



Macintosh Centris 650

Technical Specifications

Microprocessor

- > MC68040, running at 25-MHz clock speed; 32-bit data bus
- > Optional, integrated 25-MHz floating point unit (FPU)
- > Integral Paged Memory Management Unit (PMMU), and 8K-cache architecture

Memory

- > Comes with 4 MB of RAM on the logic board
- > Expandable to 132 MB of RAM by adding SIMMs to four 72-pin slots
- > Includes RAM disk software

Disk drives

- > One built-in Apple SuperDrive 1.4-MB floppy disk drive
- > One internal 80-, 230-, or 500-MB hard disk
- > 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 3rd party displays including some 19-in., VGA, SVGA, NTSC, and PAL monitors

Video RAM (VRAM)

- > 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

> 1,024K 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

Interfaces

- > Three internal NuBus expansion slots
- > One 68040 processor-direct slot
- > SCSI interface for connecting up to six external devices
- > AAUI-15 Ethernet connector (optional)
- > 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 software 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)

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)

*Weight will vary based on internal devices installed

Operating environment

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

Ordering Information

Macintosh Centris 650 4D/0.5V/80 w/o FPU Order No. M1207LL/A

- > Macintosh Centris 650 computer with 4 MB of RAM, 512K of video RAM for 256-color capability, 80-MB internal hard disk drive, and 1.4-MB internal Apple SuperDrive
- > Mouse
- > System software with complete setup, learning, and reference documentation
- > Limited warranty statement

Macintosh Centris 650 8D/0.5V/230/ Ethernet/FPU

Order No. M1337LL/A

- > Macintosh Centris 650 computer with 8 MB of RAM, 512K of video RAM for 256-color capability, 230-MB internal hard disk drive, 1.4-MB internal Apple SuperDrive, Ethernet, and floating point unit (FPU)
- > All software and accessories provided with the Macintosh Centris 650 4D/0.5V/80

Macintosh Centris 650 8D/1V/230/CD/ Ethernet/FPU

Order No. M1279LL/A

- > Macintosh Centris 650 computer with 8 MB of RAM, 1 MB of video RAM for 32,768-color capability, 230-MB internal hard disk drive, AppleCD 300i CD-ROM drive, 1.4-MB internal Apple SuperDrive, Ethernet, and floating point unit (FPU)
- > All software and accessories provided with the Macintosh Centris 650 4D/0.5V/80