

Print Screen

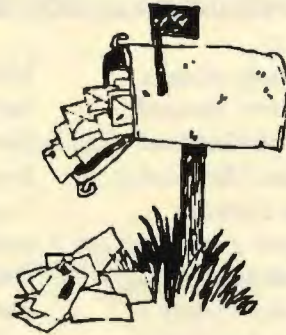
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A Non-Profit / Educational Organization



✓ *General Meeting - June 05th @ 7:30 pm - MediaCity* 

<http://www.lucasarts.com>

The Dig: An Epic Science Fiction Adventure

Combine LucasArts' expertise in crafting compelling interactive entertainment with inspiration from Steven Spielberg, special effects from Industrial Light & Magic and dialogue from award-winning science fiction writer, Orson Scott Card, and you have what amounts to one of the most dramatic stories ever told on CD-ROM-*The Dig*.

LucasArts Entertainment Company's deep space adventure about a team of space explorers who become stranded on an alien planet, will release for PC CD-ROM in the fall of 1995.

Entertainment Experts Collaborate Armed with Steven Spielberg's vision of a game that conveyed the alien feel of *Forbidden Planet* and the fallible humanity of *The Treasure of the Sierra Madre*, *The Dig* project leader Sean Clark created a story with depth, complexity and significance. "It's been an incredible experience to take an idea from Steven and then craft a game of this magnitude around it," said Clark. "Since Steven is an avid gamer, my team and I made story and gameplay our top priorities." LucasArts and Industrial Light & Magic artists combined their technologies to generate several special effects for the game. *Continued on Page 12*

Stanford Screensaver Collection Debuts with Full Sound, Graphics, Animation

Justin O'Brien, O'Brien Communications
(415) 595-1460; fax: (415) 595-3109
justin@sunfun.com

Stanford alumni, students, and supporters can now get an earful and eyeful of Stanford with the new Stanford Screensaver Collection--a colorful, fully animated multimedia program that brings the sights and sounds of Stanford University to your computer screen.

Available in Windows or Macintosh versions, this is the first multimedia screensaver of its kind to be produced by a university alumni association--plus, it's definitely got an attitude. The Stanford Screensaver Collection features nine full-color animated displays:

- Hoover Tower Blasts Off -- Stanford's landmark rockets off to wreak havoc at rival universities across the country.
- The Nobel Chalkboard -- The distinguished "Professor Laureate" offers the mystical mathematical formula for Stanford's greatness.
- The Stanford Band -- An animated Stanford Band plays their signature tune, as they strut back and forth across the screen.

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Planning Meeting Notes, April 20, 1996

Mildred Kohn, Secretary

Present: Bob Mitchell, President, Brian Christopher, PrintScreen Editor, Beverly Altman, Director at Large, Walter Varner, Accountant, Mildred Kohn, Secretary, Robert Mitchell, member. (All interested members are invited to join the Planning Meeting, which normally takes place the Wednesday after the General Meeting.)

Attendance List: Beverly Altman had made up a list of members with a record of their attendance at the last three meetings. At some not yet specified time in the future those who were absent will be asked why. In the mean time, it is hoped that Bob

Mitchell's questionnaire will elicit the reasons for non-attendance. We discussed as well the means of attracting new members.

Bob Mitchell asked for a Statement of Purpose for the club. Such a statement is among the first items in our constitution, which is being revised. A copy of the constitution was given to Bob. Bob also suggested that we have a job description for each office so that all duties would be recognized and fulfilled.

Discussion of a permanent place for meetings was discussed with little progress. We are deeply grateful to Media City for hosting us in the mean time.

Bob suggested that we exchange views with other user groups as to which guests are the most stimulating for the members.

Software evaluation has to be emphasized in order to encourage the gift of software to our club from the vendors. Robert Mitchell has been the most faithful in writing up his evaluations in good time and submitting them for publication in our newsletter. The format should be standardized. Other reliable volunteers are needed. The advantage to the reviewer is that he/she can keep the software. Evaluations of

software and hardware which the members have purchased should also be submitted for publication. We need to know what works and what doesn't; which is worth the financial outlay and which isn't. Reports can be sent in ASCII via e-mail to Brian, either as an attachment or by copying it to the clipboard and then into the file.

We want to encourage members to have dinner together starting at 6 PM before the General Meeting at the University Coffee Cafe, 271 University (on the north side of the street near Bryant and close to Media City) to encourage friendships and interaction among the members. The matter of refreshments during General Meetings then came up, again to encourage interaction among members. Cookies and beverage before, during and/or after? This depends in part on the meeting place. Food has been served at Media City for the Harvard Club meetings.

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Composing E-mail Off-line Using AOL

Bob Mitchell

1. From Program Manager Menu: Double click the AMERICA ON-LINE icon to open program
2. From the AOL Welcome Menu: *Before you sign on to America On-line* click on the Compose Mail icon in the Menu Bar.
3. Type the screen name of the person who will be getting the mail message. (It doesn't matter whether you use capital letters or not. Screen names are not case-sensitive.)
4. Press the tab key once and add the screen name of the person you may wish to copy -or- press the tab key a second time to move to the file field (window). Type your message.
5. When message is completed, click the Minimize button in the top right corner of the Compose Mail window. (This is the first button on the far right hand side of the Compose Mail title bar) This will place a Compose Mail icon at the bottom of your screen and the AOL Welcome menu will appear.
6. Now sign on to AOL as you normally do. (By clicking in the password box, typing your password and clicking the signon box.)
7. Maximize your Compose Mail window by Double clicking on the Compose Mail icon at the bottom of your screen.
8. Click on Send. When your mail has been sent you will see the "Your Mail has been Sent" window. Click on OK to close the message box and the letter.



Without a SCSI Connection True Multitasking Isn't Possible

Adaptec Inc.

With the advent of sophisticated desktop operating systems like Microsoft Windows 95 and Windows NT, and IBM OS/2 Warp, you've probably been hearing a lot about a feature called "multitasking." What exactly is this capability?

Simply put, multitasking is the process that enables you to run multiple operations at the same time. If you have a multitasking system, you can actually run two or more applications simultaneously . . . you're not limited to running one application while others are open but idle in the background.

Think of it as the ability to watch your favorite program on TV while you're recording another show on a different channel—your tasks are accomplished at the same time, exactly when you need them to be, with no waiting or loss of productivity.

The Advantages of Multitasking

When performing PC processes that take a relatively long time (such as downloading a file from the Internet, or loading a large file from your CD-ROM), multitasking allows you to start the process, then move on to more productive functions—without waiting.

If you're running a multitasking operating system, you'll quickly realize greatly enhanced system performance. Such an operating system allows you to run two or more programs simultaneously, so you can receive a fax, scan an image, crunch numbers in your spreadsheet, and watch a video from your CD-ROM . . . all at the same time. No waiting!

True Multitasking Requires SCSI I/O

Just as an intelligent operating system is
Continued on page 14

IDE vs. SCSI—The Face-Off

Rick Moen - SFpcUG

Here's the difference in a nutshell:

IDE hard drives must have correct drive-table settings, to specify the adapter-drive geometry. SCSI drives don't need that.

IDE hard drives may get corrupted, when moved between controllers. I can move a SCSI drive between any two machines without worry.

IDE hard drives over 504Mb must be specially supported through EBIOS translation, or a software equivalent. SCSI drives and adapters took care of this problem transparently, many years ago.

IDE claims higher speed because of fast transfers (in certain operating modes) between controller and drive, but has its performance compromised in other areas. Lack of intelligent seeking makes it particularly bad for multitasking and multiuser operating systems. SCSI gives reliably good performance, especially when using bus-mastering host adapters, on any operating system, under any load.

An IDE host adapter can support two devices (hard drives, tape drives, and CD-ROMS) only), or four of them using two ATA-2 channels (and two scarce interrupts). A SCSI host adapter can support seven devices of almost any type, including scanners, optical drives, etc., using one interrupt.

An IDE chain may not support devices running at different speeds (lack of independent spindle sync support). SCSI always does.

Advanced IDE devices (ATA-2 adapters and ATAPI tapes/CDs) are highly dependent on driver support for each operating system to be run. Many of those drivers are flaky. SCSI is well-supported in all OSes, and driver bugs
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Future Vision

Helen Custer
Inside Windows NT

An Operating System for the 1990s

In the fall of 1988, Microsoft hired David N. Cutler ("Dave") to lead a new software development effort: to create Microsoft's operating system for the 1990s. Dave, a well-known architect of minicomputer systems (Digital Equipment Corp.), quickly assembled a team of engineers to design Microsoft's new technology (NT) operating system. Early in 1989, Bill Gates and key Microsoft strategists met to review the operating system specifications Dave Cutler's group had defined. Their plans identified these primary market requirements for the new operating system:

Portability: Hardware advancements occur quickly and often unpredictably. RISC processors represent a great departure from traditional CISC technology, for example. Writing NT in a portable language would allow it to move freely from one processor architecture to another.

Multiprocessing and Scalability:

Applications should be able to take advantage of the broad range of computers available today. For example, computers with more than one processor appear on the market regularly, but few existing operating systems can fully employ them. Making NT a scalable, multiprocessing operating system would allow a user to run the same application on single-processor and multiprocessor computers. At the high end, the user could run several applications simultaneously at full speed, and compute-intensive applications could deliver improved performance by dividing their work among several processors.

Distributed Computing: With the increasing availability of personal computers in the 1980s, the nature of computing was irrevocably altered. Where once a single, large
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Being Two Places At Once (When You're No Place At All)

Rick Moen - SFpcUG

[The following was to a fellow who wanted to be able to set up the club's Internet Server Access Kit disk, but already had an existing "winsock"-type setup for another Internet Service Provider.]

From: help
Subject: Multiple Winsocks
You wrote: "The [Access Kit's] instructions ask us to see if we already have a winsock.dll file on our hard disks. I do. I do not want to delete it because it allows me to access another Internet Service Provider."

The advice in the instructions was the "chicken" version. That is, if we guarantee that there's no other winsock.dll on your hard drive, then we've guaranteed that none can interfere with Trumpet Winsock's, under any set of circumstances. Thus, we eliminate any number of support headaches from people with hopeless software tangles. In other words, it was the easy, safe (and thus "chicken") answer, that will always result in our stuff working correctly.

You wrote: "Can I install the SFpcUG Server files (including winsock) on my D: drive, or must they be installed on the C: drive? If they have to be on the C: drive, how can I proceed with installation?"

The drive letter has nothing to do with it. We just wanted to make sure that, when you fire up TCPMAN.EXE (the Trumpet Winsock Dialer), it won't find the wrong winsock.dll, before it finds the right one. Obviously, any arrangement that prevents such an undesirable outcome is just fine.

What kind of arrangement? We try not to get into this, because it involves understanding how DOS (the DOS that underlies Windows) finds files, and people generally don't want to
Continued on page 15

America Online Revealed !!!

Bob Mitchell

To Download From AOL/Internet To A Word For Windows File

1. From within AOL locate the desired item you wish to download
2. From the Tool Bar click on the FILE icon (This will probably be the last icon on the tool bar. It shows a paper being inserted into a file folder).
3. In the "SAVE TEXT AS" window: Delete the *.* in the File Name box and type in the name you wish to call the file that you are using to save the item. From the Directory box select the directory in which you wish to store the file. Click the OK box

To Recover The Downloaded File From Word For Windows

1. Open Word for Windows
2. From the menu bar click FILE
3. From the dropdown window click OPEN
4. From the File/Directory window select the directory where the file is located
5. Next, in the bottom box select ALL FILES *.* (This will allow the computer to look for ALL files that are filed in the selected director and not just WORD documents) (The file you are seeking should appear on the list of all files in that directory.)
6. In the CONVERT FILE window select MS DOS TEXT. Click OK (The selected file should now appear as a WORD FOR WINDOWS document)

AOL Sending & Receiving Files

Sending A File

1. Sign on to AMERICA ON-LINE

2. Click on MAIL in menu bar

3. Click on COMPOSE MAIL in dropdown box

4. In the COMPOSE MAIL window type in the screen name of the person to whom you are sending (E.G.: TVBob1)

5. Tab to SUBJECT area and type a subject for this communication

6. Tab to the Message area. Type a message, perhaps one as simple as "I'm attaching a file to this E-Mail communication"

7. Click on the ATTACH button (This is located to the left of the message area)

8. On the ATTACH FILE window you will have two boxes, one listing files and the second one listing directories. Double click on the directory where the file is located, then double click on the file you wish to send. Click on the OK button. (This will take you back to your COMPOSE MAIL window.)

9. The file that you are sending should now show between the SUBJECT and MESSAGE area. Click on SEND. (a FILE TRANSFER window should now appear showing the progress of the file transfer. When the file has been transferred a message will appear confirming that the file has been transferred). Click on the OK button.

Receiving A File

In order to receive (download) a file through E-Mail, someone will have had to have sent you an E-Mail message with a file attached.

1. Sign on to AMERICA ON-LINE

2. Assuming someone has sent you E-Mail with a file attached you will have a "You Have Mail" message on your WELCOME window. Click on the icon that reads YOU HAVE MAIL. (The NEW MAIL window will appear.)

3. If it has a file attached, you will see a little disk icon to the far left of the E-Mail title that contains

that file. Click twice on the E-Mail title bar that contains the file.

4. When that E-Mail (letter) appears on the screen you will note a DOWNLOAD FILE DOWNLOAD MANAGER window will appear on your screen.

5. Be sure that the drive, directory, and sub-directory in which you want your file to be located correctly shows in the directory window. If not make the necessary changes by locating that directory so that it shows correctly on the screen. When everything is correct click the OK button.

6. The FILE TRANSFER window will appear to show you the progress of the file transfer.

Assuming you want to signoff after the transfer, click the SIGNOFF AFTER TRANSFER button (which should put an "X" in the box).

Thank you to the following Renewing Members

Don Campbell	Ira Gold
Frank La Fetra	Aldora Lee
Bill McElhinney	Martin Packard
Vernon Price	Ronald Seltzer

Disk Of The Month [DOM9605]

Robert Mitchell

BOOTMNG.ZIP - Win 95

Lets Windows 95 user change the way 95 boots up. They can boot directly to C:> prompt, Windows GDI or Safe mode.

CACHECHK.ZIP - DOS

A utility that checks the type & how much L1/L2 cache your system has. Also checks the speed of the cache.

CCLINK14.ZIP - Win 3.1/ 95

A utility that displays the activity lights of an external modem on the screen. Handy for those

who have internal modems. Also handy for external modems as well. Also can display activity on parallel port.

CMOS20.ZIP - DOS

A utility that saves your CMOS for future failures. Will restore your lost CMOS memory.

ICNDL2.ZIP - Win 3.1/ 95

A utility for creating custom icons for use instead of generic icons that comes with Windows. Has built in compiler included.

INFOBR.ZIP - Win 3.1 / 95

A handy little bar that puts system resources like GDI, User & memory on a thin line at top or bottom of screen. Also displays Caps lock, Scroll lock & Num Lock. Has Alarm, Appointment/ TO DO List, Calculator, .bmp, gif and pcx viewer & program launcher.

VBRUN300.DLL - Win 3.1 / 95

A Visual Basic Runtime file. Required for INFOBR program. Place in windows Windows/ System directory.

WEB16BIT.EXE - Self Extractable Win 3.1/ 95

A simple to use HTML editor for those who want write simple HTML pages.

WSHADE.ZIP - Win 95, may work with WIN 32'S under Win 3.1

A handy utility that lets your application windows roll up & down like window shades. When installed and activated all windows can be rolled up with the click of a mouse on the top bar of window. Saves space when using many different programs. Use instead of the minimize feature under the small square on top left of window.



Supper with SPAUG

6 PM before the General Meeting
271 University Ave., Palo Alto
University Coffee Cafe

AMD5K86 Processor FAQs

Advanced Micro Devices

What is the AMD5K86 processor?

The AMD5K86 processor is the first in a broad range of high-performance options from AMD. The AMD5K86-P75 and AMD5K8-P90 processors offer the best value for 64-bit, 5-class performance and provide complete Microsoft Windows operating system and x86 software compatibility. A plug-in alternative for the Pentium, the AMD5K86 processor is an ideal choice for entry-level desktop PCs. The AMD5K86 processor's fifth generation performance stems from AMD's independently developed four-issue superscalar core architecture with six parallel execution units arranged in a five-stage pipeline. This architecture contains 16-Kbyte instructions and 8-Kbyte data cache, providing highly efficient instruction throughput. The result is a processor with the power to run 32-bit operating systems and applications, as well as the huge installed base of x86 software.

How is the performance of the AMD5K86 processor measured?

To help PC manufacturers and their customers evaluate the performance of AMD5K86 processor, AMD uses the P-rating, an apples-to-apples processor performance rating system that employs the industry-standard Winstone 96 benchmark. For example, based on Winstone 96 tests using identical PC configurations, the AMD5K86-P90 processor has a P-rating of "90," meaning it offers performance greater than or equal to a 90-MHz Pentium.

How does the AMD5K86 compare in competitive benchmarks?

Listed below are the Winstone 96 benchmarks for the AMD5K86-P75 and AMD5K86-P90 processors:

Continued on page 10

Cyrix 6x86 Processor FAQs

Cyrix Corporation

Q Why Is Cyrix, a microprocessor manufacturer, selling PCs?

A. We want people to know about the outstanding performance advantages of the Cyrix 6x86 processor. Marketing 6x86 PC systems is a key element in promoting Cyrix processors to end users, thus promoting demand for our OEM customers' 6x86-based PCs.

Q Will Cyrix continue selling processors to OEMs?

A. Yes. The vast majority of Cyrix processors will be sold to OEMs and PC dealers who will market 6x86-based PCs under their own brand.

Q How does it differ from the Pentium processor?

A. Most significant are the architectural differences which result in the 6x86 processor's superior performance gains. While both the 6x86 and Pentium processors are superscalar and contain an 80-bit floating point unit and a 16-Kbyte primary cache, other architectural features are found only on the 6x86. The 6x86 processor's integer and floating point units are optimized for maximum instruction throughput by using advanced architectural techniques including register renaming, out-of-order completion, data dependency removal, branch prediction and speculative execution. These design innovations eliminate many data dependencies and resource conflicts to achieve high performance.

Q What Is the difference between the Cyrix 6x88 and 5x86 processor?

A. There are significant differences between these two Cyrix processors. The 5x86

processor, formerly the M1sc, is pin-compatible with a 486. However, the 5x86 uses many fifth-generation features (branch prediction, data forwarding, superpipelining, etc.) to achieve performance equal to Pentium processors. The goal for the 5x86 was to achieve an efficient design, obtaining the highest performance possible using the fewest transistors to obtain entry-level Pentium processor performance. A 120 MHz 5x86 performs on par with a 90 MHz Pentium processor.

The Cyrix 6x86 processor is a high-performance, sixth-generation CPU that is P64C socket-compatible. It incorporates a 64-bit external data bus (5x86 use a 32-bit external data bus) and a variety of innovative architectural features that enable it to outperform higher-megahertz Pentium processors to achieve best-in-class performance. Additional design information can be found in the 6x86 Processor Brief.

Q Is the 6x86 processor compatible with existing software?

A. Yes. The 6x86 is compatible with x86 software and all popular x86 operating systems including Windows 95, Windows, Windows NT, OS/2, DOS, Solaris and UNIX. Additionally, the 6x86 Processor has been certified Windows 95 compatible by Microsoft.

Q Is the Cyrix 6x86 processor certified for Windows 95?

A. Yes. Cyrix tested the 6x86 processor on hundreds of x86 software applications

to ensure compatibility with new and existing software. Additionally, the 6x86 processor has been certified Windows 95 compatible by Microsoft. We're licensed by Microsoft to use the "Designed for Windows 95" logo.

Q Can the 6x86 processor run 16-bit and 32-bit software?

A. Yes. The 6x86 was designed to run existing 16-bit software as well as the latest 32-bit software.

Q Can I use the Cyrix 6x86 processor as an upgrade for my 586 computer?

A. No. The Cyrix 6x86 processor was never intended to be an upgrade.

Q When I run Windows 95 on my 6x86 computer, the Windows 96 control panel system information identifies the CPU as a 486. Why?

A. The algorithm used in Windows 96 to detect the CPU was completed before the Cyrix 686 was released and therefore the Cyrix 686 responds to the algorithm just as a 486 does. To verify that your system is using the 6x86 microprocessor, please reference your computer's BIOS startup screen. In addition, the following software utilities identify the 6x86 CPU correctly: Diagsoft QA Factory 6.02 and QA Plus/FE 5.42; Quarterdeck Manifest 4.01; and PC Doctor Rev 1.5.162 from Watergate Software. Cyrix will update this site with new software utilities that can detect a 6x86 CPU in the future. Please note that the 6x86 processor was certified by Microsoft for Windows 95, and Windows 96 performance results are available

Q What are the performance results for the 6x86 processor?

A. We list full, competitive 6x86 performance results for several industry benchmarks. The tests show that the 6x86 processor outperforms higher-megahertz Pentium processors in each performance class.

Q What is this new performance, or P-rating, system Cyrix is using?

A. The P-rating system was jointly developed by Cyrix, IBM Microelectronics, SGS-Thomson Microelectronics, and Advanced Micro Devices. The P-rating system allows end-users to base purchases on

relative PC performance levels rather than just the clock speed (MHz) of the processor. The new evaluation system relates the results of industry-standard benchmarks to what is achieved by an Intel Pentium processor of a given frequency. For example, a processor with a P150 rating would have performance comparable to a 150 MHz Pentium processor, regardless of its actual clock speed.

Q Why was the P-rating developed?

A. Clock frequency (MHz), while important, is no longer an accurate or consistent measure of CPU performance. Architectural differences between processor designs add another variable to the equation. With the P-rating in place a PC buyer can easily evaluate all personal computer processors for a given performance category - without scrutinizing the architectural merits of the different processors.

MicroDesign Resources (MDR) Labs conducted independent performance testing of the 6x86 processor. Commenting on the P-rating methodology, Michael Slater, president of MicroDesign Resources and publisher of the Microprocessor Report, said, "This is the first comprehensive and credible method for comparing competing processors based on the relative performance they bring PC users under real-world conditions. It standardizes test system configurations based on commercially available components, and it uses the most widely recognized and utilized application-based benchmark tests. I expect the new P-rating methodology to achieve broad industry acceptance."

Q How does the P-rating work?

A. The P-rating process uses a standardized system configuration and application-based benchmark tests to establish a performance, or 'P,' rating relative to a Pentium processor of a given frequency (MHz). This levels the playing field and allows the measurement of relative processor performance under real-world conditions, regardless of the processors clock speed (MHz) or architecture.

Q What benchmark test Is used in the P-rating?

A. Ziff-Davis Winstone 96 is used because it is a real-world, application-based benchmark that contains the most popular software applications (based on market share) that run on a Pentium processor. Winstone 96 also is the most widely used benchmark, and is freely distributed and available.

Q Why Is there a plus mark In each 6x86 processor name?

A. For the 6x86 processor, a P+ designation is used to indicate better performance.

Winstone 96 6x86-Pxxx+ > Winstone 96 Pentium-xxx

xxx = P-rating or Pentium megahertz

For example, a 6x86 processor with a P-rating of "P166+" (regardless of processor name and clock speed) indicates performance faster than a 166 MHz Pentium processor. The plus mark indicates performance that consistently exceeds the same Pentium processor megahertz level.

Q What 6x86 processors are currently available?

A. The 6x86 P120+ (100 MHz), has been in production since the fourth quarter of 1995. The 6x86-P133+ (110 MHz), 6x86-P150+ (120 MHz) and 6x86-P166+ (133 MHz) processors are in volume production now. ☒

AMD from page 8

Benchmark Configuration:

- FIC PA2002 motherboard
- VIA Apollo Master Chipset
- 16-Mbyte EDO DRAM
- 256-Kbyte L2 cache
- PCI Diamond Stealth 64 3200 video card (640 x 480 x 256)
- Diamond GT video drivers 4.02.00.218 for Windows 95

- Quantum Fireball 1.2 GB EIDE hard drive
- (Size remains consistent. Type differs from system to system)

Is the AMD5K86 processor a hardware-compatible Pentium alternative?

Yes. AMD designed the independently developed AMD5K86 processor to be hardware compatible with the Pentium. This P54C compatibility enables PC manufacturers to take advantage of existing 586-class designs and infrastructure. A plug-in processor solution for Pentium-compatible motherboards, the AMD5K86 processor minimizes redesign costs and offers a truly viable Pentium alternative

What are the key features and benefits of the AMD5K86 processor?

- Independent architecture
- Enables freedom of choice with viable alternative
- P54c(Pentium) hardware compatibility
Leverages exiting infrastructure
- Minimizes redesign costs
- AMD5K86 superscalar core Delivers Pentium Performance
- 16-Kbyte instruction cache, 8-Kbyte data cache Provides ideal processor
- Full out-of-order speculative execution/completion Offers foundation for Dynamic branch prediction
- Integrated 80-bit floating point unit (FPU)
- Enhanced SMM and clock control

Which motherboard manufacturers support AMD5K86 processor?

AMD has validated the following motherboard manufacturers that support the AMD5K86 processor. AMD5K86 motherboard validation consists of electrical and functional testing to ensure that the motherboard design meets the basic functional requirements needed to operate using an AMD5K86 processor. This list is not intended to represent all motherboards

available on the market that support this product, but is a sampling of popular motherboards that have been verified by AMD to support the AMD5K86 processor. This information is updated on a regular basis.

Company / Model / BIOS

Abit / PH5 / Award

Abit / PT5 / Award

Atrend / ATC1545 / Award

Biostar / TAC8500 / AMI

FIC / PA2002 / Award

Gigabyte / GA586ATS / AMI

Note: Older versions of these motherboards may require a BIOS update from the manufacturer to properly recognize the AMD5K86 processors. Please contact your local motherboard representative for assistance?

What are the motherboard design requirements?

- Vcc Spec
- (operating voltage) = 3.45 V - 3.60
- Heatsink Required = Yes
- Fan Required = Yes

Please consult the AMD5K86 Data Sheet for updates concerning valid operating voltage options.

When will AMD5K86 processors be available?

AMD5K86 processor volume production will begin in the second quarter of 1996 in a 296 pin SPGA (staggered pin grid array) package.

What is the difference between the K5 and the SSA/5?

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Stanford from page 1

- The Muybridge Experiment -- The famous early "movie" of a horse and buggy is recreated from the original Muybridge photographs.
- The Stanford "S" -- The Cardinal logo flips hypnotically across your screen.
- Memorial Church Mosaics -- Beautiful mosaics from the walls of Stanford's Memorial Church dissolve continuously into one another.
- Tree Shenanigans -- The Stanford Tree tiptoes and dashes across your screen, pursued by a predatory ax.
- Memorial Claw Sights and Sounds -- The campus' favorite fountain is recreated with splash.
- Bicycle Dude -- Pitfalls and pratfalls of campus life on a two-wheeler.

All that makes Stanford past and present is brought to mind via photos, graphics and animation in 256 vibrant colors, with sound effects and music adding to the multimedia experience.

Developed for Stanford University by KM DISNEY & CO, The Stanford Screensaver Collection uses the Delrina screensaver engine (the same engine as in the popular Opus 'n Bill and The Farside screensavers). The Stanford Screensaver Collection needs no other software to run.

The Collection also features a password protection system. When this feature is active, only a user with a personal password can access the computer once the screensaver is displayed.

Suggested retail is \$39.95, (plus S & H) . The program can be purchased by phoning 1-800-478-6386.

System Requirements: Windows version: Microsoft Windows-compatible computer with 80386 microprocessor running at 33 mHz (80486 microprocessor recommended) with 4MB of RAM, 7MB hard disk space, Windows-compatible VGA graphics (256 colors), Windows-compatible sound card

(optional but highly recommended), Windows compatible mouse, and 3.5" disk drive.

Macintosh version: Macintosh LC II computer or greater with 4 MB of RAM, 7MB hard disk space, 256 colors, System 6.0.7 or higher (System 7 compatible), QuickTime version 2.0 or greater, and 3.5" disk drive.

The Stanford Alumni Association is an independent non-profit organization dedicated to reaching, serving, and engaging all Stanford alumni. Founded in 1892, the Stanford Alumni Association continually strives toward providing educational programs, publications, and services to Stanford alumni and the surrounding community. ☐

The Dig from page 1

LucasArts and Industrial Light & Magic artists combined their technologies to generate several special effects for the game. These effects focus on objects - such as asteroids, planets and alien ships - moving through space and incorporate techniques such as morphing, lens flares, prism effects and warping star fields. The shots are composited with 3-D and 2-D backgrounds and characters to create realistic, yet other-worldly, extra-terrestrial phenomenon.

Additional input into the game comes from science fiction writer, Orson Scott Card, winner of the Hugo and Nebula awards for his novels, *Ender's Game* and *Speaker for the Dead*. Card, in concert with Clark, is penning the game's dialogue. Providing the music behind the words and images is a Wagnerian-inspired score. Both *The Dig's* graphics and soundtrack reflect the mysterious, fantastical and alien feel of the game.

The Dig also will be the centerpiece in another kind of entertainment collaboration. A novelization published by Warner Books, an audio drama and a CD soundtrack published by Polygram will release simultaneously with the game.

Transported to an Alien World

The Dig offers a riveting and expansive game experience centered around an original science fiction story, and the game's characters and their interactions are complex and dynamic. The player's alter ego is Commander Boston Low, a NASA veteran who leads a team of two - geologist, Ludger Brink, and Journalist, Maggie Robbins - on what should be a routine mission: (1) blast an asteroid in an unstable orbit around Earth into a stable rotation; (2) become a hero. Unfortunately, they don't make it home for the parade in their honor.

The asteroid transforms into an alien spaceship, and the team is transported to a strange, dangerous and seemingly abandoned planet. Then the apparitions appear. Through exploration and experimentation, the player learns about the species that formerly inhabited this planet - a species that discovered immortality and now exists in a ghost-like state. They desperately want something from their captive trio. It's a high price to pay, but it may be the only way back to Earth.

Minimum System Requirements
486DX2-66 CPU
Double-speed CDROM drive
8 MB RAM
8-bit sound card
DOS 5.0 or Windows 95

The Dig Development Team
Project Leader, Sean Clark
Lead Artist, Bill Tiller
Lead Programmer, Gary Brubaker
Supervising Animator, Sean Turner ☒

AMD from page 11

K5 and SSA/5 are codenames for different engineering revisions of the AMD5K86 processor. Just as Intel improved circuit speed and process technology in moving Pentium from the P5 to the P54C revision, AMD is making improvements in logic, circuit speed, and process technology between the SSA/5 and K5 revisions.

Together, these improvements will result in higher performance options of the AMD5K86 processor

How are the Am5X86 and the AMD5K86 processors different?

The Am5X86 processor delivers 586 performance while it leverages 4th-generation system designs/cost and utilizes 32-bit existing infrastructure. The AMD5K86 processor is based on the AMD5K86 superscalar architecture and has a P54C hardware compatible pinout, positioning it as a compatible and viable 5th-generation alternative to Pentium. The AMD5K86 processor utilizes 64-bit existing infrastructure. ☒

Future Vision from page 15

Government-Certifiable Security: In addition to POSIX compliance, the U.S. government also specifies computer security guidelines for government applications. Achieving a government-approved security rating allows an operating system to compete in that arena. Of Course, many of these required capabilities are advantageous features for any multi-user system. The security guideline specifies required capabilities such as protecting one user's resources from another's and establishing resource quotas to prevent one user from garnering all the system resources (such as memory). ☒

<http://www.takedown.com>

Kevin Mitnick, "America's Most Wanted Computer Outlaw," eluded the police and the FBI for over two years; his downfall was his Christmas break-in to Tsutomu Shimomura's computers in San Diego. Less than two months later, Tsutomu had tracked him down. Kevin was arrested by the FBI in Raleigh, North Carolina, on February 15th. Here you will find everything you might want to know about the pursuit and capture of Kevin Mitnick, including gory technical details, live transcripts, media coverage, photos, audio, video, and links galore. If you don't have time to sort through all of this, take the scenic tour. And remember, you can always read the book.

IDE vs SCSI from page 4

and performance issues were brought under control many years ago.

IDE drives can be difficult to set up without jumper diagrams and other documentation. If you're lucky, both drive and BIOS will support the Identity Drive protocol, and be able to fill in the drive table on request. Otherwise, you must deduce the parameters and supply them. SCSI drives can usually be set up without docs, by just setting unique SCSI ID jumpers (generally easy to find and guess), and ignoring all other settings, as the usual defaults are fine.

If you have an IDE hard drive installed, it must be the boot drive. SCSI hard drives can co-exist with IDE devices (or any prior standard), without any such requirement.

If I had bought into IDE, I'd have a difficult time using my IDE devices on other people's machines, when needed: There are driver, jumper, BIOS translation, and probably a number of other issues that don't even come to mind. As it is, if I need to use my SCSI-based external CD-ROM or tape drives on a friend's machine, I just plug my Trantor T358 parallel-to-SCSI converter into the machine's parallel port, and fire it up.

Oh, yes: External devices-you can't do that with IDE, at all. Pity.

Do I have fairly firm opinions on this matter? Why, certainly. I think that's fair to say. Some are going to disagree on sundry points, perhaps loudly: I would expect no less. However, the next time you hear them say that SCSI provides no real benefit to the average user, and that it costs \$400 more, you'll know why I regard that as absolutely errant nonsense. ☒

True Multitasking from page 4

required to allow your applications to multitask, an intelligent input/output (I/O)

system is required to allow your peripherals to multitask. The feature that enables an I/O interface to support multitasking is called multithreading. Multithreading also refers to the related ability of a single software application to generate multiple, independent processes. When a PC can perform tasks with multiple peripherals simultaneously, the system is said to be multithreading. SCSI is the only I/O interface for PCs that supports multithreading, making true multitasking a reality and boosting overall system performance. With SCSI, your PC can talk to several peripherals at once . . . and, perform a whole range of tasks at the same time!

Here's how SCSI works:

Only SCSI allows multiple peripherals to access data simultaneously, delivering true multitasking and optimizing system performance. SCSI manages and negotiates multiple requests to move data, eliminating data bottlenecks that slow system performance.

Bus mastering (available on high-performance Adaptec host adapters) takes performance one step further. Because a bus mastering SCSI adapter has its own microprocessor, it frees the system's CPU to complete other tasks. The result is more tasks, running faster.

SCSI makes it quick and easy to add high-performance hard drives and many other peripherals, giving you virtually unlimited storage capacity. A single SCSI host adapter can support seven peripherals simultaneously!

☒

Listserver

spaug-list@mediacity.com

Any member on the SPAUG-LIST can send messages to ALL other members on the list automatically by sending e-mail to this address. This list is intended of announcements of interest to all SPAUG members. Please avoid excessive or trivial announcements, since they tend to annoy some members, especially those paying for connect time.

Additions or corrections can be sent to:
spaug@mediacity.com

Two Places from page 5

understand that. It's their loss, but it's also their choice. However, you asked, so I must explain background. DOS tries to find executable command-names in its internal command set, then in the current directory, then in each of the directories defined in the PATH variable, in turn. As a special case, when you're in Windows and you (or one of your applications) are trying to invoke a .DLL file, Windows causes DOS to look in Windows, the Windows System directory, and all of the previously mentioned places (I don't know in what order). For purposes of Windows apps, the term "current directory" means whatever the application's icon says is the "working directory".

The long and short is that, if you make sure that your other dialer doesn't find Trumpet's winsock.dll, and that Trumpet doesn't find the other dialer's winsock.dll, you'll be fine, and will be able to use both pieces of software. The usual mistake that prevents this is to put one of the winsock.dlls into \WINDOWS or \WINDOWS\SYSTEM. Don't do that, if you want to keep two network "stacks" separate. (Yes, don't do it, even though the kit instructions tell you to copy or move winsock.dll from c:\winsock to c:\windows. Move it back.) The second most common mistake is to include DLLs in some other directory in the DOS PATH environment. (Type "SET" at the DOS command line, and you'll see what "PATH" is, among other things. Its value is usually determined by the SET PATH command near the top of AUTOEXEC.BAT.)

Set up each network stack entirely in its own directory. Don't put any part of either one in C:\WINDOWS, C:\WINDOWS\SYSTEM, or any directory that's in the PATH variable. Should work fine. If it doesn't, I guarantee that it's because you have the stacks mixed up. However, this continuing mix-up happens so frequently, when people try to run multiple stacks, that we don't include this recommendation in the kit instructions, and tend to advise people having trouble with it

that they should settle on one stack or the other, and delete one.

By the way, perhaps you didn't realize that you can easily make Trumpet Winsock dial your other ISP, and therefore don't have to have two stacks. Just copy your entire Trumpet Winsock directory to another directory for the 2nd ISP, and make a second icon. Then, enter that Trumpet Winsock Dialer's setup screens, and enter the information for your 2nd ISP. ☒

Future Vision from page 5

mainframe computer served an entire company, smaller and cheaper microcomputers proliferated and are now standard issue for rank-and-file employees. Enhanced networking capabilities allow the smaller computers to communicate with one another, often sharing hardware resources such as disk space or processing power (in the form of file serves, print servers, or compute servers). To accommodate this change, developers of the NT system would build networking capabilities directly into the operating system and would provide the means for applications to distribute their work across multiple computer systems.

POSIX compliance: In the mid-to-late 1980s, U.S. government agencies began specifying POSIX as a procurement standard for government computing contracts. POSIX, and acronym rather loosely defined as "a portable operating system interface based on UNIX," refers to a collection of international standards for UNIX-style operating system interfaces. The POSIX standard (IEEE Standard 1003.1-1988) encourages vendors implementing UNIX-style interfaces to make them compatible so that programmers can move their applications easily from one system to another. To Meet the government's POSIX procurement requirements, NT would be designed to provide an optional POSIX application execution environment.

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General Meeting

Dan Gillmor
Computing Editor
San Jose Mercury News

Wednesday, June 5th
7:30 PM
MediaCity
526 Bryant Street
Palo Alto
Parking under
City Hall on Ramona St.

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