

BUSES

An IEEE 802.11 wireless LAN primer. Seven years in the making, the newly released IEEE 802.11 MAC frame optimizes wireless network communications—especially for roaming handhelds. Angela Champness, *Portable Design*, 12/97, p. 28, 3 pp.

Simple guidelines help you realized maximum PCI-card performance. When designing PCI cards, you should thoroughly think through the design process, including how software drivers will interact with hardware and how you will test the product before freezing any aspect of a new design. Paul Lever, *EDN*, 1/1/98, p. 115, 4 pp.

IC DESIGN

Parasitic extraction tools aid DSM IC designs. Recent tool developments offer extraction solutions for deep-sub-micron designs targeting accuracy and capacity. Cheryl Ajluni, *Electronic Design*, 12/1/97, p. 97, 6 pp.

Chip verification: a formal affair? Simulation, with its accompanying vector suite, has become too cumbersome and time-consuming for million-plus-gate system-on-a-chip designs, but vectorless formal-verification tools and techniques let you verify your chip designs throughout the design flow. Jim Lipman, *EDN*, 1/1/98, p. 85, 6 pp.

PROCESSORS

Challenges and trends in processor design. Although the problems are manifold, chip architects from Sun, Cyrix, Motorola, MIPS, Intel, and Digital see challenges rather than walls. Janet Wilson, *Computer*, 1/98, p. 39, 1 pp.

MISCELLANEOUS

Inside Microsoft Research. While Microsoft products continue to shape our computing experience today, scientists and engineers in the company's research arm are asking, "Where do want to go tomorrow?" Scott Hamilton, *Computer*, 1/98, p. 51, 8 pp.

SYSTEM DESIGN

Digital photography clicks. Digital cameras contain several highly interdependent subsystems and rely on other hardware and software to complete the picture. Brian Dipert, *EDN*, 12/18/97, p. 50, 9 pp.

MEMORY

Memory and logic structures are getting faster and denser. Designers detail advanced process techniques and finer-dimension design rules at IEDM to build next-generation memories and logic. Dave Bursky, *Electronic Design*, 12/1/97, p. 40, 4 pp.