

# At a Glance

## **DSP Chips Enable PC Multimedia**.....1

The surge in sales of multimedia PCs has the major DSP vendors eyeing this market. IBM has been the most aggressive in deploying chips configured specifically for PCs, but its Mwave software may be left in the cold as other vendors rally around the SPOX operating system. Microsoft may be crucial in determining the winner.

## **Editorial: Digital Bets Company on Weak Hand**.....3

Alpha processors offer leading performance, but the gap is not big enough to prevent customers from jumping ship. Alpha is losing momentum and will probably end up as an in-house architecture.

## **Most Significant Bits**.....4

Alpha sizzles, Thunder rolls at Hot Chips; Digital ships 275-MHz 21064A; VLSI, Intel cancel Draco, PDA agreement; AT&T ends last chance for Hobbit; VLSI shows two new ARMs; IBM deploys MPEG-2 decoder; Cirrus licenses MPEG core from CompCore.

## **x86 Has Plenty of Performance Headroom**.....9

Despite pundits' claims to the contrary, the x86 architecture can continue to increase in performance by taking advantage of techniques, such as register renaming and out-of-order execution, that have been pioneered by high-end RISC processors. Over time, RISC and CISC designs will become more similar as both use the same techniques to increase parallelism and boost performance.

## **Viewpoint: Intel and HP Shoot Each Other in the Foot**.....15

Nick Tredennick explains how, in combining x86 and PA-RISC into a new architecture, Intel and HP have weakened their current positions and are unlikely to succeed in their new endeavor.

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