

Plugged In



Be all that you can be

New double-chip computers may outgun Mac / **Simson L. Garfinkel**

IF YOU THINK THE world doesn't need a fundamentally new kind of desktop computer — if you think Microsoft's Windows 95 is just fine for most tasks, and the Macintosh put up a good fight but ultimately lost — then you need to spend an hour in front of a BeBox, the magical new computer from Be Inc.

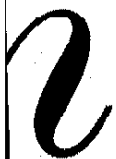
Be is the creation of Jean-

Louis Gasse, one of Apple Computer Inc.'s early Macintosh evangelists who left the firm and started his own company in 1990. From the beginning, Gasse and the early Be team had just two goals. The first was to build a computer unencumbered by the design flaws that dominate the Macintosh and Microsoft's operating systems. His second was to have fun.

The result today is the beautiful blue BeBox. But don't rush out and buy one yet: Unless you are a software developer, you'll find Be's BeOS operating system is missing a lot of key features at the moment.

That will probably change within a year, at which point Be could seriously challenge the Macintosh and become the system of choice for people creating digital images, electronic music and video — demanding applications that require the very fastest computer artists can afford.

The fundamental difference



SURF SITES FOR THE INTERNET EXPLORER

DOG'S LIFE

http://www.disney.com/index.html	101 Dogs
http://www.dogsupplies.com	Dog Stuff
http://www.feedback.com/tbd/	Black Dog
http://www.bulldog.org/dogs/	Doggy Info
http://www.canines.com/	Canines

between the BeBox and practically every other desktop computer sold today is the power of two: whereas most Mac and PC computers have just a single microprocessor, the BeBox has two 603 PowerPCs, each one running at 117 MHz.

Adding that second processor is a cheap way of making a fast computer. That's because chip foundries like Intel and Motorola always charge a premium for their very fastest chips, but the slightly slower chips are dramatically cheaper. Think about it: It's much cheaper today to buy a pair of 100 MHz Pentium chips than to buy a single 200 MHz Pentium processor. And if you are trying to make the very fastest computer possible, you can always do better by using two top-of-the-line CPUs in tandem instead of just one.

So why doesn't every computer come with two microprocessors? The problem is in the legacy operating systems like Windows 95 and the MacOS that most of today's computers run. These systems simply can't work with two CPUs. Microsoft's Windows NT system can, but most applications that run on Windows NT still can't take advantage of the second CPU.

Be's BeOS operating system, on the other hand, was designed from the ground up with multiprocessing in mind.

The base BeBox comes with a CD-ROM drive, two MIDI interfaces for controlling electronic synthesizers, three infrared interfaces for switching on-and-off anything operated by a wireless remote control, a SCSI interface for connecting scanners and external hard disks, and a special "geek port" high-speed interface. The system takes standard PC interface cards, floppy disks, and IDE hard drives. The whole idea was to

create a system that used as many off-the-shelf parts as possible.

Despite the interesting hardware and its emphasis on multiprocessing, the real thing about Be that's gotten everyone's attention is the computer's kernel - the master program that controls all of the other processes running on the computer system. With just eight engineers and a few years, Be has managed to do what Apple has tried and failed to do for much of the past decade: build a better Macintosh-like operating system. And last fall, Be further dissed Apple, by porting BeOS to a Macintosh clone manufactured by Power Computing. Demonstrated at MacWorld, the system ran circles around MacOS running on the same hardware.

Since then, rumors have been flying about a possible purchase of Be by Apple Computer. The rumor mill says Apple would take the BeOS, throw out its own Macintosh System 8 and add backwards-compatibility for existing Mac applications.

But instead of trying to get bought out by Apple, Be is spending its energies trying to get Apple's developers to port their applications to the new BeOS operating system. And to give people more experience to Be, the company is putting a CD-ROM in the January issue of MacTech magazine. On that disc will be a complete copy of BeOS, ready to run on most Power Macs. Be may also make the beta version of its operating system available for free on the Internet.

That might persuade a whole new generation of programs to say goodbye to Apple and Microsoft, and pick up the banner of Be.

Technology writer Simson Garfinkel can be reached at plugged@globe.com