

Literature Watch

Buses

Programmable device masters the art of high-speed data transfers. *The Micro Channel Architecture defines a high-speed data-transfer protocol for moving data between a bus master and a slave. Implementing this in programmable logic gives you design flexibility in addition to high-speed data transfers.* Vinita Singhal, Altera Corporation; EDN, 1/20/92, pg 121, 7 pgs.

Development Tools

8-bit microcontroller evaluation boards. Ray Weiss; EDN, 1/20/92, pg 104, 11 pgs.

Many analysis, graphing tools integrate DSP functionality. Michael L. Porter; Pers. Eng. & Inst. News, 1/92, pg 37, 8 pgs.

Simplified tools essential for DSP penetration into microprocessor markets. William B. Twaddell; Pers. Eng. & Inst. News, 1/92, pg 29, 8 pgs.

Memory

Specialty SRAMs sprint in step with speedy CPUs. Jeffrey Child; Computer Design, 1/92, pg 95, 7 pgs.

Miscellaneous

Flat panels proliferate—and challenge the CRT. Jeff Oromaner, Planar Systems Inc.; Electronic Products, 1/92, pg 21, 4 pgs.

For chip makers, 'another year of blah growth'. *Despite gains in a few hot niches, the semiconductor industry may not see 10% growth overall.* Samuel Weber; Electronics, 1/92, pg 43, 3 pgs.

Future packaging depends heavily on materials. *Packaging design must rise to a system level for tomorrow's multichip modules to unleash the power of the silicon they'll house.* David Maliniak; Electronic Design, 1/9/92, pg 83, 8 pgs.

How Microsoft plans to get it all. *DOS/Windows is fine for now, but growth is in applications.* Jack Shandle; Electronics, 1/92, pg 10, 2 pgs.

Multimedia premieres on Unix workstations. David Simpson; Systems Integration, 1/92, pg 32, 5 pgs.

Process advancements fuel IC developments. *Improvements in lithography, etching, and deposition hold the key.* Dave Bursky; Electronic Design, 1/9/92, pg 37, 10 pgs.

Surface-mount sockets expand design options. Tom Ormond; EDN, 1/20/92, pg 71, 5 pgs.

Understanding PC-based hard-disk interfaces. *Choosing among SCSI, IDE, ESDI, ST-506, and other interfaces requires the system designer to make several trade-offs between cost and performance.* Michael Liccardo, Sam Quezada, Cirrus Logic Inc.; Electronic Products, 1/92, pg 45, 5 pgs.

Viewpoint: against software patents. Richard Stallman, Simon Garfinkle, League for Programming Freedom; Communications of the ACM, 1/92, pg 17, 7 pgs.

Wrestling with multimedia standards. Dave Wilson; Computer Design, 1/92, pg 70, 11 pgs.

Peripheral Chips

DVI gets slicker software. Dave Wilson; Computer Design, 1/92, pg 22, 3 pgs.

Self-calibrating A/D converters: Monolithic devices enhance accuracy and linearity. Dave Pryce; EDN, 1/20/92, pg 53, 8 pgs.

The evolution of DVI system software. James L. Green, Intel Corporation; Communications of the ACM, 1/92, pg 53, 15 pgs.

Processors

Betting it all on ACE. *Chip maker Mips is staking its future on a consortium that may be in trouble.* Jonah McLeod, Howard Wolff; Electronics, 1/92, pg 21, 2 pgs.

Microprocessor architectures will evolve in the 90s. *Software compatibility will drive future architectures.* Michael Slater; Microprocessor Report; Electronic Design, 1/9/92, pg 115, 1 pg.

The 3DP: a processor architecture for three-dimensional applications. Yulun Wang, A. Mangaser, P. Srinivasan, S. Jordan, Computer Motion Inc., and S. Butner, UC Santa Barbara; Computer, 1/92, pg 25, 12 pgs.

Programmable Logic

High-density PLDs. *The flexibility of high-density PLDs makes them attractive in many applications, but the lack of a universal yardstick for comparison makes it difficult to find the best choice for your application.* Dave Conner; EDN, 1/2/92, pg 76, 11 pgs.

Reprogrammable FPGAs offer gate-array speed. *SRAM-based reconfigurable logic cells yield flexible, fast logic arrays that surpass other FPGAs.* Dave Bursky; Electronic Design, 1/9/92, pg 143, 4 pgs.

System Design

Laser printer design strategy emphasizes design-for-test. Jeffrey Child; Computer Design, 1/92, pg 91, 3 pgs.

Multichip modules: lack of standards impedes design issues. J.D. Mosley; EDN, 1/2/92, pg 35, 5 pgs.

Technology 1992: PCs and workstations. Alfred Rosenblatt; IEEE Spectrum, 1/92, pg 27, 3 pgs.