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Performa 400: Specifications

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Security: Everyone

Performa 400: Specifications

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TOPIC ----------

This article gives technical specifications for the Macintosh Performa 400 computer.

DISCUSSION ----------

Processor

- MC68030, 32-bit architecture, 15.6672 megahertz (MHz) clock frequency (includes built-in memory management unit).

Memory

- 4MB RAM, expandable to 10MB
- 512K of read-only memory (ROM)
- 256 bytes of parameter memory (PRAM)
- Virtual Memory Capable

Video RAM

- Comes with 512K video RAM. The following video modes are supported:
  - Macintosh 12" RGB Display (512 x 384 pixels) at 1, 2, 4, 8 and 16 bits per pixel
  - Macintosh High-Resolution Monochrome Display, AppleColor High-Resolution RGB Monitor, Macintosh Performa and Performa Plus Display and Macintosh Color Display (640 x 480 pixels) at 1, 2, 4 and 8 bits per pixel

Disk Drives

- Built-in Apple SuperDrive 1.4MB high-density floppy disk drive
- Internal 80MB SCSI hard disk drive
- Optional external Apple SCSI hard disk drive

Sound Generator

Custom sound chip, including mono sampling generator capable of driving stereo miniature phone jack headphones, or stereo equipment by sending the same output into each channel.

Power Input

- Line voltage: 100-240 volts AC, RMS automatically configured
- Frequency: 50-60 Hz ±3 Hz single phase
- Power: 50 watts maximum, not including monitor power

Clock/Calendar

CMOS custom chip with long-life lithium battery

Interfaces

- One Apple Desktop Bus port supports a keyboard, mouse, and other devices daisy-chained through a low-speed, synchronous serial bus (maximum of three chained devices)
- Two serial (RS-232/RS-422) ports, 230.4 kilobits per second maximum (up to 0.920 megabits per second if clocked externally)
- SCSI interface
- Video port supports RGB and monochrome monitors of various sizes and resolutions
- Internal expansion slot for processor-direct expansion card
- Sound output port capable of delivering monophonic sound to both channels of a stereo device
- Sound input port for monaural sound input

Monitors

- Supports the following monitors:
  - Macintosh Performa Display
  - Macintosh Performa Plus Display
  - Macintosh 12-inch RGB Display
  - Macintosh 12-inch Monochrome Display
  - AppleColor High-Resolution RGB Monitor
  - Macintosh Color Display

Keyboards

Supports all Apple Desktop Bus (ADB) keyboards

Mouse

ADB mouse: either mechanical tracking, optical shaft, or contact encoding

Apple Desktop Bus Power Requirements

- Maximum power draw for all ADB devices: milliamperes (mA)
- Mouse draws 80 mA

• Keyboard draws 25-80 mA (varies with the keyboard model used)

Note: Up to three ADB devices can be daisy-chained to the ADB port.

RAM Configurations

RAM in the Performa 400 is provided both on the logic board and in packages called Single In-line Memory Modules, or SIMMs. The SIMMs contain dynamic RAM chips on a single circuit board, with electrical "finger" contacts along one edge that plug into the SIMM sockets on the computer's logic board.

The Performa 400 can work with any of several RAM configurations, depending on the density of the RAM chips that are mounted on the SIMMs. The Performa 400 can use only 1MB, 2MB, or 4MB RAM SIMMs. Don't purchase 256K SIMMs for use with the Performa 400. Possible RAM configurations include 4MB, 6MB, 8MB, and 10MB.

Important: Performa 400 SIMMs should be fast-paged mode 100 nanoseconds (ns) RAM access time or faster. The slower 120 ns and 150 ns SIMMs available for some other models of Macintosh computers DO NOT work in the Performa 400.

Microphone/Sound

The microphone is an electret type, omnidirectional microphone that is powered by the computer. Microphone output voltage is 4 millivolts (mV) peak-to-peak at normal speaking volume.

Note: You can also use adapters to input sound from audio equipment with line level outputs, but the line level signals must be attenuated before reaching the computer's sound input port. An attenuation of 500:1 is recommended when inputting line level signals. Appropriate attenuation cables and adapters are available from electronics stores.

System Software

At introduction, the Performa 400 ships with System Software version 7.0.1P. This version has all the functionality and power of System 7.0.1, with special enhancements for first-time users:

• Application Launcher. Provides easy location and launching of all applications while retaining full Finder access.

• Default Document Folder. Provides a default location for storing documents.

• Layer Hiding. Provides easier navigation by hiding non-active layers. Users can easily switch to the Finder or to another program from the application menu.

• At Ease. Lets adults share the Performa 400 with others, and makes it easy for children to launch applications -- while protecting the hard disk.

• Backup & Restore. An easy way to create a set of back-up disks, and to restore the contents of the hard disk if necessary.

Size and Weight

- Main Unit
  Weight: 8.8 lb. (4.0 kg)
  Height: 3.0 inches (77 mm)
  Width: 12.2 inches (310 mm)
  Depth: 15.0 inches (382 mm)
- Mouse
  Weight: 6 oz. (0.17 kg)
  Height: 1.1 inches (27.9 mm)
  Width: 2.1 inches (53.3 mm)
  Depth: 3.8 inches (96.5 mm)
- Keyboard
  Weight: 2 lb. (1 kg)
  Height: 1.8 inches (44 mm)
  Width: 16.5 inches (418 mm)
  Depth: 5.6 inches (142 mm)

Environment

- Operating temperature
  10 degrees C to 40 degrees C (50 degrees F to 104 degrees F)
- Storage temperature
  –40 degrees C to 47 degrees C (–40 degrees F to 116.6 degrees F)
- Relative humidity
  0% to 80% (noncondensing)

Altitude
  0 to 3048 m (0 to 10,000 ft.)

Article Change History:
20 Jan 93 - Revised to include 512K VRAM version and remove 256K VRAM version.
02 Nov 92 - Revised to expand display information and correct errors.
09 Nov 92 - Revised to further expand display information.

Support Information Services

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