Why PowerPC represents an incredible jump.

PowerPC represents and incredible jump in power because it will run at speeds 3-5 times faster than a Quadra. This is the largest performance jump we have ever seen in Macintosh history. PowerPC will open the doors to new technologies such as full motion video, 3D modeling, voice recognition and many other new exciting technologies.

PowerPC is a complete change in the Macintosh architecture. Almost every aspect will change. Even system software will change to take advantage of the new power.
The new Architecture

Besides using a new processor, Apple will most likely abandon Nubus within two years because it has recently teamed up with Intel and many other companies to form a new standard called PCI. This standard will be able to "pump" data through at speeds of 10-12 MB per second. This is about the speed of our top notch hard drives. Origionally, Apple wanted to use a technology called Token Ring but they were forced by the popularity of PCI to cancel their plans. Token Ring could have achieved speeds much greater but Apple wants to mainstream their products which requires compatability.

Apple announces it will support PCI bus

ATLANTA, Georgia--May 26, 1993--Apple Computer, Inc. announced today it plans to support the Peripheral Component Interconnect (PCI) Local Bus as the expansion bus standard for future Apple Macintosh desktop personal computers. Apple has joined the PCI Special Interest Group and will play a key role in maintaining and developing the PCI specification.

Expansion buses provide a standard for data transfer between a computer and expansion cards, which enhance computer capabilities such as networking, video, graphics and acceleration. The PCI Local Bus is a high-performance local bus architecture designed to eliminate bottlenecks between a computer's processor and its high bandwidth peripherals, such as networking, video and graphics.

The PCI Local Bus is an open, industry-standard peripheral bus that was developed by more than 150 leading companies.

Apple is embracing PCI expansion buses for future Macintosh computers in order to offer its customers the higher performance levels required as video, graphics, multimedia and other data-intensive kinds of computing grow in popularity.

The PCI Special Interest Group is responsible for setting technical direction for existing and future versions of the PCI Local Bus Specification. Initially, Apple will be a non-voting member of the PCI Steering Committee. It is Apple's goal to become a voting member during the next balloting period.

"Apple is taking a leading role in supporting and developing industry standards," said Eric Harslem, vice president of desktop Macintosh products for Apple Computer, Inc. "We want to join in supporting PCI as an industry standard, and share with the PCI community our expectations for future customer requirements and their implications to graphics, video, input/output, and bus technologies."

"Apple’s participation in the PCI Steering Committee will ensure that PCI will become the de facto industry standard local bus," said Mike Bailey, PCI Steering Committee Chairperson. "With Apple’s support of PCI, we are gaining momentum for a unified bus strategy that connects the PC industry by supporting different CPUs, architectures and platforms."

Apple’s current mid-range to high-end desktop personal computers use NuBus expansion bus technology. The company will continue to support NuBus and build systems based on the technology. Reinforcing Apple's commitment to excellent compatibility with Macintosh on PowerPC, the first RISC-based Macintosh systems will also support NuBus. Apple anticipates that later PowerPC-based systems will include PCI expansion.

"Over time, we believe PCI will provide a unified bus strategy that will benefit third-party developers and customers alike," added Harslem.