMS, SQL/DS, and DB/2, on VAX and IBM computers.

DAL Servers are networking software products that provide DAL access to files and databases running on a variety of host systems. DAL for AS/400, for example, allows users to access data stored on IBM AS/400 machines—and use the intuitive Macintosh user interface.

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## **Connecting to IBM environments using SNA•ps**

SNA•ps (Systems Network Architecture protocols and services) 3270 is a full-function 3270 terminal emulation program that enables Macintosh computers to communicate with IBM mainframes. SNA•ps 5250 is a full-function 5250 display terminal emulation program that enables Macintosh personal computers to communicate with IBM AS/400 midrange computer systems. SNA•ps products provide file-transfer and 3287 printer emulation capabilities for Macintosh computers over a LAN.


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## **Connecting to DEC environments using Digital PATHWORKS**

Digital PATHWORKS for Macintosh allows Macintosh users to access data residing on Digital VAX/VMS minicomputers, from the desktop—as if those systems were simply another node on an AppleTalk network.

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## **Connecting to TCP/IP networks using TCP/IP Connection for Macintosh**

TCP/IP Connection for Macintosh provides the software to connect a Macintosh computer to a TCP/IP network and to allow the Macintosh to be managed from a console using the Simple Network Management Protocol (SNMP). The product includes a TCP/IP protocol stack implementation (MacTCP); SNMP network management software (MacSNMP)  167; datalink drivers for LocalTalk, Ethernet, and Token Ring; a Domain Name Resolver; support for host files; and a ping text application (MacTCP Ping).

TCP/IP Administration for Macintosh is a companion product that includes additional documentation and software (MacSNMP Admin) for configuring and administering end-user systems with TCP/IP Connection installed.

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## **MacX25 software**

MacX25 software links Macintosh computers to packet-switched data networks (PSDNs) supporting CCITT Recommendation X.25. Access to host computers and end-user services on the PSDN is then distributed from the server to Macintosh computers over the AppleTalk network system. MacX25 supports AppleTalk routing over X.25 when used with the Apple Internet Router, and it supports standard messaging when used with MacX.400 software.

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## **AppleTalk Connection for Macintosh software**

AppleTalk Connection for Macintosh software provides the most current version of AppleTalk networking software and Apple's implementation of the industry-standard SNMP network management protocol.  167 The AppleTalk transport stack includes the latest software drivers for LocalTalk, Ethernet, and Token Ring.

AppleTalk Administration for Macintosh is a companion product that includes additional documentation and software (MacSNMP Admin) for configuring and administering end-user systems with AppleTalk Connection installed.

# QuickCharts



# Desktop & Portable Computers **QuickChart**

<b>Model</b>	<b>Processor</b>	<b>Memory</b>	<b>Storage</b>	<b>Key features</b>
<b>Macintosh LC 580</b>	66/33-MHz 68LC040 with 32-bit data bus	8MB–52MB	500MB; CD-ROM drive <sup>1</sup>	All-in-one multimedia Macintosh; PowerPC upgrade capability; Energy Star compliant
<b>Macintosh LC 630 DOS Compatible</b>	66/33-MHz 68LC040; 66-MHz 486DX2 with 32-bit data bus	8MB–52MB (Mac OS); 4MB–32MB (DOS Compatibility Card)	500MB; CD-ROM drive	Hardware-level MS-DOS 6.2 and Windows 3.1 compatibility; unique multimedia expansion options
<b>Macintosh Performa 580</b>	66/33-MHz 68LC040 with 32-bit data bus	5MB or 8MB–52MB	250MB or 500MB; CD-ROM drive <sup>1</sup>	All-in-one multimedia Macintosh; PowerPC upgrade capability; Energy Star compliant
<b>Macintosh Performa 630 series</b>	66/33-MHz 68LC040	5MB or 8MB–36MB	250MB or 350MB; CD-ROM drive	Display, keyboard, software, and mouse included; unique multimedia expansion options; PowerPC upgrade capability; Energy Star compliant
<b>Macintosh Performa 630 and 640CD DOS Compatible</b>	66/33-MHz 68LC040; 66-MHz 486DX2 with 32-bit data bus	8MB–52MB (Mac OS); 4MB–32MB (DOS Compatibility Card)	500MB; CD-ROM drive	Hardware-level MS-DOS 6.2 and Windows 3.1 compatibility; unique multimedia expansion options
<b>Macintosh Performa 5200CD series</b>	75-MHz PowerPC 603 with math coprocessor, 16K on-chip cache; 256K level 2 cache	8MB–64MB	500MB or 1GB; quad-speed CD-ROM drive	PowerPC performance in an innovative all-in-one design; unique multimedia expansion options; Energy Star compliant

★ <b>Macintosh Performa 5300CD series</b>	100-MHz PowerPC 603e with math coprocessor, 16K on-chip cache; 256K level 2 cache	16MB–64MB	1.2GB; quad-speed CD-ROM drive	Faster PowerPC performance in an innovative all-in-one design; unique multimedia expansion options; Energy Star compliant
<b>Macintosh Performa 6100 series</b>	60-MHz PowerPC 601 with math coprocessor, 32K on-chip cache	8MB–72MB	250MB, 350MB, or 500MB; CD-ROM drive <sup>1</sup>	High performance; PowerPC processor; display, keyboard, software, and mouse included; Ethernet capability
<b>Macintosh Performa 6200CD series</b>	75-MHz PowerPC 603 with math coprocessor, 16K on-chip cache; 256K level 2 cache	8MB–64MB	1GB; quad-speed CD-ROM drive	PowerPC performance in a flexible modular design; unique multimedia expansion options; Energy Star compliant
★ <b>Macintosh Performa 6300CD</b>	100-MHz PowerPC 603e with math coprocessor, 32K on-chip cache; 256K level 2 cache	16MB–64MB	1.2GB; quad-speed CD-ROM drive	Faster PowerPC performance in a flexible modular design; unique multimedia expansion options
<b>Power Macintosh 5200/75 LC</b>	75-MHz PowerPC 603 with math coprocessor, 16K on-chip cache; 256K level 2 cache	8MB–64MB	500MB; quad-speed CD-ROM drive	PowerPC performance in an innovative all-in-one design; unique multimedia expansion options; Energy Star compliant

<sup>1</sup> Optional

★ New model—introduced after August 1, 1995

# Desktop & Portable Computers QuickChart

(continued)

Model	Processor	Memory	Storage	Key features
★ <b>Power Macintosh 5300/100 LC</b>	100-MHz PowerPC 603e with math coprocessor, 16K on-chip cache; 256K level 2 cache	16MB–64MB	1.2GB; quad-speed CD-ROM drive	Faster PowerPC performance in an all-in-one design; unique multimedia expansion options; Energy Star compliant
<b>Power Macintosh 6100/66</b>	66-MHz PowerPC 601 with math coprocessor, 32K on-chip cache; 256K level 2 cache	8MB or 16MB–72MB	350MB or 500MB; one half-height 5.25-inch peripheral	PowerPC performance; Ethernet capability
<b>Power Macintosh 6100/66 DOS Compatible</b>	66-MHz PowerPC 601; 66-MHz 486DX2 with 32-bit data bus	8MB or 16MB–72MB (Mac OS); 0MB–32MB (DOS Compatibility Card)	500MB; one half-height 5.25-inch peripheral	Hardware-level MS-DOS 6.2 and Windows 3.1 compatibility; PowerPC performance; Ethernet capability
<b>Power Macintosh 6200/75</b>	75-MHz PowerPC 603 with math coprocessor, 16K on-chip cache; 256K level 2 cache	8MB–64MB	500MB; quad-speed CD-ROM drive	High performance; PowerPC processor; unique multimedia expansion options
<b>Power Macintosh 7100/80</b>	80-MHz PowerPC 601 with math coprocessor, 32K on-chip cache; 256K level 2 cache	8MB or 16MB–136MB	500MB or 700MB; one half-height 5.25-inch peripheral	More memory and expansion options; faster performance; Ethernet capability; Energy Star compliant

<b>Power Macintosh 7200/75 and 7200/90</b>	75-MHz or 90-MHz PowerPC 601 with math coprocessor, 32K on-chip cache; 256K or 512K level 2 cache (optional)	8MB–256MB	500MB; quad-speed CD-ROM drive; one 3.5-inch peripheral	Powerful, flexible, and affordable; PowerPC performance; three PCI expansion slots; Ethernet capability; Energy Star compliant
<b>Power Macintosh 7500/100</b>	100-MHz PowerPC 601 with math coprocessor, 32K on-chip cache; 256K or 512K level 2 cache (optional)	8MB–512MB	500MB; quad-speed CD-ROM drive; one 3.5-inch peripheral	Powerful professional system; PowerPC performance; three PCI expansion slots; processor upgradability; Ethernet capability; Energy Star compliant
<b>Power Macintosh 8100/100 and 8100/110</b>	100-MHz or 110-MHz PowerPC 601 with math coprocessor, 32K on-chip cache; 256K level 2 cache	8MB or 16MB–264MB	700MB, 1GB, or 2GB; two 3.5-inch peripherals and one half-height 5.25-inch peripheral	High performance; more storage capacity; Ethernet capability; dual SCSI buses; Energy Star compliant
<b>Power Macintosh 8500/120</b>	120-MHz PowerPC 604 with math coprocessor, 32K on-chip cache; 256K level 2 cache	16MB–512MB	1GB or 2GB; quad-speed CD-ROM drive; one 3.5-inch peripheral	Powerful, feature-rich system; PowerPC 604 performance; three PCI expansion slots; processor upgradability; Ethernet capability; Energy Star compliant

★ New model—introduced after August 1, 1995

# Desktop & Portable Computers QuickChart

Model	Processor	Memory	Storage	Key features	(continued)
<b>Power Macintosh 9500/120 and 9500/132</b>	120-MHz or 132-MHz PowerPC 604 with math coprocessor, 32K on-chip cache; 512K level 2 cache	16MB–768MB	1GB or 2GB; quad-speed CD-ROM drive; two 3.5-inch peripherals	Most powerful and expandable Power Macintosh computer; PowerPC 604 performance; six PCI expansion slots; processor upgradability; Ethernet capability	
<b>PowerBook 150</b>	33-MHz 68030	4MB–40MB	250MB	Most affordable PowerBook notebook computer; Energy Star compliant	
<b>PowerBook 190/66</b>	66/33-MHz 68LC040	4MB or 8MB–36MB or 40MB	500MB	Most affordable 68LC040-based PowerBook; PC Card slots and expansion bay; preinstalled software; upgradable to PowerPC; Energy Star compliant	
<b>PowerBook 190cs/66</b>	66/33-MHz 68LC040	4MB or 8MB–36MB or 40MB	500MB	Most affordable color PowerBook; PC Card slots and expansion bay; preinstalled software; upgradable to PowerPC; Energy Star compliant	
<b>PowerBook Duo 2300c/100</b>	100-MHz PowerPC 603e with math coprocessor, 16K data cache, 16K instruction cache	8MB or 20MB–56MB	750MB or 1.1GB	Smallest, lightest PowerBook; PowerPC performance; active-matrix color display; Energy Star compliant	



<b>PowerBook 5300/100</b>	100-MHz PowerPC 603e with math coprocessor, 16K data cache, 16K instruction cache	8MB–64MB	500MB	Affordable; PowerPC performance; PC Card slots and expansion bay; 8-bit video-out; infrared technology; upgradable to active-matrix color display; Energy Star compliant
<b>PowerBook 5300cs/100</b>	100-MHz PowerPC 603e with math coprocessor, 16K data cache, 16K instruction cache	8MB or 16MB–64MB	500MB or 750MB	PowerPC performance; dual-scan color display; PC Card slots and expansion bay; 8-bit video-out; infrared technology; upgradable to active-matrix color display; Energy Star compliant
<b>PowerBook 5300c/100</b>	100-MHz PowerPC 603e with math coprocessor, 16K data cache, 16K instruction cache	8MB or 16MB–64MB	500MB or 750MB	PowerPC performance; active-matrix color display; PC Card slots and expansion bay; 8-bit video-out; infrared technology; Energy Star compliant
<b>PowerBook 5300ce/117</b>	117-MHz PowerPC 603e with math coprocessor, 16K data cache, 16K instruction cache	32MB–64MB	1.1GB	PowerPC performance; highest-resolution color display; SVGA display; high-capacity hard disk drive; PC Card slots; 8-bit video-out; infrared technology; Energy Star compliant

# Desktop Computer Upgrades QuickChart

If you currently have this...	You can upgrade to this...	By purchasing this...
Macintosh LC 475	PowerPC processor	See Apple dealer
Macintosh LC 550	PowerPC processor	See Apple dealer
Macintosh LC 575	PowerPC processor	See Apple dealer
Macintosh LC 580	PowerPC processor	See Apple dealer
Macintosh LC 630	PowerPC processor	Macintosh Processor Upgrade Card
Macintosh Performa 580	PowerPC processor	See Apple dealer
Macintosh Performa 630 series	PowerPC processor	Power Macintosh Processor Upgrade
Macintosh Ilvi	Power Macintosh 7100/66	Power Macintosh 7100/66 Logic Board Upgrade
Macintosh Ilvx	Power Macintosh 7100/66	Power Macintosh 7100/66 Logic Board Upgrade Power Macintosh 7100/66av Logic Board Upgrade
Macintosh Centris 610	PowerPC processor	Power Macintosh Upgrade Card
Macintosh Quadra 610		
	Power Macintosh 6100/60	Power Macintosh 6100/60 Logic Board Upgrade

Macintosh Quadra 630	PowerPC processor	Macintosh Processor Upgrade
Macintosh Centris 650	Power Macintosh 7100/66	Power Macintosh 7100/66 Logic Board Upgrade
Macintosh Quadra 650		Power Macintosh 7100/66av Logic Board Upgrade
Macintosh Performa 600 series		
	PowerPC processor	Power Macintosh Upgrade Card
Macintosh Centris 660av	Power Macintosh 6100/60	Power Macintosh 6100/60 Logic Board Upgrade
Macintosh Quadra 660av		Power Macintosh 6100/60av Logic Board Upgrade
Macintosh Quadra 700	PowerPC processor	Power Macintosh Upgrade Card
Macintosh Quadra 800	Power Macintosh 8100/80	Power Macintosh 8100/80 Logic Board Upgrade
Macintosh Quadra 840av		Power Macintosh 8100/80av Logic Board Upgrade
	Power Macintosh 8500/120	Power Macintosh 8500/120 Logic Board Upgrade
Macintosh Quadra 900	PowerPC processor	Power Macintosh Upgrade Card
Macintosh Quadra 950	PowerPC processor	Power Macintosh Upgrade Card
Power Macintosh 7200/75	Power Macintosh 7500/100	Power Macintosh 7500/100 Logic Board Upgrade
Power Macintosh 7200/90		
Power Macintosh 8100/80	Power Macintosh 8500/120	Power Macintosh 8500/120 Logic Board Upgrade
Power Macintosh 8100/100		
Power Macintosh 8100/110		

# Portable Computer Upgrades QuickChart

## If you currently have this...

## You can upgrade to this...

## By purchasing this...

Macintosh PowerBook 190/66  
Macintosh PowerBook 190cs/66

PowerPC processor

Macintosh PowerBook Logic Board Upgrade Kit

Infrared technology

Macintosh PowerBook Infrared Upgrade Kit

8-bit video-output

Macintosh PowerBook 8-bit Color Video-out Upgrade Kit

Active-matrix color display

Macintosh PowerBook 10.4" Active-Matrix Color Display Upgrade Kit<sup>1</sup>

Macintosh PowerBook Duo 230  
Macintosh PowerBook Duo 250  
Macintosh PowerBook Duo 270c  
Macintosh PowerBook Duo 280  
Macintosh PowerBook Duo 280c

PowerPC processor

Macintosh PowerBook Logic Board Upgrade Kit

Macintosh PowerBook 520 Macintosh PowerBook 520c Macintosh PowerBook 540 Macintosh PowerBook 540c	PowerPC processor	Macintosh PowerBook Processor Card Upgrade
Macintosh PowerBook 5300/100 Macintosh PowerBook 5300cs/100	Active-matrix color display	Macintosh PowerBook 10.4* Active-Matrix Color Display Upgrade Kit

<sup>1</sup> Requires PowerPC upgrade



# Memory Configurations QuickChart

Model	Minimum configuration			And how to get it...
	Built-in RAM on logic board	Number of SIMM or card slots	Amount of memory (RAM) you want...	
Macintosh LC 580 Macintosh Performa 580 <sup>1</sup>	4MB	One SIMM slot filled with a 1MB or 4MB SIMM, and one empty SIMM slot	5MB configuration	= 4MB on logic board + one 1MB SIMM
			8MB configuration	= 4MB on logic board + one 4MB SIMM
			52MB configuration	= 4MB on logic board + one 16MB SIMM + one 32MB SIMM
Macintosh LC 630 DOS Compatible <sup>1,2</sup> Macintosh Performa 630 and 640CD DOS Compatible <sup>1,2</sup>	4MB	One SIMM slot filled with a 4MB SIMM, and one empty SIMM slot	8MB configuration	= 4MB on logic board + one 4MB SIMM
			12MB configuration	= 4MB on logic board + two 4MB SIMMs
			52MB configuration	= 4MB on logic board + one 16MB SIMM + one 32MB SIMM
Macintosh Performa 630 series	4MB	One empty SIMM slot	4MB configuration	= 4MB on logic board
			5MB configuration	= 4MB on logic board + one 1MB SIMM
			6MB configuration	= 4MB on logic board + one 2MB SIMM
			8MB configuration	= 4MB on logic board + one 4MB SIMM
			12MB configuration	= 4MB on logic board + one 8MB SIMM
			20MB configuration <sup>3</sup>	= 4MB on logic board + one 16MB SIMM
			36MB configuration <sup>3</sup>	= 4MB on logic board + one 32MB SIMM

★ <b>Macintosh Performa 5300CD series</b>	None	One SIMM slot	<b>16MB</b> configuration	= One 16MB SIMM
★ <b>Macintosh Performa 6300CD</b>		filled with a 16MB	<b>32MB</b> configuration	= One 16MB SIMM + one 16MB SIMM
★ <b>Power Macintosh 5300/100 LC</b>		SIMM, and one empty SIMM slot	<b>64MB</b> configuration	= One 32MB SIMM + one 32MB SIMM
<b>Macintosh Performa 5200CD and 6200CD series</b>	None	One SIMM slot	<b>8MB</b> configuration	= One 8MB SIMM
<b>Power Macintosh 5200/75 LC</b>		filled with an 8MB	<b>16MB</b> configuration	= One 8MB SIMM + one 8MB SIMM
<b>Power Macintosh 6200/75</b>		SIMM, and one empty SIMM slot	<b>32MB</b> configuration	= One 16MB SIMM + one 16MB SIMM
			<b>64MB</b> configuration	= One 32MB SIMM + one 32MB SIMM
<b>Macintosh Performa 6100 series</b>	8MB	Two empty	<b>8MB</b> configuration	= 8MB on logic board
<b>Power Macintosh 6100/66</b>		SIMM slots	<b>16MB</b> configuration	= 8MB on logic board + two 4MB SIMMs
<b>Power Macintosh</b>			<b>24MB</b> configuration	= 8MB on logic board + two 8MB SIMMs
<b>6100/66 DOS Compatible<sup>2</sup></b>			<b>40MB</b> configuration	= 8MB on logic board + two 16MB SIMMs
			<b>72MB</b> configuration	= 8MB on logic board + two 32MB SIMMs

<sup>1</sup> These computers can be configured in a variety of ways, using 1MB, 4MB, 8MB, 12MB, 16MB, and 32MB SIMMs. It is not necessary to have equal amounts of memory in the two SIMM slots. Maximum amount for one slot is 16MB; for the other, 32MB.

<sup>2</sup> The DOS Compatible models also come with a single, Macintosh-compatible 72-pin SIMM slot for up to 32MB of local RAM on the DOS Compatibility Card. A 4MB SIMM has been installed in this slot at the factory for the Macintosh LC 630 DOS Compatible and the Macintosh Performa 630 and 640CD DOS Compatible systems.

<sup>3</sup> Requires third-party product.

★ New model—introduced after August 1, 1995.

# Memory Configurations QuickChart

(continued)

Model	Minimum configuration		Amount of memory (RAM) you want...	And how to get it...
	Built-in RAM on logic board	Number of SIMM or card slots		
<b>Power Macintosh 7100/80</b>	8MB	Four empty SIMM slots	<b>8MB</b> configuration <b>24MB</b> configuration <b>40MB</b> configuration <b>72MB</b> configuration <b>136MB</b> configuration	= 8MB on logic board = 8MB on logic board + four 4MB SIMMs = 8MB on logic board + four 8MB SIMMs = 8MB on logic board + four 16MB SIMMs = 8MB on logic board + four 32MB SIMMs
<b>Power Macintosh 7200/75 and 7200/90<sup>4</sup></b>	None	Four 168-pin DIMM slots	<b>8MB</b> configuration <b>32MB</b> configuration <b>64MB</b> configuration <b>256MB</b> configuration	= one 8MB DIMM = four 8MB DIMMs = four 16MB DIMMs = four 64MB DIMMs
<b>Power Macintosh 7500/100<sup>4</sup></b>	None	Eight 168-pin DIMM slots	<b>8MB</b> configuration <b>16MB</b> configuration <b>32MB</b> configuration <b>128MB</b> configuration <b>512MB</b> configuration	= one 8MB DIMM = two 8MB DIMMs = four 8MB DIMMs = eight 16MB DIMMs = eight 64MB DIMMs
<b>Power Macintosh 8100/100 and 8100/110</b>	8MB	Eight empty SIMM slots	<b>8MB</b> configuration <b>40MB</b> configuration <b>72MB</b> configuration <b>136MB</b> configuration <b>264MB</b> configuration	= 8MB on logic board = 8MB on logic board + eight 4MB SIMMs = 8MB on logic board + eight 8MB SIMMs = 8MB on logic board + eight 16MB SIMMs = 8MB on logic board + eight 32MB SIMMs

<b>Power Macintosh 8500/120<sup>4</sup></b>	None	Eight 168-pin DIMM slots	<b>16MB</b> configuration = two 8MB DIMMs <b>32MB</b> configuration = four 8MB DIMMs <b>128MB</b> configuration = eight 16MB DIMMs <b>512MB</b> configuration = eight 64MB DIMMs
<b>Power Macintosh 9500/120 and 9500/132<sup>4</sup></b>	None	Twelve 168-pin DIMM slots	<b>16MB</b> configuration = two 8MB DIMMs <b>96MB</b> configuration = twelve 8MB DIMMs <b>192MB</b> configuration = twelve 16MB DIMMs <b>768MB</b> configuration = twelve 64MB DIMMs
<b>PowerBook 150</b>	4MB	One memory expansion slot	<b>4MB</b> configuration = 4MB on logic board <b>8MB</b> configuration = 4MB on logic board + 4MB memory card <b>12MB</b> configuration = 4MB on logic board + 8MB memory card <b>24MB</b> configuration <sup>3</sup> = 4MB on logic board + 20MB memory card <b>40MB</b> configuration <sup>3</sup> = 4MB on logic board + 36MB memory card

<sup>3</sup> Requires third-party product.

<sup>4</sup> These computers can be configured in a variety of ways, using a variety of DIMM sizes. It is not necessary to have equal amounts of memory in the DIMM slots. The configurations given represent a sampling of the possibilities, including the maximum memory configuration.

# Memory Configurations QuickChart

(continued)

Model	Minimum configuration		Amount of memory (RAM) you want...	And how to get it...
	Built-in RAM on logic board	Number of SIMM or card slots		
PowerBook 190/66 PowerBook 190cs/66	4MB	One memory expansion slot	4MB configuration	= 4MB on logic board
			8MB configuration	= 4MB on logic board + 4MB memory card
			12MB configuration	= 4MB on logic board + 8MB memory card
			20MB configuration <sup>3</sup>	= 4MB on logic board + 16MB memory card
			28MB configuration <sup>3</sup>	= 4MB on logic board + 24MB memory card
			36MB configuration <sup>3</sup>	= 4MB on logic board + 32MB memory card
PowerBook 190/66 PowerBook 190cs/66	8MB	One memory expansion slot	8MB configuration	= 8MB on logic board
			12MB configuration	= 8MB on logic board + 4MB memory card
			16MB configuration	= 8MB on logic board + 8MB memory card
			24MB configuration <sup>3</sup>	= 8MB on logic board + 16MB memory card
			32MB configuration <sup>3</sup>	= 8MB on logic board + 24MB memory card
			40MB configuration <sup>3</sup>	= 8MB on logic board + 32MB memory card
PowerBook Duo 2300c/100	8MB	One memory expansion slot	8MB configuration	= 8MB on logic board
			12MB configuration	= 8MB on logic board + 4MB memory card
			16MB configuration	= 8MB on logic board + 8MB memory card
			20MB configuration <sup>5</sup>	= 8MB on logic board + 12MB memory card
			24MB configuration <sup>3</sup>	= 8MB on logic board + 16MB memory card
			32MB configuration <sup>3</sup>	= 8MB on logic board + 24MB memory card
			40MB configuration <sup>3</sup>	= 8MB on logic board + 32MB memory card
			48MB configuration <sup>3</sup>	= 8MB on logic board + 40MB memory card
			56MB configuration <sup>3</sup>	= 8MB on logic board + 48MB memory card



PowerBook 5300/100 PowerBook 5300cs/100 PowerBook 5300c/100	8MB	One memory expansion slot	<b>8MB</b> configuration = 8MB on logic board <b>16MB</b> configuration = 8MB on logic board + 8MB memory card <b>24MB</b> configuration <sup>3</sup> = 8MB on logic board + 16MB memory card <b>32MB</b> configuration <sup>3</sup> = 8MB on logic board + 24MB memory card <b>40MB</b> configuration <sup>3</sup> = 8MB on logic board + 32MB memory card <b>48MB</b> configuration <sup>3</sup> = 8MB on logic board + 40MB memory card <b>56MB</b> configuration <sup>3</sup> = 8MB on logic board + 48MB memory card <b>64MB</b> configuration <sup>3</sup> = 8MB on logic board + 56MB memory card
PowerBook 5300cs/100 PowerBook 5300c/100 PowerBook 5300ce/117 <sup>6</sup>	16MB	One memory expansion slot	<b>16MB</b> configuration = 16MB on logic board <b>24MB</b> configuration = 16MB on logic board + 8MB memory card <b>32MB</b> configuration <sup>3</sup> = 16MB on logic board + 16MB memory card <b>40MB</b> configuration <sup>3</sup> = 16MB on logic board + 24MB memory card <b>48MB</b> configuration <sup>3</sup> = 16MB on logic board + 32MB memory card <b>56MB</b> configuration <sup>3</sup> = 16MB on logic board + 40MB memory card <b>64MB</b> configuration <sup>3</sup> = 16MB on logic board + 48MB memory card

<sup>3</sup> Requires third-party product.

<sup>5</sup> Customers who purchase the 20MB configuration of the PowerBook Duo 2300c/100 must remove the 12MB memory card that comes installed in the expansion slot to add RAM.

<sup>6</sup> Customers who purchase the PowerBook 5300ce/117 must remove the 16MB memory card that comes installed in the expansion slot to add RAM.

# Apple Printers QuickChart

Model	Resolution (dots per inch)	Printing speed (pages per minute)	Recommended number of users	Fonts	Key features
<b>ImageWriter II</b>	144 dpi	0.5 ppm (best mode) 2 ppm (draft mode)	1 user	Built-in character sets for many languages	Prints on forms; color printing capability; Energy Star compliant
<b>StyleWriter 1200</b>	720 by 360 dpi (black & white); 360 dpi (gray scale)	3 ppm (black & white) 2 ppm (best mode)	1–3 users with GrayShare	64 TrueType fonts	High-resolution ink-jet printing; GrayShare software; Energy Star compliant
<b>Color StyleWriter 2200</b>	720 by 360 dpi (black & white); 360 dpi (gray scale and color)	5 ppm (black & white) 0.33 ppm (color)	1 user	64 TrueType fonts	High-quality portable color ink-jet printer; perfect for PowerBook computers; Energy Star compliant
<b>Color StyleWriter 2400</b>	720 by 360 dpi (black & white); 360 dpi (gray scale and color)	5 ppm (black & white) 0.33 ppm (color)	1–3 users with ColorShare	64 TrueType fonts	Superior-quality color ink-jet printing; low cost per page; ColorShare software; Energy Star compliant
<b>Personal LaserWriter 300</b>	300 dpi	4 ppm	1–3 users with GrayShare	39 TrueType fonts	Most affordable laser printer; GrayShare software; Energy Star compliant

<b>LaserWriter 4/600 PS</b>	600 dpi	4 ppm	1–3 users	64 TrueType and 35 PostScript fonts	Affordable yet advanced PostScript printer; can be shared on a network; Energy Star compliant
<b>LaserWriter Select 360</b>	600 dpi	10 ppm	2–6 users	64 TrueType and 35 PostScript fonts	Optional plain-paper fax capability; autoemulation switching between Macintosh and Windows systems; Energy Star compliant
<b>LaserWriter 16/600 PS</b>	600 dpi with FinePrint; optional PhotoGrade <sup>1</sup>	16 ppm (A4) 17 ppm (letter)	7–10 users	64 TrueType and 35 PostScript fonts	Ethernet support; SCSI ports for hard disk font storage; supports Macintosh and Windows systems; optional plain-paper fax capability; Energy Star compliant
<b>Color LaserWriter 12/600 PS</b>	600 dpi with Color PhotoGrade	12 ppm (black & white) 3 ppm (color) 1 ppm (color transparencies)	10–20 users	64 TrueType and 39 PostScript fonts	Superior-quality color laser printing; supports Macintosh and Windows systems; Energy Star compliant

<sup>1</sup> Requires minimum 12MB of RAM

# Video Support QuickChart

Model and Video RAM	Apple Multiple Scan 14 Display	Apple Multiple Scan 15 Display	Apple Multiple Scan 1705 Display	AppleVision 1710av Display	Apple Multiple Scan 20 Display
<b>Macintosh LC 580</b>					
Built-in video (1MB)	32,768 colors	32,768 colors	—	—	—
<b>Macintosh LC 630 DOS Compatible<sup>†</sup></b>					
Built-in video (1MB)	32,768 colors	32,768 colors	256 colors	256 colors	—
<b>★ Power Macintosh 5200/75 LC and 5300/100 LC</b>					
Built-in video (1MB)	32,768 colors	32,768 colors	—	—	—
<b>Power Macintosh 6100/66 and 6100/66 DOS Compatible<sup>†</sup></b>					
Built-in video (DRAM)	32,768 colors	32,768 colors	256 colors	256 colors	—
Expanded to 2MB	16.7 million colors	16.7 million colors	32,768 colors	32,768 colors	32,768 colors
<b>Power Macintosh 6200/75</b>					
Built-in video (1MB)	32,768 colors	32,768 colors	—	—	—

**Power Macintosh 7100/80**

Built-in video (1MB)	32,768 colors	32,768 colors	32,768 colors	32,768 colors	256 colors
Expanded to 2MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors


**Power Macintosh 7200/75 and 7200/90<sup>2</sup>**

Built-in video (1MB)	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors

**Power Macintosh 7500/100<sup>2</sup>**

Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors

<sup>1</sup> 512K video RAM included for MS-DOS 6.2 and Windows 3.1 environments.

<sup>2</sup> Video support shown is maximum number of colors; actual number of colors varies by resolution on multiple-scan displays.  194

★ New model—introduced after August 1, 1995.



(continued)

Model and Video RAM	Apple Multiple Scan 14 Display	Apple Multiple Scan 15 Display	Apple Multiple Scan 1705 Display	AppleVision 1710Av Display	Apple Multiple Scan 20 Display
<b>Power Macintosh 8100/100 and 8100/110</b>					
Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
<b>Power Macintosh 8500/120<sup>2</sup></b>					
Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
<b>Power Macintosh 9500/120 (comes with ATI mach64 card)<sup>2</sup></b>					
Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors

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**PowerBook 190/66 and 5300/100**

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Built-in video (512K) at 640 by 480 pixels	256 colors	256 colors	256 colors	256 colors	256 colors
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**PowerBook 190cs/66 and 5300cs/100**

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Built-in video (512K) at 640 by 480 pixels	256 colors	256 colors	256 colors	256 colors	256 colors
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**PowerBook Duo 2300c/100 with PowerBook Duo Dock Plus**

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At 640 by 480 pixels	256 colors	256 colors	256 colors	256 colors	256 colors
At 640 by 400 pixels	32,768 colors	32,768 colors	32,768 colors	32,768 colors	256 colors

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**PowerBook 5300c/100**

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Built-in video (512K or 1MB) at 640 by 480 pixels	256 colors	256 colors	256 colors	256 colors	256 colors
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**PowerBook 5300ce/117**

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Built-in video (1MB) at 800 by 640 pixels	256 colors	256 colors	256 colors	256 colors	256 colors
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<sup>2</sup> Video support shown is maximum number of colors; actual number of colors varies by resolution on multiple-scan displays. 🇺🇸 194

# Video Support QuickChart

(continued)

Model and Video RAM	Display resolution			
	640 by 480 pixels	832 by 624 pixels	1,024 by 768 pixels	1,152 by 870 pixels
<b>Power Macintosh 6100/66 and 6100/66 DOS Compatible</b>				
Built-in video (DRAM)	32,768 colors	256 colors	—	—
Expanded to 2MB (Standard in Apple AV Technologies configuration)	16.7 million colors	16.7 million colors	32,768 colors	32,768 colors
<b>Power Macintosh 7100/80</b>				
Built-in video (1MB)	32,768 colors	32,768 colors	256 colors	256 colors
Expanded to 2MB (Standard in Apple AV Technologies configuration)	16.7 million colors	16.7 million colors	32,768 colors	32,768 colors
<b>Power Macintosh 8100/100 and 8100/110</b>				
Built-in video (2MB)	16.7 million colors	16.7 million colors	32,768 colors	32,768 colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors

Model and Video RAM	Display resolution				
	640 by 480 pixels	800 by 600 pixels	832 by 624 pixels	1,024 by 768 pixels	1,280 by 1,024 pixels
<b>Power Macintosh 7200/75 and 7200/90</b>					
Built-in video (1MB)	16.7 million colors	32,768 colors	32,768 colors	256 colors	—
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors
<b>Power Macintosh 7500/100 and 8500/120</b>					
Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors	256 colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors
<b>Power Macintosh 9500/120 (comes with ATI mach64 card)</b>					
Built-in video (2MB)	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors	256 colors
Expanded to 4MB	16.7 million colors	16.7 million colors	16.7 million colors	16.7 million colors	32,768 colors

# Apple Displays QuickChart

Model	Screen size	Screen refresh rate	Resolution	Dimensions (HWD) and weight	Key features
<b>Apple Multiple Scan 14 Display</b>	14-inch (diagonal); 12.4-inch (diagonal viewable image size); shadow mask tube	60–75 hertz (varies by resolution)	Selectable from 640 by 480 pixels to 832 by 624 pixels <sup>1</sup>	14.9 by 14.4 by 15.2 in.; 25.0 lb.	Affordable multimedia display; multiple-scan technology for user-adjustable resolution settings; works with Macintosh computers and PCs running Windows; integrated stereo speakers and headphone jack; Energy Star compliant
<b>Apple Multiple Scan 15 Display</b>	15-inch (diagonal); 13.3-inch (diagonal viewable image size); flat, square, screen; shadow mask tube	60–75 hertz (varies by resolution)	Selectable from 640 by 480 pixels to 832 by 624 pixels <sup>1</sup>	16.7 by 15.9 by 17.8 in. <sup>2</sup> ; 31.0 lb.	Flat screen for sharp image; multiple-scan technology for user-adjustable resolution settings; works with Macintosh computers and PCs running Windows; integrated stereo speakers and headphone jack; Energy Star compliant
★ <b>Apple Multiple Scan 1705 Display</b>	17-inch (diagonal); 15.8-inch (diagonal viewable image size); shadow mask tube	67–75 hertz (varies by resolution)	Selectable from 640 by 480 pixels to 1,024 by 768 pixels <sup>1</sup>	17.2 by 16.5 by 18.8 in.; 45.2 lb.	Multiple-scan technology for user-adjustable resolution settings; works with Macintosh computers and PCs running Windows; compatible with Windows 95; Energy Star compliant



<b>AppleVision 1710av Display</b>	17-inch (diagonal); 16.1-inch (diagonal viewable image size); Sony Trinitron tube	67–75 hertz (varies by resolution)	Selectable from 640 by 480 pixels to 1,280 by 1,024 pixels <sup>1</sup>	19.7 by 15.8 by 17.6 in.; 60.0 lb.	"Next-generation" Sony Trinitron tube; multiple-scan technology for user-adjustable resolution settings; works with Macintosh computers and PCs running Windows; compatible with Windows 95; integrated stereo speakers and voice-recognition-capable microphone; Energy Star compliant
★ <b>Apple Multiple Scan 20 Display</b>	20-inch (diagonal); 19.1-inch (diagonal viewable image size); next-generation Sony Trinitron tube	67–75 hertz (varies by resolution)	Selectable from 640 by 480 pixels to 1,280 by 1,024 pixels <sup>1</sup>	18.7 by 18.7 by 19.7 in.; 66.0 lb.	Largest Apple display available; shows up to two full pages; multiple-scan technology for user-adjustable resolution settings; works with Macintosh computers and PCs running Windows; Energy Star compliant

<sup>1</sup> Resolution range given is for Macintosh computers.

<sup>2</sup> Two designs available worldwide—dimensions and weight may vary.

★ New model—introduced after August 1, 1995.

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