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Power Macintosh 8100/80: Description (Discontinued)

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TOPIC ---

The Power Macintosh 8100/80 is the highest performance Macintosh incorporating
the new PowerPC 601 RISC processor.

DISCUSSION --

Overview

The Power Macintosh 8100/80 and Power Macintosh 8100/80AV deliver the highest
performance and speed ever in Macintosh computers. These racehorse computers are
designed to meet the speed, expansion, and networking needs of the most
demanding Macintosh power users, from professional publishers to computer-aided
design professionals.

Although based on new technology, these computers support virtually all existing
Macintosh applications. In addition, Power Macintosh computers run applications
written for Power Macintosh at two to six times the speed of previous Macintosh
computers. And the 8100/80 and 8100/80AV can run 50 to 100 percent faster than
the Power Macintosh 6100/60 computer. Both computers can also run MS-DOS and
Windows applications when using SoftWindows software.

Based on the 80-megahertz PowerPC 601 microprocessor co-developed by Apple, IBM,
and Motorola, the Power Macintosh 8100/80 and 8100/80AV both have built-in,
floating-point math coprocessors. They also provide built-in, high-speed
Ethernet networking.

Both computers support all Apple and most third-party displays, including
monochrome, color, VGA, and SVGA. Support for 16.7 million colors on Apple color
displays (up to 16- or 17-inch) is included with the 8100/80 and the 8100/80AV.
The 8100/80, with the addition of 2 megabytes of VRAM (to total 4 megabytes)
supports display of more than 16 million colors.

Both computers feature easy expandability via three NuBus slots, and you can run two simultaneous displays with each.

GeoPort telecommunications capabilities can integrate both computers with your phone, and both feature speech-recognition and text-to-speech capabilities (PlainTalk microphone and software required). The 8100/80AV adds S-video and composite video input as well as output for use with televisions, video cameras, and video recorders.

The Power Macintosh 8100/80 and Power Macintosh 8100/80AV provide the most power and speed ever available in a Macintosh computer. And they come with the flexibility and expandability necessary to build a firm foundation for your future computing needs.

Power and Speed

• 80-MHz PowerPC 601 RISC Processor
• Integrated floating-point unit and 32k cache

Memory

• 4 MB ROM
• 256 bytes of non-volatile parameter memory
• 8 MB of RAM standard, expandable to 264 MB
• 8 SIMM slots
• SIMMs can be 4 MB, 8 MB, 16 MB or 32 MB, but must be installed in pairs
  of the same size AND speed. For example, you should install two 8 MB
  SIMMs in first two adjoining slots.
• Possible RAM configurations are 8 MB, 40 MB, 72 MB, 136 MB and 264 MB.
• 80 ns SIMMs or faster
• L2 Cache Slot with preinstalled Macintosh Cache Card

 RAM note: All 8MB RAM configurations come with 8MB of RAM soldered onto
 the logic board

Display

• New AV Display Connector supports the Apple AudioVision 14 Display. A
  Video Adapter Cable (Part #M2681LL/A) is available as an option to allow
  connecting an additional monitor with a standard DB-15 connector to your
  Power Macintosh built-in video.
• Works with all Apple monitors as well as third-party displays including
  VGA and SVGA. AV configurations also support NTSC and PAL.
• 2 MB of VRAM standard, upgradeable to 4 MB on the PDS card with standard
  DB-15 monitor connector

Expansion

• Eight built-in ports to support a wide range of peripherals
• One 601 PDS (Processor Direct Slot)
• Three NuBus 90 Slots for additional expansion cards
• Optional internal CD-ROM drive (such as AppleCD 300i Plus)

System software

• System 7 for Power Macintosh with multitasking, file sharing, QuickTime,
  Balloon Help, TrueType, and more

Networking

• Built-in AppleTalk networking
• File sharing without a dedicated server
• On-board Ethernet networking

Compatibility

• Reads Macintosh, MS-DOS, and OS/2 floppy disk formats

What's in the box:

Each unit includes a power cord, keyboard cable, mouse, microphone, and system
software.

System software includes System 7.1.2 for Power Macintosh, Color Macintosh
Basics, AppleScript 1.1, QuickTime 1.6.2, and HyperCard Runtime 2.2.

System software shipped on a bootable CD-ROM, the "Install Me First CD" which
can double as a rescue disk.#

Documentation included with the Power Macintosh 8100/80:
• Power Macintosh Getting Started
• Technical Information
• Macintosh Reference
• AppleCD 300i Plus User's Guide#

- CD-ROM and AppleCD 300i Plus User's Guide bundled with configurations
    which include an internal CD-ROM drive.

Configurations and Ordering Information:

• Power Macintosh 8100/80:
  - Power Macintosh 8100/80 computer with 8MB of RAM, 2MB of VRAM, built-in
    1.4MB Apple SuperDrive, and internal 250MB hard disk drive:
    Order No. M1884LL/A
  - With 8MB of RAM, 250MB hard disk, and internal CD-ROM drive:
    Order No. M1880LL/A
  - With 16MB of RAM, 500MB hard disk, and SoftWindows software:
    Order No. M3079LL/A
  - With 16MB of RAM, 1GB hard disk, and internal CD-ROM drive:
    Order No. M2297LL/A

• Power Macintosh 8100/80AV*
  - Power Macintosh 8100/80AV computer
    with 16MB of RAM, 2MB of VRAM, built-in 1.4MB Apple SuperDrive,
    internal 500MB hard disk drive, internal CD-ROM drive, and two S-video
    to composite video adapters: Order No. M2293LL/A

- Power Macintosh GeoPort Telecom Adapter
  Order No. M3127LL/A

- PlainTalk for Power Macintosh: Includes PlainTalk software and the
  PlainTalk microphone (required to utilize text-to-speech and speech
  recognition features). Order No. M2844LL/A

- DRAM upgrades: All models of the Power Macintosh 8100 have eight DRAM
  SIMM slots (Single In-line Memory Module). SIMMs can be 4 MB, 8 MB,
  16 MB or 32 MB, but must be installed in pairs (16MB and 32MB SIMMs
   available through third-party vendors).
  - 4MB (1-4MB SIMM)
    Order No. M1507LL/A
  - 8MB (1-8MB SIMM)
    Order No. M1508LL/A

- Power Macintosh 8100 VRAM upgrade kit (Part M1311LL/A)
  Adding VRAM increases the number of colors which can be displayed on
  large monitors. For example, adding VRAM to the Power Macintosh 8100/80
  increases the number of colors which can be viewed on a 21-inch monitor
  from 32,000 to over 16.7 million. The kit upgrades the standard 2MB VRAM
  to 4MB VRAM.

  Note: This upgrade does not apply to the Power Macintsoh 8100/80 AV which
  is not expandable over the standard configuration of 2MB VRAM.

- Video Adapter Cable (Part M2681LL/A)
  This cable allows you to connect a monitor with a standard DB-15
  connector to your Power Macintosh built-in video. You can use it if you
  want to connect an additional display (other than the Apple AudioVision
  14) to your computer.

Article Change History:
13 Jun 1995 - Reviewed for technical accuracy.
17 May 1994 - Updated to remove unavailable configurations and products.
              Clarified ProDos support and PlainTalk requirements.
11 Mar 1994 - Revised "What's in the box" section and reclassified for
              public access.

Support Information Services

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