

advantage of new technologies. This is why they used the PowerPC processor and built the standard MPEG technology into the system as well as PCMCIA technology.

M2 Performance

The performance of the M2 was designed to leapfrog the competition of the Sega Saturn and the Sony Playstation. Originally the 3DO design team wanted to beat the Playstation, they began their design to be at least 5 times faster. When the Playstation shipped, they discovered the M2 was 7 to 10 times the Playstation performance.

While Playstation offers 60,000 to 90 thousand polygons per second, M2 is capable of a peak rate of over a million polygons per second. M2 is capable of a sustained rate of 700,000 polygons per second. The potential for the worlds created by the system are extremely great.

The second criteria was to deliver the best quality on-screen graphics and digital video experience available. With M2, the consumer does not just see fast polygons, but improved graphics.

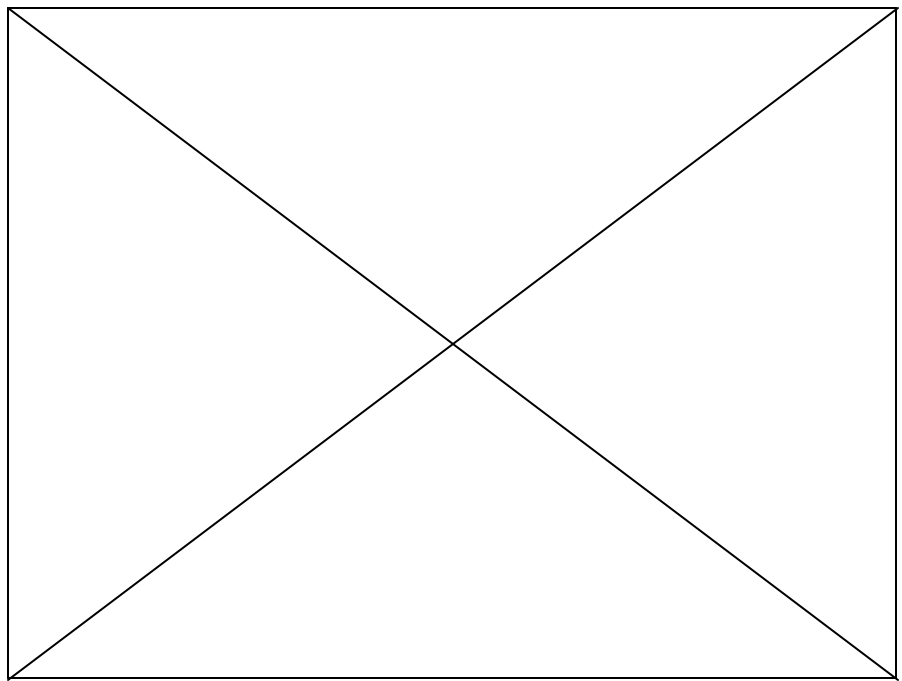
The computer graphics industry has greatly improved their ability to create extensive scenes and characters. However, this effort once placed in the current general level of video games is lost. M2 is designed to improve the graphics and deliver picture crisp graphics and movie quality playback.

M2 Features.

Filtering, MIP Mapping, Perspective Correction, alpha channel support, and Z-Buffering are all new features to the games console market. The introduction of these features in a single chip design means that 3DO did not only lower costs, but they significantly raised the potential of their platform.

M2 Product Releases

Almost as important as how well the hardware will perform is how fast will the software be created. The 3DO Company created a multi-stage



M2 Does The Work

The leaves on the palm tree are texture mapped and their background is transparent through alpha channel support. With the Z-buffering technique able to decide which images require rendering and which do not, M2 not only makes programming and art design easier, it allows the designers to make the games much more involved and faster.

program to bring software developers up to speed. The initial launch of products will occur over a ninety day period. The arcade ports will be available on the day of launch. There is a strong possibility some of these titles will be bundled with the hardware at the launch.

The dream team, those developers who have signed on early to supply product and titles, will have an initial 8-10 titles sometime in the first 90 days. In the first quarter there will be approximately 12 to 15 M2 titles.

To accomplish this, a select group of developers are already working on M2 titles with early M2 development tools. This summer, the number of developers will grow by an additional 25 to 30 developers called the Alpha group. They should have additional software ready by the second and early third quarter after launch.

The 3DO Company will incorporate the remainder of the development community with the final version of the development system in the Fall of 1995. These companies should begin supplying product by the third quarter

or fourth quarter after launch. By the Christmas of 1996, The 3DO Company expects to be at a title delivery rate similar to the rate the current 3DO system experiences today (or even greater). This is important because they feel they have to keep delivering a sustained rate of products to the consumer base. Nothing could be more damaging than to see a drop off of titles coming to market.

Conclusions

The M2 is a distinct advantage for 3DO users. Rarely has a company provided this level of improvement as an upgrade to an existing system. The backward compatibility of M2, its ability to upgrade the current 3DO player for M2 peripheral support, and its long list of features unique to the M2 3DO system provide 3DO developers and users with an unbelievable opportunity in new games and experiences.

Sincerely,

Don Hicks
Managing Editor

Editorial

What happened to May?

For dedicated **3** readers, this issue is a little more than odd. The issue before this was March/April, so it is natural to assume this issue should be May/June. Had all the factors required in this issue been normal, we would have been able to do it, but they were not.

The 3DO Company invited **3** to see a presentation of the capabilities of M2. Unfortunately, we were not notified until late March and the earliest we could schedule a visit was April 11. This was exactly one month before E3. We were not allowed to discuss the M2 information until after the May 11, 1995 E3 introduction. Reading the nondisclosure agreement, it was apparent that the magazines could not even be shipped until that date. While this was fine for the M2 information, it would mean that we would be two months late in getting E3 information to our readers.

The Winter CES coverage in our March/April issue has received high praise from many of our readers. Apparently the **3** staff was able to track down new product information more completely than any other source. **3** Magazine is dedicated to the 3DO platform and it is our obligation to discover everything we can. The only negative in our Winter CES coverage was that the issue was not available until two months after the show (which took place the first week of January).

It is difficult with a bi-monthly magazine to always time the release of an issue with the latest information. We do our best by utilizing short lead times, tight delivery and printing schedules, and working without sleep. But, it is not always enough.

The decision was made (right or wrong) that we would release the next issue of **3** to press after E3 so the 3DO community could get the latest information on new products and Summer releases. Our printer would

not be able to release the issue before early June and would not be in distribution until mid June. We were forced to change to a June/July issue.

One other concern in this issue is a smaller page count. Last issue we provided a 64-page magazine while this issue is 48-pages. Summer is always a difficult time in the magazine industry--especially with games and computers. Advertisers traditionally pull back their budgets in order to gear up for the Fall and Winter seasons. With half of the advertising pages withheld, we were forced to make a few temporary changes. The only thing we trust you will not find changed is the variety and depth of the enclosed articles.

Is M2 Really a Good Idea?

There has been a lot of hoopla about the new systems, 64-bit platforms, and the next generation of software available. But when all is said and done, is it worth anything? Will we see a dramatic increase in the entertainment factor of titles or are we just being fooled? Is this just an additional way for the manufacturers and the software developers to make more money on us?

According to Janet Strauss of 3DO, there were 169 available 3DO titles, that is individual 3DO titles, available in May. 3DO expects that number to increase dramatically over the next six months. Also according to 3DO, each user (on average) buys 7 to 8 titles. Software developers are now producing 50,000 to 100,000 copies of each 3DO title at introduction.

That is a lot of software and a sizeable investment for both 3DO users and developers. This is why the idea of backward compatibility is so important. While the new titles which are created with M2 features will not work in older machines, older, non-M2 3DO titles will be fully functional on an

M2 system. This also includes peripherals, controllers and other devices.

Apparently, The 3DO Company was extremely concerned with their users' investment in the system. This is unusual for an entertainment company. Sharon Grimshaw, Manager, Development Products Group of The 3DO Company stated, "All upgraded capabilities will be available whether you buy a stand-alone M2 unit in the future or a 3DO system today and an M2 upgrade when it is available. This includes all control port features and new ways to connect and expand the functionality of the product."

What is also exciting is what it can do. The M2 technology will support PCMCIA card architecture for use with peripherals such as modems and a micro card architecture will be used for game save.

Cost Reductions

One of the main focuses on the M2 development was cost reduction. The 3DO team searched for ways to use existing technology and hardware in their unique applications. They were able to design a CD-ROM that was based on current double speed models, but without much of the hardware and circuitry that was not required (or redundant in the 3DO M2 chip design).

The reason for this is clear. Everyone believes the next game platform battle will not only be fought on features but also on price. This is a pretty clear bet since all previous battles have been fought on the same grounds. It would not help the 3DO to be ahead on design but so expensive that they could not compete.

They looked for ways to incorporate industry standard technologies into the M2 design in order to ride the cost curve downward as the overall computer and gaming industry take