



# Tech Info Library

## Macintosh Quadra 840AV: Specifications (7/93)

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Security: Everyone

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TOPIC -----

This article gives the technical specifications for the Macintosh Quadra 840AV computer.

DISCUSSION -----

### Microprocessor

- Motorola 68040, 32-bit architecture, 40 Mhz clock speed
- Integrated floating-point unit (FPU)
- Paged Memory Management Unit (PMMU)
- 8 KB Cache

### Digital signal processor (DSP)

- AT&T 3210 running at 66.67 Mhz
- Used for sound, speech recognition, telecommunications, and other real-time processing tasks

### Memory

- 8 MB of RAM standard (varies depending on model ordered).
- Four memory expansion slots for 60ns 72-pin SIMMs. Supported SIMM sizes are 4,8,16,and 32 MB.
- Expandable to 128 MB of RAM by using 32 MB SIMMs in each of the four SIMM slots. (Note: Dealer Installation Required).
- 256 bytes of non-volatile parameter memory (PRAM).
- 2 MB ROM (Two 512k by 16 chips).

### Disk Drives

- One Built-in Apple SuperDrive 1.4MB floppy disk drive that uses

high-density floppy disks and reads, writes, and formats Macintosh, MS-DOS, OS/2, and ProDOS disks.

- Support for three internal SCSI devices, two of which may be used for removable media such as an internal CD-ROM drive. One of the internal SCSI devices may be a full height drive or a drive array. (230 MB, 500 MB, and 1 GIG options available).
- Optional internal Apple CD-ROM drive (see above).
- Optional external SCSI hard disk drive (many capacities available).

#### Video Display

- Supports all Apple displays up to 21 inches.
- Supports some other non-Apple monitors, including VGA, SVGA, NTSC, and PAL 19" monitors.

#### Video RAM

- 1 MB VRAM expandable to 2 MB. Upgrading VRAM to 2 MB permits 24 bit display (millions) on monitors up to 16-in. and 16 bit (thousands) on 21-in. color monitor.
- Four memory expansion slots for 80ns 256K SIMMs.
- VRAM is shared between graphics window and video window.
- Maximum video window size at a color depth of 16 bits is 640 X 480.

#### Interfaces

- Three internal NuBus expansion slots, including one with a digital-audio video connector (DAV)
- One Apple Desktop Bus (ADB) port, supporting a keyboard, mouse, and other devices
- AAUI-15 Ethernet connector
- Two serial (RS-232/RS-422) ports (Printer & Modem/GeoPort).
- Two S-Video ports, one each for input and output.
- Two composite video ports, one each for input and output.
- SCSI interface for connecting up to a total of seven SCSI devices.
- Sound-out port for stereo playback from CDs or Macintosh audio applications
- Stereo sound-input port (supports 16-bit stereo audio)
- One monitor out port.

#### Networking

- Built-in Ethernet
- Serial port for AppleTalk
- Integrated GeoPort telecommunications architecture for data, fax, and voice connectivity.

#### Sound Generator

- DSP-based 16 bit stereo audio
- Sample rates: 8 Khz to 48 Khz

#### Keyboard

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- Several Apple Desktop Bus keyboards with numeric keypads available.

#### Mouse

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- Apple Desktop Bus Mouse II; mechanical tracking, optical shaft, or contact encoding.

#### Clock/Calendar

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- Custom integrated circuit with long-life lithium battery.

#### Apple PlainTalk Microphone

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- The microphone is unidirectional and optimized for use with speech recognition. (Microphone bundled with all units sold in the USA, available as a separate item outside the USA.)

#### Disability Access

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- CloseView, Easy Access, and visible beep included with system software. These built-in features and third-party options provide alternative input and output tools for people with disabilities.

#### Electrical Requirements

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- Line voltage: 100 to 240 VAC, RMS single phase, automatically configured.
- Frequency: 50 to 60 Hz, single phase
- Power: 200 watts maximum, not including monitor power

#### ADB Power Requirements

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- Maximum current draw for all ADB devices: 500 milliamps (a maximum of three Apple Desktop Bus devices is recommended)
- Mouse draws 10 milliamps.
- Keyboard draws 25 to 80 milliamps, depending on the keyboard model used.

#### Size and Weight

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##### Main unit

- Height 14.25 inches (30.6 cm)
- Width 7.75 inches (19.7 cm)
- Depth 16.0 inches (39.6 cm)
- Weight\* 24 pounds (10.9 kg)

\* Weight varies based on internal devices installed.

##### Mouse

- Height 1.3 inches (33 mm)
- Width 2.4 inches (61.7 mm)

- Depth 4.2 inches (107.3 mm)
- Weight 4 ounces (0.10 kg)

#### Operating Environment

- Operating temperature: 50 degrees to 104 degrees F  
(10 degrees to 40 degrees C)
- Storage temperature: -40 degrees to 116.6 degrees F  
(-40 degrees to 47 degrees C)
- Relative humidity: 5% to 95 non condensing
- Maximum altitude: 10,000 ft. (3,048m)

#### System Software Requirements

- Requires System 7.1 or later and the System Enabler 088.

#### Article Change History:

9 August 1993 - added VRAM SIMM specifications

30 July 1993 - added correct name of System Enabler.

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