

The Russians Are Coming 1

In the category of “from out of left field,” Russian supercomputer maker Elbrus has described an EPIC-based microprocessor it is developing. Without a source of funds, the company currently has no way to bring the processor to market. But if funds were found, and if its claims panned out (a big if), the result would be impressive indeed. Running at 1.2 GHz in 0.18-micron technology, Elbrus claims the processor would deliver 135 SPECint95 and 350 SPECfp95 using only 126 mm² of silicon and 35 W. And, by the way, it would be x86- and IA-64-compatible to boot. Too good to be true? Maybe. Maybe not. Either way, it’s a fascinating story.

Editorial: Pentium III Serial Number Is Just a Tool 3

In an innocent attempt to offer a feature in its processors to assist with the sticky problem of Internet security, Intel has unwittingly disturbed a hornet’s nest of privacy-rights issues. Although Pentium III’s new unique digital serial number may serve its intended purpose, it carries with it a potential for misuse that could cause more harm than good in the long run.

Most Significant Bits 4

AMD gains Gateway, loses money; Motorola boosts PowerPC to 400 MHz; Intel cuts Celeron to \$63; Intel 815 extends Whitney’s reach; SiS gets Intel P6 bus license; Erratum—UltraSparc-3.

Embedded News 5

Intel, Analog Devices team for DSPs; Philips exits PDA-processor biz; EEMBC sells benchmarks, opens testing lab; Galileo announces system logic for PowerPC; IDT debuts two system-logic chips.

SGI Chip Set Powers NT Workstations 12

The first fruit of the deal between Intel and Silicon Graphics has taken the form of two new SGI workstations. The 320 and 540 workstations are based on Intel’s Pentium II and Xeon processors. Both workstations use a proprietary SGI chip set that provides 3.2 Gbytes/s of memory bandwidth in a unified-memory architecture that allows processor, graphics, and I/O subsystems to operate simultaneously.

Savage4 Shows Substantial Speedup 14

S3 has unveiled Savage4, successor to the company’s Savage3D graphics chip. The new chip adds dual texturing pipelines and other features that should make it far more attractive to OEMs.

The Slater Perspective: Electronic Books Stuck in Niches 16

The debut of electronic books marks a milestone in the evolution of computer hardware. Unfortunately, these devices fall short for most users and aren’t likely to reach mass markets. Although e-books will improve, most electronic content will be read on more general-purpose devices; a refined Internet slate is perhaps the ultimate e-book.

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Literature Watch will return in the next issue.

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