

EMBEDDED

Server Chips Slip; RISCs Regroup 1
 Last year was a tough one for high-end processors. Nearly every one, including Intel's much-feared Merced, suffered delays and missed their performance targets. Our **Editor's Choice** award goes to HP's PA-8500 for its trendsetting use of large on-chip cache and for (almost) meeting its performance and schedule goals.

Editorial: Where's Willamette? 3
 Intel has been relying on the same now-tired P6 core since 1995. Its replacement, Willamette, isn't due until late 2000. AMD will capitalize on this lapse with K7, leaving Intel wondering what went wrong.

Most Significant Bits 4
 Katmai becomes Pentium III; AMD escalates notebook battle with K6-2; Xeon gets 2M cache; Intel offers new low-cost PC chip sets.

Embedded News 9
 TeraGen reveals 8-bit threaded processor; Lexra rolls out second MIPS core; Toshiba, NEC make 10-year Ruby investment.

Integration, Diversification Key in 1998 10
 In the embedded world, 1998 saw big increases in the level of integration and the degree of architectural diversity. Our **Embedded Editor's Choice** goes to the ColdFire 5307 and the IDT RC32364.

Intel Stakes 3D Claim, But ATI Takes Lead 14
 The 1998 3D year saw Intel's highly-touted 740 fail to meet expectations. The experience hasn't dissuaded market participants, as overcrowding has continued unabated. Our **3D Editor's Choice** goes to ATI's Rage 128 for the best combination of features and performance.

Intel Gets Aggressive With Celeron 18
 Growing tired of AMD's theft of its market share, Intel has signaled that it wishes to stop it by offering faster Celerons at dramatically reduced prices. The result could be an all-out price war.

Dixon Revamps Intel's Mobile Line 20
 With a single chip, Intel today replaced its entire mobile-processor line. Dixon, with 256K on-chip L2, higher frequencies, and lower power, dramatically improves Intel's mobile offerings.

Intel Raises the Ante With P858 22
 Process technology has long been one of Intel's strong suits. Continuing the tradition, Intel's impressive new 0.18-micron process, will power new CPUs, such as Coppermine, by midyear. Intel's competitors should be worried.

The Slater Perspective: Smart Cars—Reinventing Driving 27
 Exciting new applications could dramatically improve auto safety and comfort, creating a huge market for high-performance processors.

Literature Watch 28

Recent IC Announcements 29

Patent Watch 30

Chart Watch 31

Resources 32

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