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Pippin: Questions and Answers (Part 1 of 2) (1/96)

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TOPIC ----------

This article is part one of answers to questions concerning the Apple Pippin.

DISCUSSION ----------

Question: What is Pippin?

Answer: Pippin is a multimedia player platform derived from Apple’s second generation Power Macintosh hardware and system software. It is designed as a playback tool for multimedia CD-ROMs initially created for the Macintosh and/or IBM compatible PC and at a low cost.

Pippin is directed to the home market (and probably schools) as an intergral part of the consumer AV stereo and TV environment. Its primary display will be a TV screen. It uses one of the most advanced RISC microprocessor architectures in the industry today, PowerPC. It is derived from both the hardware and software architectures of the Macintosh. It will provide developers with an easy way to take their investment in personal computer CD-ROM content and make it available to a wider audience in a more natural environment associated with entertainment and fun.

Question: What events led to the introduction of Pippin?

Answer: The percentage of personal computers having CD-ROM drives, is rapidly approaching 100% for the Macintosh. In 1994, for the first time, the worldwide sales of personal computers (from all manufacturers) into the home exceeded 10M. It was also the first year in which more personal computers sold into the home went those already having a personal computer.

More than 60% of the households in the U.S. have combined gross income less than $40,000 per year. While most of these homes have one or more television sets, it

is expected that even by 1997 the number of homes in this category with a personal computer will be well below 10%. The high barrier price of personal computers is limiting its penetration into homes around the world. Multimedia hardware and content sales will be limited in the years to come, just as many new title publishers are entering the industry. It is essential to the long-term health of the CD-ROM title industry that the growth it is experiencing now, continue into the future.

Apple realized that for multimedia technology to reach the home, the entry price must be reduced substantially. A low entry price is still not enough. The platform must be distributed by many companies which collectively can reach a much larger audience than one company alone. Apple has chosen to make the Pippin platform available under license to manufacturers interested in building and selling their own version.

Question: How will Pippin be positioned in the market?

Answer: If all a family wants is the least expensive video game player and does not want to be able to use their purchase for other uses they will probably be better off buying the upcoming new platforms being introduced by the video game giants Nintendo and Sega. Other new platforms such as Atari Jaguar, Sony Playstation and 3DO are all video game players and cannot be useful for much else. It remains to be seen how these platforms will hold up against the two mainstay players, Nintendo and Sega.

Apple believes that families are looking for more than video game players today. Certainly they want to be able to play their favorite games, but they also want to communicate, learn, play interactive music, access information and much more. Pippin provides them this capability. In addition it provides them a high level of compatibility with a mainstream personal computer technology. This will provide them the knowledge that their investment in CD-ROM titles and experience will not go to waste.

Question: What is the difference between a Macintosh and Pippin?

Answer: Pippin is derived from the second generation of Power Macintosh computers. Much of its system software code, integrated circuit cells and integrated circuits come directly from the Macintosh world. Pippin is being designed for optimal playback. It operates from a run-time version of the MacOS on less memory with more dedicated functions. While it is possible to add mass storage devices in the aftermarket, Pippin will ship with only a readable CD-ROM mechanism as a mass storage device.

Question: If there is no hard disk, how is the system software distributed?

Answer: The system software will be incorporated into the hardware separate from the CD-ROM player. Different Pippin system software releases will be available from which the developer to choose. Each will support a different functionality set. The end customer will not know or care which version of the operating system is bundled with their CD-ROM title. The Pippin title will support successive generations of titles always improving in performance and

functionality.

Question: Why is Apple doing this?

Answer: This is a logical extension of our existing technology. It capitalizes on Apple’s expertise in multimedia, RISC and ease-of-use....using resources and technology that are already in place today, not an entirely new product or market concept. The architecture and business model for Pippin are designed to provide this wealth of content with a means for reaching an audience substantially larger than that which exists today. For Apple this is a strategic thrust to expand its business beyond the sales of personal computers and at the same time put the multimedia industry, currently in its infancy, into high gear. This is part of Apple's on-going strategy to expand the reach of Macintosh technology into new markets.

Question: Why now?

Answer: There were two key elements missing that prevented Apple from launching Pippin earlier. The first is technology. QuickTime has progressed as an industry standard and has developed increasingly in sophistication to the point now that it is an extremely compelling technology. In addition, Apple had to make the transition to RISC microprocessor technology. To reach the performance necessary for game and multimedia playback RISC technology is a must. Apple has successfully made the transition to RISC.

The second major reason why Apple has waited until now is market maturity. The year 1994 will be known within the industry as the year in which Multimedia became mainstream. CD-ROM titles are being reviewed in the New York Times Book Review section. Hit titles such as Myst, Rebel Assault, Star Trek Interactive Manual, Doom, etc. are hitting distribution volumes ranging between 200,000 and 1,000,000 units. The momentum for creating the content is now in place. Pippin is designed to take this momentum of content on the personal computer and distribute in much greater volumes throughout the world.

Question: How did Apple choose the name Pippin?

Answer: Pippin is a type of apple. It is smaller than a mcintosh apple. Apple chose this name because it would be easily associated with Apple, Computer Inc. Moreover, Apple believes that over time Pippin will take many forms including home telecommunication devices, game players and much more. Hence, Apple did not want to choose a name that would be specific for a certain market space as it will certainly appeal to many types of consumers and be shipped in a variety of forms from many manufacturers.

Question: What type of CD-ROM titles will work on Pippin?

Answer: Apple is integrating hardware technologies which improve the "on-screen" appearance of text on a TV screen. While the text will never be as clear as that on a computer monitor it is substantially better than anything in the video game

industry today. This was done because Apple intends to encourage a wide diversity of titles to be available on Pippin, including reference titles which contain a great deal of textual information. We expect action games, adventure games, simulation, role-playing games, puzzles, reference, education, learning, interactive music and more.

Pippin is not expected to be strong in document creation or modification. Computer applications are not well suited to systems without a lot of memory. Simple word processors, simple spread sheets, tax preparation programs, financial management tools, and children's authoring tools should work well on a Pippin as long as there is a rewritable mass storage device that can store data files.

Customers

Question: What is in this for the customer?

Answer: For the first time, the customer will be able to "buy-in" to the era of multimedia and cyberspace at a low entry ticket price. The customer will be able to expand the entry system through aftermarket add-ons, accessing some personal computing capabilities if they choose. They will be able to buy the unit from a variety of companies in different configurations in a multitude of distribution channels. Their Pippins will integrate within their audio-visual consumer electronics world. In addition, it will be able to communicate and transfer files with their personal computers should they have them in their home. Finally, the Pippins with the addition of a GeoPort adapter or external modem will permit the customers to communicate over cyberspace.

Question: Will Pippin reduce the system configuration problems faced in the personal computer market?

Answer: Pippin is designed to behave like an audio CD Player. The customer inserts the CD-ROM into the player and it automatically boots off the CD. There are no files to configure and no drivers to conflict over system resources.

Question: Can customers upgrade their Pippins?

Answer: Pippin is the most expandable device in its category. The consumer can add system memory easily using plastic DRAM memory cards. In addition, through the PCI-like expansion, manufacturers will be able to add other devices, including mass storage devices, graphics accelerators, compression decoders and more. Thus, by purchasing easy to add/configure add-ons, the customers will be able to retain their investment into the future.

Question: Will customers upgrade Pippin to a Macintosh?

Answer: Pippin cannot be made into a Macintosh. Without the availability of a high speed read/write mass storage device customers will find it difficult (at

best) to utilize current "standard" personal computer applications. It would not be unfair to say, however, that Apple would like Pippin customers to also be Macintosh customers. The advantage for the customer is that their investment in titles can be played on both machines.

Question: Wouldn’t customers rather view their titles on a computer screen?

Answer: This actually depends upon the customer and the title. The vast majority of the worldwide market doesn’t own a computer monitor and is unlikely to own one any time soon. This permits a larger number of people to interact with the screen simultaneously. This also enables customers to integrate their Pippin with their home entertainment environment.

If customers prefer, they will be able to attach a 640x480 VGA monitor to Pippin.

For additional information on the Pippin, see "Pippin: Questions and Answers (Part 2 of 2)" and "Pippin: Technical Specifications."

Support Information Services

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