Intel Seeks Salvation on Internet *Trying to Build "Killer App" for Pentium III While Waiting for Microsoft*



"A lack of compelling new applications is reducing demand for Intel's more expensive processors, dampening the company's revenue growth." I wrote that 18 months ago (see MPR 11/17/97, p. 3), and little progress has been made since then. Intel's latest strategy is to use the Internet to

build demand for Pentium III—a strategy that has as much to do with Microsoft's intransigence as with the processor's technical capabilities.

Over the past year and a half, Intel has tried to build demand for CPU-hungry technologies such as digital photography, videoconferencing, 3D graphics, and voice recognition. Although some have caught on to a modest degree, they remain niche applications without appeal to broad markets, particularly the businesses that still buy the majority of PCs. These technologies have not become ubiquitous for a variety of reasons, but perhaps the biggest is Microsoft's refusal to embrace them.

With Windows, Office, and other applications, Microsoft controls the core software used on most PCs. But with no strong competitor to spur its creativity, the Redmond giant sees no need to improve its user interfaces with 3D graphics or voice recognition. At the recent WinHEC (see MPR 5/10/99, p. 20), the company paid little heed to these areas other than a lame 3D-GUI demo that may not have any more impact than last year's ill-fated Chromeffects demo.

While waiting for Microsoft to upgrade its user interfaces, Intel has been unable to build widespread interest in 3D or voice recognition, the very tasks that Pentium III is best at. Intel's new strategy revolves around the Internet, something that Microsoft doesn't fully control. By working with many plug-in vendors and Web-site owners, Intel is spurring the use of 3D, audio, and video on the Web in ways that make a high-end processor more attractive.

Of course, these features are already available today via browser plug-ins. The vast majority of Web sites, however, consist of text and simple graphics, leading to the widespread belief that users who are "just surfing the Web" should buy the cheapest available PC. Intel's fervent hope is to turn this paradigm around, such that anyone using the Web—which means just about anyone with a PC—will want a more powerful processor.

To start, Intel has made sure that important plug-ins, such as Macromedia Shockwave and RealNetworks Real Player, are available with Pentium III enhancements. Other plug-ins, such as Haptek's Virtual Friend, have not been widely used in the past but deliver a more compelling experience with the new enhancements.

To showcase these new features, Intel has put together a Pentium III owner's site, *www.intelweboutfitter.com*, but this site is mainly an exclusive race track: it's fun to drive around the site with your Pentium III (no other processors allowed), but after you finish, you haven't accomplished much.

To build demand for its high-end processors, Intel is working with more-mainstream sites such as *www.disney. com, www.etoys.com,* and *www.sharperimage.com.* These sites draw a lot of traffic, most of it from people with processors less powerful than a Pentium III. Such visitors may want a processor upgrade after seeing the new features on these sites.

For example, Sharper Image allows you to download a 3D image of certain products so you can examine them from multiple angles, just as you would in a physical store. This feature works with Pentium IIs and other slower processors, but with SSE, the images have more resolution and/or better lighting, making them look more realistic. Compute power, not bandwidth, is the issue here; unlike video, 3D images work well with merely a standard modem.

Getting all these plug-in vendors and Web sites behind Pentium III before the product was even launched required plenty of legwork by Intel—and quite a bit of money. This funding is typically in the form of technical assistance to implement the new features but is sometimes a direct investment from Intel's \$400 million venture fund.

This campaign is well beyond what other CPU makers can afford. Conceivably, a K6 III processor with 3DNow could offer an experience similar to that of Pentium III, but most of the plug-ins don't support 3DNow. Intel says its agreements with vendors are nonexclusive and don't bar them from supporting non-Intel processors, but AMD can't match Intel's ante to these vendors.

External competition is not Intel's primary concern, however. The company must keep PC buyers from focusing exclusively on Celeron to the detriment of Intel's more profitable high-end products. Given Microsoft's delays, Intel's Internet strategy could be the quickest solution to this problem. Success requires that more sites adopt 3D and other high-performance features; if PC buyers appreciate these additions, their affinity for the cheapest PCs could be broken.

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