

AT A GLANCE

Intel Prepares MMX CPU Wave 1
 Even though Intel introduced almost no new microprocessors in 1996, the past year has been a remarkably successful one for the company and a remarkably tough one for its major competitors, AMD and Cyrix. With P55C, Klamath, the K6, and the M2 all set to debut within months of each other, the next year will be crucial for all three players—and, perhaps, for some new players to enter the market. The new high-end x86 microprocessors have even less in common than in previous years, but all of them will increase performance dramatically. While Intel begins the switch to a new, cartridge-based processor module, AMD and Cyrix are extending the useful life of Pentium sockets.

Editorial: Windows CE Creates Opportunities 3
 With the announcement of Windows CE, Microsoft seems to have finally divorced itself from the Intel architecture in a meaningful way. But the first wave of handheld PCs is just the tip of the iceberg; Microsoft's real goal is to penetrate consumer-electronics devices. The new OS gives RISC CPU makers an unusual opportunity to work with Microsoft without opposing Intel.

Most Significant Bits 4
 Motorola, IBM system groups drop Windows NT for PowerPC; Intel, Rambus make DRAM pact; Windows CE support spreads to five CPUs; Motorola, General Magic shift PDA platforms; Digital slashes Alpha prices in half.

Microprocessors Outperform DSPs 2:1 12
 Can a CPU really do digital-signal processing? There's no question that digital signal processors are becoming more popular and that a number of conventional microprocessors are starting to acquire DSP-like capabilities. The DSP watchers at Berkeley Design Technology looked at six CPUs and cores and rated them on DSP performance, price/performance, and development support. The results show that a number of CPUs do surprisingly well on DSP tasks, though usually at much higher clock rates.

Toshiba, TI Roll Out Set-Top Box Decoders 16
 Two semiconductor giants have simultaneously created intelligent, single-chip decoders for the budding digital-satellite decoder market. They differ in CPU core, but share their approach to I/O.

Viewpoint: IA-64 and Merced—Whats and Why 17
 With Intel and HP both remaining mum about the details of their collaborative IA-64 architecture, MDR President Peter Christy takes a shot at pinning down some of the specifics of this new generation instruction set. It's not RISC and it's not VLIW. What is it?

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