

Xeon Replaces Pentium Pro 1
 To boost revenues and ASPs, Intel is redoubling its effort to take a bite out of the lucrative high-end workstation and server markets with a new processor it calls Xeon. The processor replaces the venerable but now-rickety Pentium Pro with a 400-MHz Deschutes-based processor module. Xeon offers four-way symmetric multiprocessing, extended physical memory, and a large, fast L2 cache.

Editorial: Intel Accused Again 3
 Already accused of anticompetitive practices with CPUs and core logic, Intel is now being accused of dumping graphics chips. Even if this is true, it's time to stop encouraging government intervention that will stifle competition more than the practices it seeks to prevent.

Most Significant Bits 4
 Intel steps back from modules; Silicon Spice cooking up new processor; KryoTech ships chilled Alpha at 767 MHz; Micron buys Rendition; Intel countersues Intergraph.

New Chip Sets Embellish Xeon 11
 Along with Xeon, Intel announced two new chip sets to support that processor in the workstation and server markets. The 450NX for servers is a major step up from Pentium Pro's 450GX, but the 440GX for workstations is a disappointingly minor improvement over the 440BX used in the PC market.

IBM Copies TI's 'C54x DSP 13
 IBM's cloning of the 'C54x DSP core from Texas Instruments is one more step in the company's shift away from microprocessor products and toward a position as a full-line ASIC supplier.

Embedded News 14
 ARM signs Epson, Qualcomm, and National; Motorola cans Core+, FPGA business; TI, Philips cooperate on FireWire silicon; V3 provides system support for MIPS chips; IDT 200-MHz R5000 goes embedded; MPC860 controllers get smaller, faster; ARM spins up extensions for disk drives; Symbian forms from Euro tech trio.

S3, Matrox, 3Dfx Target 3D Mainstream 16
 A host of hot new 3D rendering engines have come forth in 1998. In this first of a three-part series, we look into S3's Savage3D, Matrox's MGA-G200, and 3Dfx's Voodoo Banshee—all significant improvements over the companies' previous 3D products.

The Slater Perspective: Integration and Segmentation Intertwined 20
 Mendocino signals the beginning of the end of off-chip caches in PC microprocessors. Future shrinks to 0.18-, 0.13-, and 0.10-micron will bring even more integration, raising this question: What will differentiate the Celeron line?

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