Literature Watch

Buses

Bypass the PC bus to speed up your system. *A local bus allows high-bandwidth plug-in cards, such as video boards and network adapters, to access your computer's CPU directly, thereby maximizing throughput and boosting overall system performance.* J. D. Mosley, EDN, 2/18/93, pg 65, 8 pgs.

DSPs

Hand optimization makes DSP routines really hum. *The availability of today's powerful digital signal processing (DSP) µPs has not removed the perennial problem facing engineers writing DSP code: getting their code to run fast enough.* Stephen J. Roome, Steve Denny, Data Sciences UK, Ltd.; EDN, 2/18/93, pg 129, 5 pgs.

Analog Devices guns to be the Intel of DSP. *Analog is quietly establishing a platform that could make it the standard for signal processing as multimedia comes to the PC.* Peter Burrows, Electronic Business, 3/93, pg 101, 4 pgs.

Memory

Synchronous DRAMs clock at 100 MHz. *CPU wait states will become a thing of the past with the emergence of synchronous DRAMs. Result: higher system throughput.* Dave Bursky, Electronic Design, 2/18/93, pg 45, 4 pgs.

Flash memory challenges disk drives. *Flash memory is becoming a rugged, compact alternative to disk drives in subnotebook and palmtop computers. Some flash-memory cards emulate disks so well that your application software can't tell the difference.* Gary Legg, EDN, 2/18/93, pg 99, 6 pgs.

Miscellaneous

Neural networks are ready for prime time. *With most doubts laid to rest and applications flourishing, chip makers gear up for business.* Jack Shandle, Electronic Design, 2/18/93, pg 51, 6 pgs.

Special report—Multimedia: the technology framework. *Lack of standards and the huge bandwidth appetite of full-motion multimedia are very present obstacles but won't be for long.* Bernard Cole, IEEE Spectrum, 3/93, pg 32, 8 pgs.

Digital wireless networks. *Burgeoning wireless-network technology brings ease of installation, portability, and roaming contact to the wire-bound world of standard networks.* John Gallant, EDN, 3/4/93, pg 78, 8 pgs.

Image compression part 2. *Second in a 3-part series on image compression, this article focuses on the methods embodied in international standards JPEG, MPEG and P $\times$ 64.* Richard A. Quinnell, EDN, 3/4/93, pg 120, 7 pgs.

Peripheral Chips

24-bit ADCs handle more than just ultrahigh-resolution applications. *Twenty-four-bit ADCs prove useful and practical as replacements for programmable-gain amplifiers in data-acquisition systems.* David Shear, EDN, 2/18/93, pg 47, 4 pgs.

Add interrupt support to polled parallel ports. *Having to constantly poll a parallel port to watch for changed input bits can eat up a large portion of a processor's time. With the right kind of parallel port, a few extra chips can ease the processor's burden significantly.* James Grundell, The Computer Applications Journal, 3/93, pg 44, 8 pgs.

Processors

New core gives the 80C52 2.5 to 3 times faster execution. Ray Weiss, EDN, 3/4/93, pg 64, 2 pgs.

IC acts as JPEG image-compression coprocessor. Richard A. Quinnell, EDN, 3/4/93, pg 68, 2 pgs.

Programmable Logic

Profitless prosperity hits the gate array market. *Already under profit pressure, makers saw prices collapse in 1992 as PC makers drove hard deals.* Robert Ristelhueber, Electronic Business, 3/93, pg 108, 2 pgs.