

AT A GLANCE

Chromatic's Mpact 2 Boosts 3D 1
 Chromatic's Mpact/3000 recently became the first media processor to reach volume production. The company is also shipping a full set of software for the new chip. The next-generation device, Mpact 2, doubles the performance of the first part while offering an even bigger gain on 3D graphics due to new floating-point capabilities. Mpact 2 is due to be in systems for Christmas 1997.

Editorial: Clouds Darken Over RISC 3
 Increasingly, RISC chips exist only to serve the needs of their parent system vendors, but when IA-64 debuts in 1998, its high performance may force some of these vendors to abandon their progeny.

Most Significant Bits 4
 Intel's Katmai, Willamette surface; New MicroUnity chip for cable modems; Newton first design win for StrongArm; Oak describes single-chip DVD decoder; TriTech debuts highly integrated 3D accelerator; S3 upgrades popular 3D accelerator; VLSI SongBird leads audio migration to PCI; Motorola 68376 flies as TouCan.

Fujitsu Aims Media Processor at DVD 11
 Eschewing PC applications, Fujitsu has developed a relatively simple media processor aimed at video players. The 185-MHz MMA processor uses an LIW design to execute two instructions per cycle. The chip contains 16K of on-chip SRAM and various system logic, reducing the cost of a consumer device.

TurboSparc Offers Low-End Upgrade 14
 Fujitsu's latest SPARC processor provides a good field upgrade for underpowered MicroSparc-2 workstations. With a small team, the company designed a simple scalar processor running at 170 MHz, retaining the highly integrated system design of MicroSparc. But the \$499 chip's performance is about that of a low-end Pentium and lags well behind that of other midrange workstation processors.

ARM Tunes Piccolo for DSP Performance 17
 ARM has created a digital signal coprocessor called Piccolo that works with an ARM processor on the same die. Such a chip is well suited for pagers, cell phones, and other devices that require signal processing capabilities as well as a simple host processor.

Digital, MIPS Add Multimedia Extensions 24
 Digital's motion-video instructions (MVI) add a few instructions to Alpha for video encoding. The MIPS V extensions boost 3D graphics by doubling single-precision floating-point throughput, while the MIPS MDMX extensions offer high performance for integer signal processing and other multimedia applications. Among all vendors' extensions, MIPS V is the only one to target 3D geometry; MDMX stacks up well against Intel's MMX and Sun's VIS.

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Microprocessor Report is published every three weeks, 17 issues per year. Rates are: N. America: \$495 per year, \$895 for two years. Europe: £375 per year, £645 for two years. Elsewhere: \$595 per year, \$1,095 for two years. Additional copies in the same envelope: \$175 per year in North America, \$225 elsewhere. Back issues are available.

Published by

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Winner, Computer Press Award, 1993, 1994

 Printed on recycled paper with soy ink.