n April 22, Apple Computer introduced its long awaited "speed bump" Power Macintosh and significantly raised the performance bar of its mid-range and high-end systems. The company also announced the availability of 120MHz and 132MHz PowerPC 604 Processor Upgrade Cards, a new 7600 Logic Board Upgrade and two new Pentium-class PCI-based coprocessor cards.

porting a speedy 120 MHz PowerPC 601 processor, the new 7200/120 replaces both of its slower predecessors, the 7200/75 and 7200/90. The 7200/120 offers either 8 or 16MB of RAM (expandable to 256MB), 2MB of VRAM (expandable to 4MB) and an optional 256k Level 2 cache. Also included is a 1.2GB hard drive, a quad-speed CD-ROM drive, three PCI slots and built-in Ethernet ports

(for 10BaseT and AAUI-15) and 16-bit stereo sound input and output. Software includes Mac OS 7.5.3 and the Apple Internet Connection Kit. (For more configuration information, please see New Power Macintosh QuickCharts in this issue.)

Like earlier 7200 models, the 7200/120 is equipped with a surface-mounted CPU rather than a processor daughter card configuration found in its more powerful siblings. Upgrading the 7200's CPU thus requires a logic board swap. Apple will soon begin offering all 7200 owners the option of upgrading to the more flexible 7600 for \$1,299, plus the cost of a processor card (please see "Upgrade Options," below).

Apple is also offering configurations of the 7200/120 equipped with its new PC compatibility card with either a 586 or Pentium capability (please see "PC Compatibility Cards," below).

The new Power Macintosh 7200/120 is available immediately. The PC Compatibility models are expected in June.

he new 7600/120 replaces the popular 7500, offering 120MHz PowerPC 604 performance in a desktop chassis. The 7600/120 offers 16MB of AM (expandable to 512MB), 2MB of VRAM (expandable to 512MB), 2MB of VRAM (expandable to 4MB) and a 256k Level 2 cache. Also included is a 1.2GB hard drive, a quad-speed CD-ROM drive, three PCI slots and built-in Ethernet ports (for 10BaseT and AAUI-15). Software includes Mac OS 7.5.3 and the Apple Internet Connection Kit. (For more configuration information, please see New Power Macintosh QuickCharts in this issue.)

Like its predecessor, the 7600/120 features composite and S-video input ports, 16-bit stereo sound input and output and a DAV (digital audio/video) connector. The 7600's processor is mounted on a Processor Daughter Card which may be swapped for faster CPU cards as they are made available (up to 200MHz).

All configurations of the 7600 include Mac OS 7.5.3, QuickTime Conferencing software and the Apple Internet Connection Kit. A logic board upgrade for 7500 owners is available (please see "Upgrade Options," below).

The Power Mac 7600/120 is available immediately in most markets at an ApplePrice of \$2,999 US.

pple's tower Macintoshes also get a hefty speed boost. The Power Macintosh 8500 is now available with either a 132MHz or 150MHz PowerPC 604 processor, while the 9500 series gets a speedy 150MHz 604 of its own. (For more configuration information, please see New Power Macintosh QuickCharts in this issue.)

All models should be available immediately at the following ApplePrices:

Il three configurations come with the Apple Internet Connection Kit and have the capability—via their Processor Upgrade Slots—to handle clock speeds of 200MHz.

pple delivered two long awaited Logic Board Upgrades in the April 22 roll-out that will make many Power Macintosh owners happy—and some Quadra owners VERY happy.

Power Macintosh 7200 owners will be able to upgrade to the new Power Macintosh 7600/120. Owners of the 800 series tower, including the Macintosh Quadra 800, the Quadra 840 AV and the Power Macintosh 8100 series, will be able to upgrade to the new 8500 series. (Power Macintosh 7500 owners can get 604 performance with a Daughter Card upgrade—see "Daughter Card of your dreams," below).

Note: These Logic Board Upgrades require the separate purchase of a Processor Upgrade Card separately. For more information please see our companion story "Daughter Card of your dreams".

The Power Mac 7600 Logic Board Upgrade includes a 256K level II cache, DAV connector and composite and S-Video input ports. RAM DIMMs and VRAM carry over from the old 7200 logic board. The Processor Upgrade Expansion Slot built into this new logic board can handle CPU speeds of up to 200 MHz for future expansion. This upgrade is expected in May for a US ApplePrice of \$1,299. (Processor Card is extra—see "Daughter Card of your dreams," below).

Earlier 800 tower owners should be delirious over the opportunity to move up to a PCI capable Macintosh with PowerPC 604 performance. The 8500 Logic Board Upgrade is expected in May for a US Apple Price of \$1,799 (Processor Card is extra—see "Daughter Card of your dreams," below). It includes video input and output ports, a 256K level II cache and all the other 8500 goodies. RAM will NOT carry over from previous models because the 8500 requires DIMM chips rather than the several varieties of SIMMs in the 800/840AV and the 8100.

pple took advantage of the flexibility in its new PCI Power Macintosh line with the delivery of two Macintosh Processor Upgrade Cards.

The new Processor Upgrade Card fits into the processor upgrade slot built into the 7500, 8500 and 9500 series Macs and bumps the clock speed to either 120MHz or 132MHz PowerPC 604 performance.

The Power Macintosh Processor Upgrades Cards are expected in May at a price of \$599 US for the 120MHz model and \$899 for the 132MHz model.

he dual platform computer made strides last month when Apple debuted two new PCI-based PC Compatibility Cards.

Both 100MHz cards are expected in June and will offer PC Compatibility to run Windows 3.1, Windows NT, and Windows 95. (The cards ship only with MS DOS 6.22, and it is up to the customer to purchase a flavor of Windows.) A 100MHz 586 card with 8MB RAM (expandable to 64MB) and a 128k L2 cache is expected to be ApplePriced at \$799 US. A 100MHz Pentium equipped card with 8MB of RAM (expandable to 72MB) and a 256k L2 cache will be ApplePriced at \$1,049 US. Both cards feature built-in PC Game Port and 16-bit Sound Blaster Pro support.

Users of the new cards should be able to connect to a variety of networks including Novell Network SPX/IPX, TCP/IP and NETBEUI in either Windows or DOS environments via the built-in Ethernet connector and ODI and NDIS 2.0 drivers. Apple claims that Mac OS and Windows networks should be able to be maintained simultaneously.

hat has been rumored for many months was nnounced as reality on May 6: Apple Computer has licensed the Mac OS to International Business Machines Corp., otherwise known as IBM.

The agreement, in addition to Apple's licensing agreement with Motorola announced in February, should result in a bigger market for the Macintosh platform.

IBM (http://www.ibm.com) will be able to sublicense the Mac OS to any systems manufacturer building systems with IBM PowerPC microprocessors.

As a result, IBM and its sub-licensees will be able to develop and ship the Mac OS with various hardware systems, based on the Power Macintosh architecture or on the PowerPC Platform specification (CHRP).

Apple will certify all systems sold with the Mac OS.

First in line to sub-license the Mac OS from IBM are Datatech (DTK) Enterprises Co., LTD and Tatung Co., manufacturers of a range of computer equipment DTK is based in the U.S. with operations in China, Taiwan and Europe. Tatung is based in Taipei, Taiwan.

The licensing agreement includes versions 7.5.X of the Mac OS, access to the next major release of the Mac OS, and access to the 16 local language versions of the Mac OS that Apple has so far approved for licensing.

The pact is a giant step in Apple's aggressive push to license its Macintosh operating system, one of the key goals set by Gil Amelio, Apple's new chief executive, when he took over the troubled computer maker in early February. Next week, Amelio is expected to unveil his vision for Apple's future.

IBM and Apple in 1991 agreed to share technology in hopes of taking control of the industry as it moves to a new generation of devices, but little progress was made initially.

Working with Motorola, IBM and Apple co-developed a new microprocessor, called Power PC, and last November agreed on a common design for a new personal computer that uses the chip. The new computer would run both Macintosh and OS/2 programs but it won't go on sale until next year at least.

Last September, Apple and IBM executives reportedly met twice in Chicago to discuss a merger but neither company would confirm rumors of the talks.

In February, just weeks after Amelio took over at CEO at Apple, the company reached the licensing agreement with Motorola.

Apple began in Cupertino, Calif., on April 1, 1976, and was incorporated a year later. In 1977, it produced the Apple II, the first commercially successful personal computer. Apple's sales skyrocketed, hitting \$1 billion in 1982.

In early 1984 it introduced the Mac, which featured a "graphical user interface," allowing users to click on symbols and options in menus rather than typing complex commands. The Mac set an industry standard with superior ease of use and such features as sound and video.

But even the most powerful can't ride high forever: The company's low point came earlier this year, when Apple reported a \$69 million loss for the October-December quarter and saw its market share continue to erode. Its second guarter losses were close to \$700 million.