Macintosh Quadra 650: Specifications (3/94)

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TOPIC ---

This article provides technical specifications for the Macintosh Quadra 650 computer.

DISCUSSION ---

Microprocessor

- MC68040, running at 33 MHz
- Integrated 33-MHz math coprocessor (FPU)
- Integral Paged Memory Management Unit (PMMU), and 8K-cache architecture

Memory

- Comes with 8MB of RAM on the logic board
- Expandable to 136MB of RAM by adding SIMMs to four 72-pin slots. (Doesn't support 1MB, 2MB, or 64MB 72-pin SIMMs.)
- Includes RAM disk software
- 1MB ROM
- DRAM must be 80 ns or faster.

Disk Drives

- One built-in Apple SuperDrive 1.4MB floppy disk drive
- One internal 230MB or 500MB hard disk drive
- Accommodates one 5.25-in., half-height device, such as the AppleCD 300i internal CD-ROM drive

Video Display

- Supports all Apple displays
- Works with a wide range of third-party displays including some 19-in., VGA, SVGA, NTSC, and PAL monitors

Video RAM (VRAM)

VRAM must be 80 ns or faster.

512K standard supports:
• 32,768 colors on the Macintosh 12-inch RGB Display
• 256 colors on the AppleColor High-Resolution RGB Display (13"), Macintosh Color Display (14"), and Macintosh 16-inch Color Display
• 256 shades of gray on the Macintosh 12-inch Monochrome Display
• 16 shades of gray on the Macintosh Portrait Display (15")
• 16 colors on the Macintosh 21-inch Color Display

1MB option supports:
• 32,768 colors on the Macintosh 12-inch RGB Display, AppleColor High-Resolution RGB Display (13"), Macintosh Color Display (14"), and Macintosh 16-inch Color Display
• 256 shades of gray on the Macintosh 12-inch Monochrome Display and Macintosh Portrait Display (15")
• 256 colors on the Macintosh 21-inch Color Display

System Software

Macintosh System software 7.1 with System Enabler 040 ver. 1.1

Interfaces

• Three internal NuBus expansion slots
• One 68040 processor-direct slot
• SCSI interface for connecting up to six external devices
• AAUI-15 Ethernet connector (Ethernet itself is built in)
• Two serial (RS-232/RS-422) ports
• One video port for color and monochrome displays of various sizes and resolutions
• One sound-output port for stereo playback from CDs and stereo playback of Macintosh sound
• One monaural sound-input port
• Two Apple Desktop Bus (ADB) ports for a keyboard, mouse, and other devices

Sound generator

• Custom integrated circuit that drives a stereo miniature headphone jack (22 kHz sample rate)

Keyboard and mouse

• Works with several ADB keyboards
• Apple Desktop Bus Mouse II

Clock/Calendar

• Custom integrated circuit with long-life lithium battery

Disability Access

• CloseView, Easy Access, and visible-beep soft-ware are built in. These and third-party options provide alternative input and

output devices.

Power Requirements

- Line voltage: 100 to 240 V AC, RMS, automatically configured
- Frequency: 50 to 60 Hz
- Power: 112 W maximum, not including display power

ADB power requirements

- Maximum current draw for all ADB devices: 500 mA (three ADB devices maximum recommended)
- Mouse draws 10 mA
- Keyboard draws 25 to 80 mA, depending on the model used

Size and weight

Main unit:
- Height: 6.0 in. (15.2 cm)
- Width: 13.0 in. (33.0 cm)
- Depth: 16.5 in. (41.9 cm)
- Weight: 25 lb. (11.3 kg) Varies depending on internal devices installed.

Mouse:
- Height: 1.3 in. (3.3 cm)
- Width: 2.4 in. (6.2 cm)
- Depth: 4.2 in. (10.7 cm)
- Weight: 4.0 oz. (0.10 kg)

Operating environment

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

Article Change History:
18 March 1994 - Added "Macintosh" to title.
2 November 1993 - Corrected speed of FPU (33 MHz, not 25 MHz).
24 December 1993 - Corrected power requirement (112 W, not 325 W).

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