#### MICROPROCESSOR REPORT

# Literature Watch

# Graphics/Video

**Building the digital-video pipeline.** Image compression is required to deliver digital video over existing channels. Richard A. Quinnell, *EDN*,

12/22/94, p. 39, 3 pp.

# Graphics accelerators bring 3D to

**PCs.** Inexpensive 3D graphics accelerators can now render complex 3D images. This low-cost capability will transform desktop PCs into sophisticated workstations. Manju Nath, *EDN*, 12/22/94, p. 65, 3 pp.

#### Memory

The dynamics of DRAM technology multiply, complicate design options. Several new technologies, including SDRAM, Rambus, EDRAM, and CDRAM, are vying to become the next standard memory technology. Markus Levy, *EDN*, 1/15/95, p. 45, 9 pp.

### Miscellaneous

Power-reduction schemes promise "cool" digital ICs. Advances in power management and supply-voltage scaling make possible cooler and faster CPUs and logic. Dave Bursky, *Electronic Design*, 1/9/95, p. 51, 8 pp.

## Ball grid arrays gain respectability.

After years of hype, the ball grid array and flip-chip interconnects are finally winning supporters among ASIC and MPU makers. But other new packages are also coming to market. Carol Rosen, *Electronic Business Buyer*, 1/95, p. 81, 5 pp.

An uncommon ISR technique. When handling interrupts in a high-performance RISC environment, your standard approach may come up lacking. One way to boost performance is to use a two-tier architecture. Daniel Mann, AMD; Embedded Systems Programming, 1/95, p. 26, 4 pp.

#### **Programmable Logic**

Knowing your CPLD maximizes its resources. CPLDs are becoming indispensable design tools. But to wring the most performance and capacity out of your CPLD, you should know the basics of its inner structure. Christopher Jones, Cypress Semiconductor; *Electronic Design*, 1/5/95, p. 117, 6 pp.

## System Design

- Motorola launches family of PowerPC-based systems. The Motorola Computer Group has introduced a family of PCs and servers based on PowerPC processors. /AIXtra, 1-2/95, p. 28, 3 pp.
- PowerPC SMP servers, entry platform debut. IBM has updated its RS/6000 line with three new PowerPC-based SMP servers and a \$3,995 workstation. /AIXtra, 1-2/95, p. 34, 4 pp.
- Three ways to serve thee. We compare an Alphaserver 2100, an HP 755, and a four-Pentium ALR Revolution Q-4SMP. Mark Cappel, Advanced Systems, 1/95, p. 36, 6 pp.
- Fast cache designs keep the RISC monster fed. Getting multiple executions per clock from generalpurpose machines requires thoughtful cache and memory-system design. Stephan Ohr, Computer Design, 1/95, p. 67, 11 pp.