Processor power

If you have decided to treat yourself in the new year and invest in a new PC, do you opt for Intel's Pentium 4 chip or go for an Athlon-based machine? The processor debate has raged fiercely for years, but is there actually much difference between them?

Debates about PC processors and the companies that make them are staple fodder for the computer industry. Although the details are probably more fascinating to the people who write for PC magazines than those who read them, the processor league table recently rose above the mundane level of industry in-fighting and entered public awareness – at least, the part of the public interested in owning a PC – as AMD made steady progress against Intel throughout 2001.

In the February 02 issue of *PC Advisor*, which was published in the last week of 2001, all the 30 desktop PCs in our Top 10 Power, Budget and Superbudget charts were AMD-powered machines. Intel didn't get a sniff.

Intel or AMD?

Over the course of 2001, several people who I know outside my field of work asked me to recommend a PC to them. While I ummed and ahed about the relative merits of one manufacturer's customer service over another's, my anxious novice punters only wanted the answer to one question – Athlon or Pentium 4?

This surprised me. In the past I was always annoyed by the way that people from the computer industry, when asked for a recommendation, would sound off at length about the technological advantages of one machine over another. They don't understand what all that jargon means, I used to think. What the punter wants is something that won't let them down, and for someone to be there if it breaks down.

And I wasn't wrong: the best technology money can buy is useless if you can't get it to do what you want. Efficient customer service is worth more than an extra 300MHz any day of the week. But rather than worrying about the first 10,000-mile service, buyers are beginning to look at what's under the bonnet themselves.

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The debate continues

So why has this processor debate become so important to the buying public? Have the computer companies finally bamboozled them into believing that the jargon is important? To a certain extent, yes. Intel has spent billions of dollars establishing its brand and drawing attention to PCs' inner components, using the Intel Inside campaign with its annoying ascending jingle. The message to the public is clear: the PC's processor is important; make sure it's an Intel one.
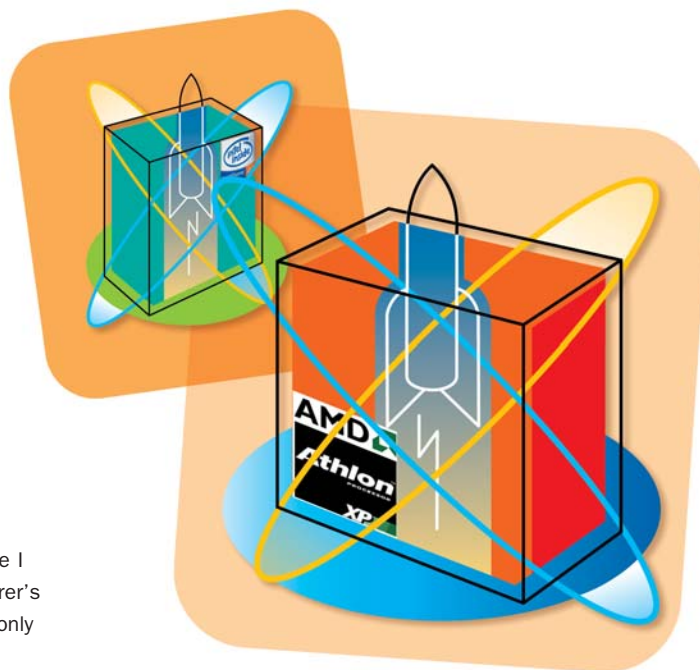
But having raised the public awareness that the quality of processor matters, Intel has enabled AMD to build on that. Its radio ad campaign – which probably cost a tiny fraction of Intel's continual TV blitz – is very simple: the Athlon runs today's applications faster than a Pentium 4.

Timely technology

At the root of the debate is a fundamental principle about the use of PCs and the way the industry has been selling them up until now. On paper, Intel's P4 is undoubtedly a better chip. It runs at faster clock speeds, its architecture is more advanced for handling high-end video applications and it is built with the next generation of operating systems and online streaming media in mind.

But that's the point. AMD's processor costs less, works with cheaper memory – until now – and is tweaked to run the applications that sit on most people's PCs today. AMD-based systems do better in our charts than Pentium 4-based machines because the performance benchmarks we use run a suite of real-world applications. Intel is selling the future; AMD the present.

Intel has always sold this way, justifying the high price of each new processor with a long spiel about what it will do for you next year and how it is ready for the next-generation operating system and application software.

And because Intel has dominated the PC business, the whole industry has sold this way: tomorrow will be better, tomorrow will be digital nirvana. AMD seems to have cottoned on to the fact that real people – that is, those that don't work in the computer industry – want it to work today. ■

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