Technical Information

Specifications for Macintosh Performa 6300CD series computers

Technical Information

Main unit

Processor

- PowerPC™ 603e processor at 120 megahertz (MHz) clock frequency (includes built-in floating-point unit)

Memory

- A minimum of 8 megabytes (MB) of dynamic random-access memory (DRAM) installed in one 72-pin DRAM SIMM socket.
- A second 72-pin DRAM SIMM socket; RAM can be expanded to 64 MB (80 nanoseconds)
- 4 MB of read-only memory (ROM)
- 256K Level 2 cache memory on 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 RAM. 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 RAM 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 with auto-eject
- Internal IDE hard disk drive (several capacities available)
- Internal CD-ROM player
- A combination of up to seven internal and external SCSI devices can be used.

CD-ROM specifications

- Disc diameter   120 millimeters (4.7 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

- Average latency (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

- 512 x 384 resolution with 16-bit color
- 640 x 480 resolution with 16-bit color
- 800 x 600 resolution with 8-bit color
- 832 x 624 resolution with 8-bit color (does not support video input)

Compatible monitors

- All 12", 13", and 14" Apple Macintosh monitors
- The 15", 16", 17", and 20" Apple Macintosh multiple synchronous monitors

The computer is strong enough for you to place on top of it any monitor that is 15" or smaller.

Sound

- 16-bit monophonic sound input
- 16-bit stereophonic sound output
- Sound input port for optional microphone or line input
- Two sound output ports, level nominally 0.5 volts RMS into 39 ohms
- Internal speaker, muted whenever a plug is inserted into either sound output port

Clock/calendar

- CMOS custom chip with battery

WARNING If the clock begins to lose accuracy, see your authorized Apple dealer or service provider for a battery replacement. Do not attempt to replace the clock battery yourself.

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

■ Monitor port (DB-15 connector)

■ 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)

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

The following measurements do not include the weight of the monitor.

■ 7.7 kg (17 lb.) without CD-ROM player

■ 8.6 kg (19 lb.) with CD-ROM player

Note: The weight varies depending on the options you purchase.

Dimensions

■ 320 mm x 419.5 mm x 109.5 mm (12.6" x 16.5" x 4.3")

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

■ Power consumption: 82 watts maximum, not including monitor