

Literature Watch

Buses

Agreement on key issues gives single-high VME new life. Warren Andrews; Computer Design, 5/92, pg 28, 2 pgs.

Hot swap broadens Multibus II horizons. Warren Andrews; Computer Design, 5/92, pg 32, 3 pgs.

PC-based architecture dominates the single-board market. Despite technical incompatibilities and much competition from other computing architectures, the PC is still king. Patrick Mannion; Electronic Products, 5/92, pg 49, 4 pgs.

PC/104: an SBC architecture for the '90s. Rick Lehrbaum, Ampro Computers, Inc.; Electronic Products, 5/92, pg 54, 2 pgs.

Memory

Content-addressable memories: FDDI routers and bridges create niche for memories. John Gallant; EDN, 4/9/92, pg 61, 6 pgs.

Enhancing SRAMs propel systems performance. The venerable static RAM evolves as users demand versions tuned for narrow market segments. Dave Bursky; Electronic Design, 4/2/92, pg 57, 8 pgs.

Miscellaneous

Gary Johnson on: wireless systems. Gary Johnson, National Semiconductor; Computer Design, 5/92, pg 25, 3 pgs.

ICs going on a 3-V diet. After over a decade at 5 V, higher IC densities require a 'cooler' 3-V standard, with transitional systems likely to mix 3 and 5 V. Betty Prince, Texas Instruments; and Roelof H.W. Salters, Philips Research Laboratories; IEEE Spectrum, 5/92, pg 22, 4 pgs.

Low-skew clock drivers: which type is best? Gate, divider, phase-locked loop, and programmable delay types are available. Each must be evaluated against the specific design requirements to determine which is the most suit-

able. Gary Tharalson, Motorola, Inc.; Electronic Products, 5/92, pg 85, 7 pgs.

Ring in the new: HDTV becomes a reality. Large-scale trials at the Olympics are dress rehearsals for a 1994 commercial debut in Europe. John Gosch; Electronics, 4/92, pg 36, 3 pgs.

Windows and engineering software. Charles H. Small; EDN, 4/9/92, pg 123, 8 pgs.

Wireless LANs: welcome to the virtual workplace. To really cut the cord, issues of standards, power consumption, and spectrum availability must be resolved. Jack Shandle; Electronics, 4/92, pg 26, 3 pgs.

Workstation wars: what will it take to survive? Customer service is as important as price and performance in determining the 1995 leaders. Lawrence Curran; Electronics, 4/92, pg 32, 3 pgs.

Peripheral Chips

Digital audio drives 14-to-20-Bit DAC designs. Innovative designs for audio hint at future 16-to-20-Bit DACs with more than 16-Bit DC accuracy. Frank Goodenough; Electronic Design, 4/16/92, pg 55, 10 pgs.

IBM, National union yields integrated token ring controller. Dave Wilson; Computer Design, 5/92, pg 42, 3 pgs.

On-chip 8-bit DACs set comparator thresholds. On-chip 8-bit DACs set and vary threshold voltages of quad, 1.5- μ s comparator; and 4- and 10-ns single ECL and TTL comparators. Frank Goodenough; Electronic Design, 4/2/92, pg 99, 3 pgs.

Silicon solution merges video, stills, and voice. Codec chip set drives standard algorithms for desktop multimedia and videoconferencing. Milt Leonard; Electronic Design, 4/2/92, pg 45, 6 pgs.

VGA accelerator chip supports 4-Mbyte frame buffers. Hardware cursor, line-drawing primitives, and anti-aliasing screen fonts make displays, up to 1280 x 1024 pixels, fast and easy on the eyes. Jon Turner, ATI Technologies Inc.; Electronic Products, 5/92, pg 107, 1 pg.

Processors

RISC chips continue conquest of embedded realm. Jeffrey Child; Computer Design, 5/92, pg 103, 5 pgs.

Programmable Logic

Hands-on FPGA project: Taking the first steps. If you're considering designing with FPGAs, this 2-part hands-on design project will show you exactly what is involved. Part 1 covers the design and schematic entry, and part 2 covers simulation and the functioning circuit. Doug Conner; EDN, 4/9/92, pg 98, 15 pgs.

System Design

Analog vs DSP: balancing speed and precision against cost. There are many applications where an analog approach is best in terms of accuracy, speed and cost. Stephan Ohr; Computer Design, 5/92, pg 83, 10 pgs.

Minimizing energy consumption through power management. Battery-powered portables will benefit from 3-V ICs, but system-level design priorities such as clock speed and use of a disk drive, rather than the 3.3- vs. 3.0-V LVC MOS standard, will have more effect on cumulative power. Stephan Ohr; Computer Design, 5/92, pg 69, 6 pgs.

Synchronous rectifier ups PC battery life. A tiny IC steps up, steps down, regulates, and controls battery drain in portable PCs, lab and medical instruments. Frank Goodenough; Electronic Design, 4/16/92, pg 47, 4 pgs.