LITERATURE WATCH

BUSES

CPCI or VME? That is the question. CPCI (Compact-PCI or Compact Peripheral Component Interconnect) and the mature VME (Versa Module European) have different advantages and disadvantages. Drew Berding, Bustronic; *RTC*, 1/97, p. 53, 3 pp.

DEVELOPMENT TOOLS

Ease system simulation with IBIS device models. Create your own behavioral models of components with a few simple tools to better simulate board-level systems. Syed B. Huq, National; *Electronic Design*, 12/2/96, p. 93, 7 pp.

IC DESIGN

Logic-synthesis standards promise tool-independent design. The success of design reuse depends on the formal specification of synthesis. Victor Berman, Cadence; *Electronic Products*, 1/97, p. 41, 2 pp.

VHDL and Verilog fundamentals—design entities, data types, and data objects. To successfully design chips with Verilog or VHDL, you need to understand the basics of these hardware-description languages. Douglas J. Smith, VeriBest; *EDN*, 2/3/97, p. 163, 4 pp.

Digital-simulation logic-value systems. In addition to representing logical values, simulators need to represent the strengths of those values. The problem lies in how a simulator can accomplish this task. Clive Maxfield, Intergraph; *EDN*, 2/3/97, p. 173, 5 pp.

High-frequency processes remain locked in the vault. Several vendors offer fast bipolar silicon and GaAs process technology. Paul McGoldrick, *Electronic Design*, 12/16/96, p. 79, 7 pp.

Novel processes, structures to yield advanced digital ICs. 0.1- and 0.18-µm fine-line processes will herald 4-Gbit DRAMs, 256-Mbit flash memories, and magneto-resistive RAMs. Dave Bursky, *Electronic Design*, 12/2/96, p. 60, 5 pp.

Modeling and simulation make designing easier. Advances in the development of modeling and simulation tools offer increased predictability and optimized design capabilities. Cheryl Ajluni, *Electronic Design*, 12/2/96, p. 68, 4 pp.

MEMORY

High-speed DRAMs keep pace with high-speed systems. EDO, SDRAM, and RDRAM system-timing parameters show which memory type delivers the performance that your system needs. Craig Hampel, Rambus; *EDN*, 2/3/97, p. 141, 5 pp.

MISCELLANEOUS

CD-ROMS: the naked truth about X ratings. An analysis of the X-speed ratings looks at their negative impact on player production, their failure to define the performance of the drives, and their likely effect on DVD. Mark Carroll, EE Times; *OEM*, 12/96, p. 66, 4 pp.

PROCESSORS

Integrated 8-bit MCU handles high-power applications. Motorola's 68HC705V12 is an 8-bit microcontroller that includes high-current motor control and a high-voltage display driver. Dave Bursky, *Electronic Design*, 12/2/96, p. 85, 4 pp.

SYSTEM DESIGN

Choosing a 2-mm connector. Not all such connectors offer the same degree of density and performance. Michael Munroe, Mark Canestrano, ERNI Components; *Electronic Products*, 1/97, p. 59, 4 pp.

For want of circuit-protection devices... A variety of devices protects sensitive circuits against overvoltage or overcurrent conditions, thereby preventing overheating, avalanche breakdown, and device burnouts. Bill Travis, *EDN*, 2/3/97, p. 46, 7 pp.

Advanced display technologies come to light. Developments in alternative display and manufacturing techniques seek to overtake AMCLDs as they go head-to-head with CRTs. Cheryl Ajluni, *Electronic Design*, 12/16/96, p. 93, 6 pp.

Coping with convergence: the future of wireless system design. Designing the wireless products for the next century requires vision, technology, and the right design tools. Homayoon Saam, Alta Group; *Electronic Design*, 1/6/97, p. 67, 3 pp.

Rechargeable power options for portable computers. With NiCd's popularity fading, designers must choose between NiMH or Li-Ion chemistries, both of which have their respective advantages. D. Blake Frye, Energizer Power Systems; *Electronic Design*, 12/16/96, p. 105, 5 pp.

Mobility and information a la card. Applications and opportunities for SmartCard technology. Friedrich V. Diest, ACG AG; *Electronic Design*, 1/6/97, p. 95, 4 pp.

Cache-coherence issues for real-time multiprocessing. As more embedded applications become complex enough to require multiprocessing, cache-coherence technology needs to be evaluated and adapted to these applications. Alfredo Romagosa, Concurrent; *Embedded Systems Programming*, 2/97, p. 26, 7 pp.