Technical Information

Specifications for Macintosh Performa 5300CD series computers

Technical Information

Main unit

Processor

- PowerPC™ 603e processor at 100 megahertz (MHz) clock frequency

Memory

- 16 megabytes (MB) of dynamic random-access memory (DRAM) minimum, installed in one of the SIMM sockets
- Two 72-pin DRAM Single Inline Memory Module (SIMM) sockets; RAM can be expanded to 64 MB (80 nanoseconds)
- 4 MB read-only memory (ROM)
- 256 kilobytes (K) Level 2 cache memory on a 64-bit PowerPC bus
- 1 MB DRAM frame buffer on board (for video support)

WARNING To avoid damage to your computer, Apple recommends that only an Apple-certified technician install additional DRAM. Consult the service and support information that came with your Apple product for instructions on how to contact an Apple-authorized service provider or Apple for service. If you attempt to install additional DRAM yourself, any damage you may cause to your equipment will not be covered by the limited warranty on your computer. See an Apple-authorized dealer or service provider for additional information about this or any other warranty question.

Disk drives

- Apple SuperDrive 1.4 MB high-density floppy disk drive
- Internal IDE hard disk drive (1/3-height)
- Internal SCSI CD-ROM player
- A combination of up to seven internal and external SCSI devices can be used.

Video screen

- 15-inch cathode-ray tube (CRT)
- 0.28 mm dot pitch

CD-ROM Specifications

■ Disc diameter	120 millimeters (5.25 inches) and 80 mm
■ Scanning velocity	1.2–1.4 meters per second
■ Rotation speed	Varies over radius
Normal speed	~530 to 230 rpm
Double speed	~1060 to 460 rpm
Quadruple speed	~2120 to 920 rpm
■ Latency (average)	Varies over radius
Normal speed	~55 to 130 milliseconds (ms)
Double speed	~27.5 to 65 ms
Quadruple speed	~13.75 to 32.5 ms
■ Blocks per rotation	~8.4 to 19.5 variable
■ Average access time (typical)	
Normal speed	380 ms
Double speed	270 ms
Quadruple speed	200 ms

Data

■ Data capacity	656 megabytes (MB), Mode 1 748 MB, Mode 2
■ Number of blocks per disc	336,150
■ Data per block	2048 bytes, Mode 1 2336 bytes, Mode 2
■ Address description	Minutes, seconds, blocks

Audio capacity

■ Playing time	74 minutes, 42 seconds

Modes supported

- Audio CD
- CD-ROM — Modes 1 and 2
- CD-ROM XA — Mode 2, Forms 1 and 2
- CD-I — Mode 2, Forms 1 and 2
- Photo CD — Single session and multisession
- Video CD

Data streaming and transfer rates

- Blocks per second

Normal speed	75
Double speed	150
Quadruple speed	300

- User kilobytes (K) per second

Normal speed	150K, Mode 1 171.1K, Mode 2
Double speed	300K, Mode 1 342.2K, Mode 2
Quadruple speed	600K, Mode 1 684.4K, Mode 2

- SCSI bus burst rate (typical)

Asynchronous	5.0 MB per second
Synchronous	5.0 MB per second

Power consumption (typical)

+ 5 V DC	360 milliamperes (mA)
+12 V DC	620 mA

Laser

- Type: Semiconductor GaAlAs laser
- Wavelength: 790 ± 25 nanometers
- Output power: 0.2 to 0.6 milliwatts
- Beam divergence: 55

Video modes

- 640-by-480 resolution with 16-bit color at 67 Hertz (Hz) or 60 Hz (VGA)
- 800-by-600 resolution with 8-bit color at 60 Hz or 72 Hz
- 832-by-624 resolution with 8-bit color (does not support video input) at 75 Hz

With the optional external video connector kit, the Macintosh Performa 5300CD series supports video mirroring on the following external monitors at 640-by-480 resolution:

- Macintosh 13" Color Display
- Apple Color Plus 14" Display
- Macintosh Color Display
- Apple Performa Plus Display
- Apple Multiple Scan 14 Display
- Apple Multiple Scan 15 Display
- Apple Multiple Scan 17 Display
- Apple Multiple Scan 20 Display
- VGA monitors (a plug adapter may be required)

You can also use all of the Apple Multiple Scan Display and SVGA monitors for video mirroring at 800-by-600 resolution.

You can use the following external monitors for video mirroring at 832-by-624 resolution:

- Apple Multiple Scan 15 Display
- Apple Multiple Scan 17 Display
- Apple Multiple Scan 20 Display

Sound

- 16-bit monophonic sound input
- 16-bit stereophonic sound output
- Integrated microphone for monaural sound input
- Sound input port for microphone or line input (port accepts stereophonic input, but sound is combined into monophonic sound for play-through or recording)

- Two stereophonic sound output ports, level nominally 0.5 volts RMS into 39 ohms
- Internal stereo speakers, muted whenever a plug is inserted into either sound output port

Clock/calendar

- CMOS custom chip with battery

Keyboard

- Supports all Apple Desktop Bus (ADB) keyboards

Additional interfaces

- ADB port for keyboard, mouse, and other input devices using a low-speed, synchronous serial bus
- Two serial ports for printers, modems, and other serial devices
- High-performance SCSI port for a chain of up to seven hard disk drives, scanners, printers, and other devices
- LC-compatible 68030 processor-direct slot (96/114-pin)
- Communication slot for optional internal modem or Ethernet card (112-pin) (depending on the configuration of your computer, a modem or card may already be installed in this slot)
- Video-in slot for optional expansion card providing real-time video display, video capture, and overlay (60-pin) (depending on the configuration of your computer, a card may already be installed in this slot)
- Port for optional internal TV tuner card (depending on the configuration of your computer, a card may already be installed in this port)
- Optional monitor-out port for video mirroring (using external video connector kit, purchased separately)

Additional features

- Support for optional infrared remote control
- Front panel push-button controls for volume
- Front panel stereo headphone jack
- Power on and off from keyboard and optional remote control

Environment

Operating temperature

- 10° C to 40° C (50° F to 104° F)

Storage temperature

- –40° C to 47° C (–40° F to 116.6° F)

Relative humidity

- 5% to 95% noncondensing

Altitude

- Works below 3048 m (10,000 ft.)

Weight

- 21.15 kg (47 lbs)

Dimensions

- 445 mm x 383 mm x 406 mm (17.5" x 15.1" x 16")

Apple Desktop Bus power requirements

- Maximum current draw for all ADB devices is 500 milliamperes (mA)
- Mouse draws up to 10 mA
- Keyboard draws 25–80 mA (varies with model)

Note: The maximum number of ADB devices recommended in a daisy chain connected to the ADB port is three.

AC line input

- Line voltage: 100–240 volts AC, RMS, single phase, nominal
- Frequency: 50–60 hertz (Hz)
- Power consumption: 125 watts

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