Power Macintosh Upgrade Card

Basics

Power Macintosh Upgrade Card

General Compatibility Information

The Power Macintosh Upgrade Card is compatible with any 68040 Macintosh computer that has a processor-direct (PDS) slot. Once installed, the Upgrade Card doubles the processing speed of the computer.

The illustrations on the following pages indicate which Macintosh computers are compatible with the Power Macintosh Upgrade Card and highlight the location of the PDS slot in each machine.

Note: The Power Macintosh Upgrade Card does not support AV functions. Customers wanting to upgrade an AV machine to a PowerPC microprocessor must purchase a PowerPC Logic Board Upgrade Kit.

Centris/Quadra 610

The Power Macintosh Card can be installed in the PDS slot of the Macintosh Centris 610/Quadra 610 as shown in the figure on the left.

Note: The Centris 610/ Quadra 610 requires an adapter to install the Power Macintosh Upgrade Card.

Processor-direct slot

(front)
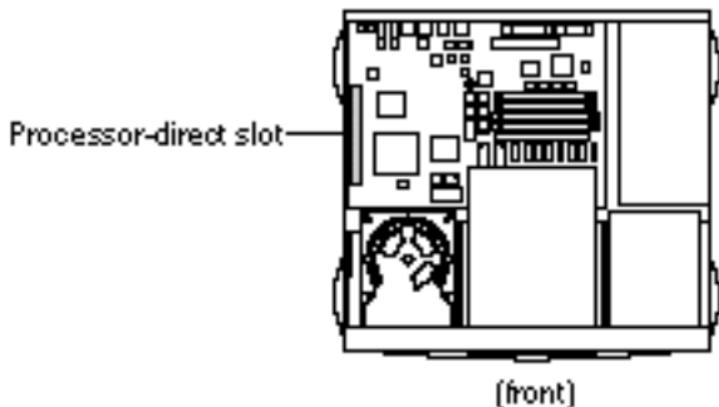
Macintosh Centris 610/Quadra 610

Centris/Quadra 650

The Power Macintosh Card can be installed in the PDS slot of the Macintosh Centris 650/Quadra 650 as shown at left.

Processor-direct slot ─────

(front)
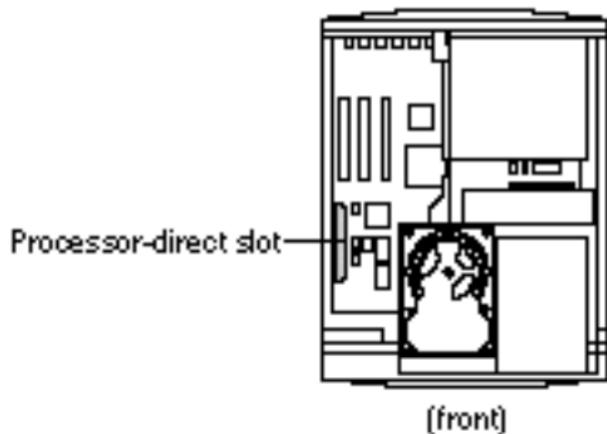
Macintosh Centris 650/Quadra 650

Quadra 700

The Power Macintosh Card can be installed in the PDS slot of the Macintosh Quadra 700 as shown at left.

(front)

Processor-direct slot
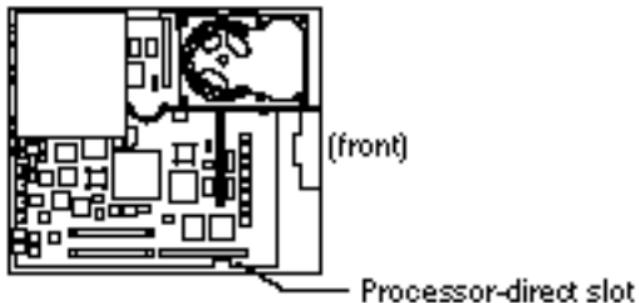
Macintosh Quadra 700

Quadra 800

The Power Macintosh Card can be installed in the PDS slot of the Macintosh Quadra 800 as shown at left.

(front)

Processor-direct slot

Macintosh Quadra 800
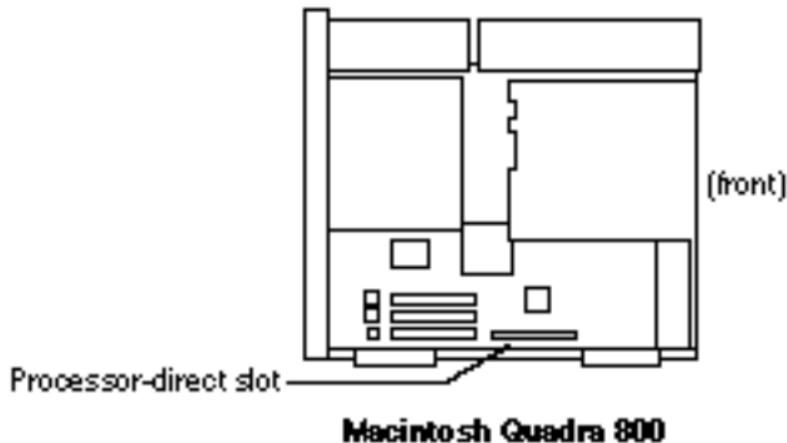
Quadra 900/950

The Power Macintosh Card can be installed in the PDS slot of the Macintosh Quadra 900/950 as shown at left.

(front)

Processor-direct slot
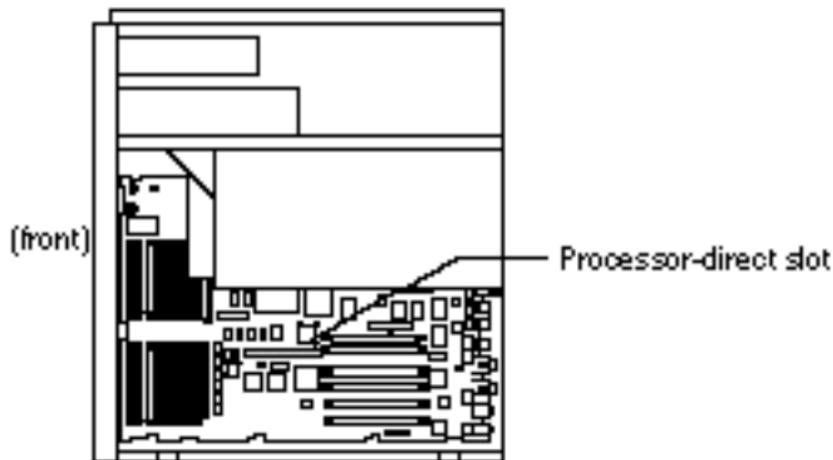
Macintosh Quadra 900/Quadra 950

Illustrated View

The graphic at left shows the Power Macintosh Card.
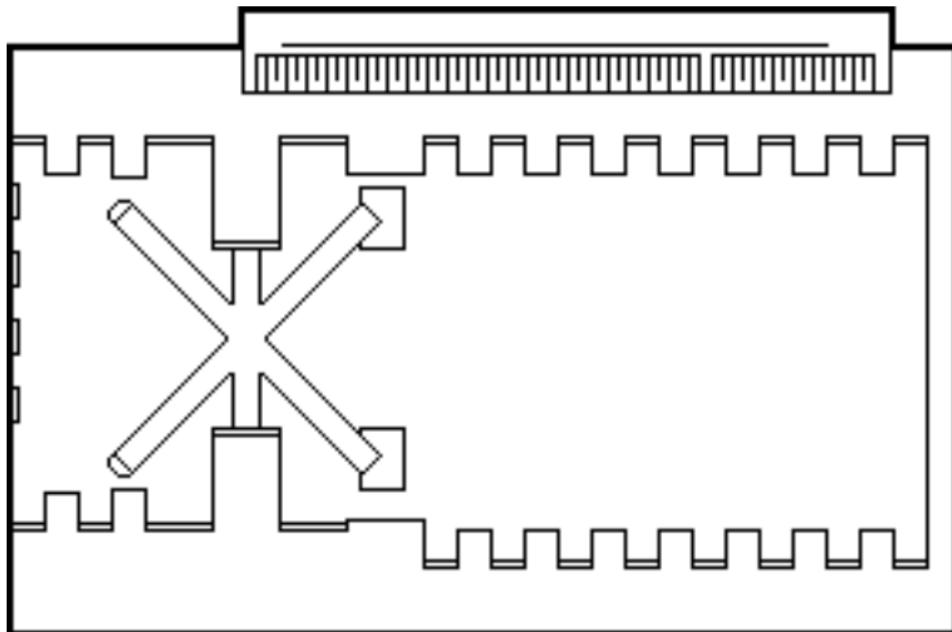
Installation Procedures

The graphic at left illustrates the procedure for installing the Power Macintosh card in the Macintosh Centris 650/ Quadra 650.

Note: You must remove the expansion port cover from the computer's rear panel.

Connector

Processor-direct slot
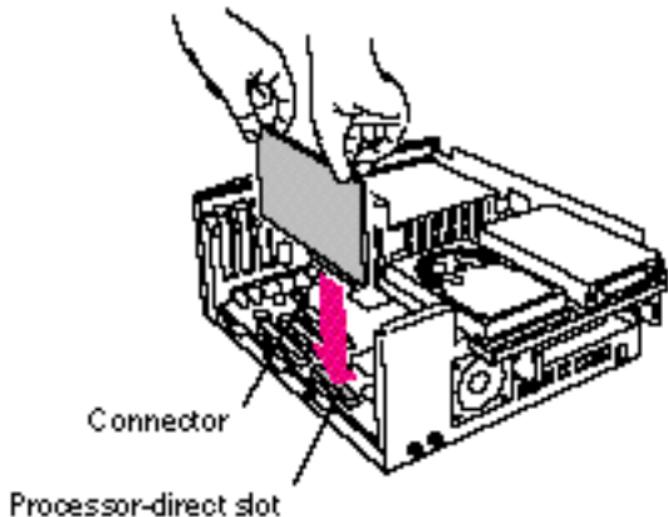
Macintosh Centris 650/Quadra 650

The graphic at left illustrates the procedure for installing the Power Macintosh card in the Macintosh Quadra 700.

Note: You must remove the expansion port cover from the computer's rear panel.

Connector

Processor-direct slot
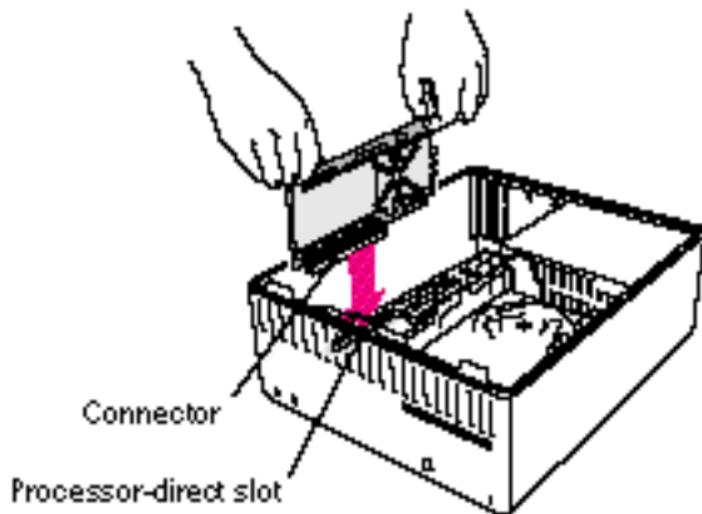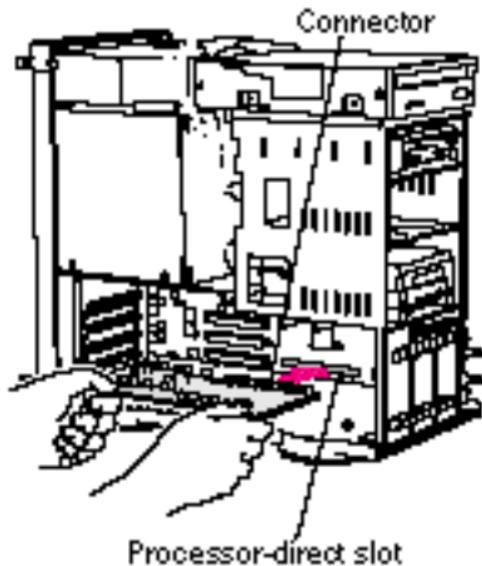
Macintosh Quadra 700

The graphic at left illus-
trates the procedure for
installing the Power
Macintosh card in the
Macintosh Quadra 800.

Note: You must remove the
expansion port cover from
the computer's rear panel.

Connector

Processor-direct slot

Macintosh Quadra 800

Processor-direct slot   Connector
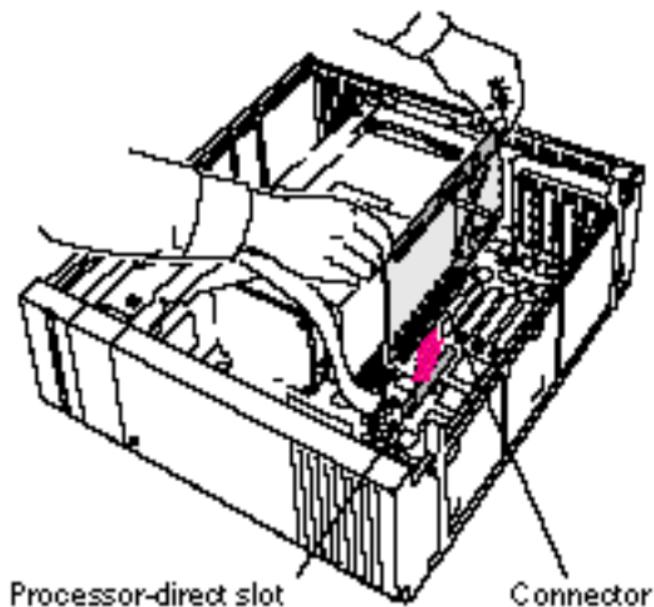
Macintosh Quadra 900/Quadra 950

The graphic at left illustrates the procedure for installing the Power Macintosh card in the Macintosh Quadra 900/950.

Note: You must remove the expansion port cover from the computer's rear panel.

Specifications

Power Macintosh Upgrade Card

Power Macintosh Upgrade Card

PowerPC 601 RISC Microprocessor

Power Macintosh card increases computer speeds as follows:

Computer	040 Frequency	601 Frequency
Quadra 950	33 MHz	66 MHz
Quadra 900	25 MHz	50 MHz
Quadra 800	33 MHz	66 MHz
Quadra 700	25 MHz	50 MHz
Quadra 650	33 MHz	66 MHz
Quadra 610	25 MHz	50 MHz
Centris 650	25 MHz	50 MHz
Centris 610	20 MHz	40 MHz

System Software   Requires system software version 7.1.2 or later

DRAM   System you are upgrading with the Power Macintosh Upgrade Card
            must have a minimum of 8 MB of RAM

ROM   4 MB of ROM

SRAM   1 MB of cache

Environmental

Operating Temperature:	50–104° F (10° to 40° C)
Relative Humidity:	5–95% non-condensing
Altitude:	0–10,000 ft. (0–3048 m)

Troubleshooting

Power Macintosh Upgrade Card

General

The Symptom Charts included in this chapter will help you diagnose specific symptoms related to your product. Because cures are listed on the charts in the order of most likely solution, try the first cure first. Verify whether or not the product continues to exhibit the symptom. If the symptom persists, try the next cure. (Note: If you have replaced a module, reinstall the original module before you proceed to the next cure.)

For additional assistance, contact Apple Technical Support.

Symptom Charts

General Problems

Computer won't start

1. Reseat Power Macintosh Upgrade Card.
2. Verify that computer has at least 8 MB of RAM installed.
3. Replace Power Macintosh Upgrade Card.

Can't open program, or program quits unexpectedly

1. Quit other programs, or restart computer.
2. Allocate more memory for the program via the program's Info window.
3. Turn on virtual memory via the Memory control panel.
4. Turn off Power Macintosh Upgrade Card via the control panel.
5. Reinstall system software.
6. Install additional RAM.

Application doesn't work properly; system error messages	1 If using an older application, turn off Modern Memory Manager via the Memory control panel and restart the computer.
	2 Before running the application, turn off the Power Macintosh Upgrade card via the control panel. Choose Shut Down from the Special menu. Wait 10 seconds and switch on the computer.
Application runs slower than before card was installed	If application was not designed for the Power Macintosh, then before running the application, turn off the Power Macintosh Upgrade card via the control panel. Choose Shut Down from the Special menu. Wait 10 seconds and switch on the computer.

System runs out of memory when running Power Macintosh applications	1 Turn on virtual memory via the Memory control panel. (Hint: set the virtual memory size to the size of the available built-in memory plus 1.) 2 Install additional RAM.
Card is turned on in control panel, but computer starts up with card turned off	After turning on the card in the control panel, make sure you choose Shut Down (not Restart) to turn off computer completely before restarting it.
Mouse tracking on screen is erratic	1 Turn off virtual memory via the Memory control panel. 2 Install additional RAM.

Computer behaves strangely or has problems starting up

Hold down the Command/Option/P/R keys simultaneously while computer is starting up to reset PRAM. Be sure to turn back on Power Macintosh Upgrade card and reset date, time, monitors, and file sharing.