

AT A GLANCE

**RISC Ambushed by Pentium Pro in 1995** . . . . . 1  
 The RISC vendors suffered a uniformly disappointing 1995. None of the major RISC architectures was able to fulfill its bold claims and mount a credible assault on Intel's dominance of the industry. The PowerPC camp, in particular, had a bad year, as Apple miscalculated demand for Power Macintoshes and CPU shipments suffered. Meanwhile, Intel's new Pentium Pro distinguished itself as the fastest microprocessor shipping, a claim few would have anticipated. Now it remains to be seen what the RISC competitors can do to close the performance gap and stay in the race they once led.

**Editorial: Changes for the New Year.** . . . . . 3  
 Starting with this issue, Microprocessor Report has a new look including more color throughout the design. The Editorial Board has gained two new members. And 1996 will feature the debut of our newest event, the PC Tech Forum.

**Most Significant Bits** . . . . . 4  
 Intel rolls out Pentiums at 150, 166 MHz; Philips produces single-chip PDA processor; P7 becomes Merced; AMD gains access to Intel patents, MMX; Intel overSPECs parts; NEC tapped to build Micro-Sparc-3 for Sun; SGS offers 486 core; UMC exits 486 business; PowerPC pumps up volume in 1995.

**R5000 Improves FP for MIPS Midrange** . . . . . 10  
 The new MIPS R5000 boosts the R4600's single-precision floating-point performance, giving Silicon Graphics a new midrange processor for Indy. The chip is compact, with impressive SPEC ratings for its small die size. Its single-precision FP is tailored for graphics and visualization applications, a traditional Silicon Graphics strong-point. NEC, IDT, and NKK all bought rights to the R5000 design, signaling its possible appearance in the embedded market.

**PC Graphics Reach New Level: 3D** . . . . . 14  
 As personal computers become more popular for entertainment and for business presentations, the performance emphasis has shifted to compelling graphics. A new batch of 3D graphics accelerators is being readied to catapult 3D graphics performance beyond what is possible with today's 2D Windows accelerators. In the first of two installments, we examine the functions performed by 3D accelerators and the features necessary for their success in the coming year.

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