

At A Glance

MICROPROCESSOR REPORT

THE INSIDERS' GUIDE TO MICROPROCESSOR HARDWARE

Acer Announces R4000 System Logic Chips.....1

Acer is sampling its PICA chip set, which provides near-workstation performance with an R4000PC. MIPS and DeskStation are also working on chip sets that interface to standard PC buses.

Editorial: Wanted—Benchmarks for Windows NT.....3

Traditional PC benchmarks cannot be used to evaluate new NT systems, as they will not run on non-x86 platforms. SPECint92 is the best measure so far, but actual NT application tests are needed.

Most Significant Bits.....4

DEC has \$5000 Alpha box, higher performance; Sun to license SPARC CPU designs; Dallas Semi announces fast 8-bit controller; AMD 29205 wins Apple printer design; Cirrus to build, sell Newton chip set; IBM makes its 486SLC2 available via OEMs; ET8000 chip set targets notebook PCs; Sun to port Solaris to PowerPC.

Pentium Extends 486 Bus to 64 Bits.....10

Intel's new Pentium processor incorporates many major and minor changes to the 486's external bus. The wider data path and higher clock rate greatly increase the bandwidth. Pentium also adds bus pipelining, multiprocessing support, and eliminates bus sizing.

Pentium Chip Sets Poised for Launch.....15

Close on the heels of Pentium are three system-logic chips sets from Intel, OPTi, and VLSI Technology. Both LSI Logic and Corollary are developing chip sets for multiprocessor Pentium systems.

T9000 Transputer Begins Sampling.....18

Inmos is sampling its T9000 but does not expect to have a final bug-free version until 1994. The eight-way superscalar chip, originally due in 1Q92, has grown in complexity to 3.3 million transistors.

Few Microprocessor Developments at 40th ISSCC.....20

The conference featured papers on 256-Mbit DRAMs, 16-Mbit SRAMs, and a 115-watt processor, but no commercial CPUs.

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Published By

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Microprocessor Report is published every three weeks, 17 issues per year. Rates are:

N. America: \$445 per year, \$795 for two years.

Europe: £345 per year, £595 for two years.

Elsewhere: \$575 per year, \$995 for two years.

Additional copies in the same envelope \$145 per year in North America, \$195 elsewhere.

Back issues are available.

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