Literature Watch

Development Tools

VXI system performs full SDH/Sonet testing. Using an open architecture ensures that the analyzer can grow and mature in tandem with communications standards. John Novellino, *Electronic Design,* 1/24/94, p. 131, 2 pp.

Teaming a logic analyzer with a debugger provides advantages to both tools. Pairing these two tools gives a low-level look into high-level problems. David Shear, *EDN,* 1/20/94, p. 21, 4 pp.

Logic design is alive and well. Logic synthesis emerges as a core technology for designing systems, boards, and chips. Ray Weiss, *EDN,* 1/20/94, p. 29, 4 pp.

Graphics

Graphics chips race to accelerate. Pulled by paint programs and pushed by Pentium's performance, graphics-chip and -card makers race to keep PC screens refreshed and their companies in business. Alberto Socolovsky, *Electronic Business Buyer*, 1/94, p. 45, 3 pp.

Memory

Memory in the fast lane. The demand for higher-bandwidth memories in systems from multiprocessing to multimedia has designers pulling out all the stops. Betty Prince, Memory Strategies International; *IEEE Spectrum,* 2/94, p. 38, 4 pp.

Miscellaneous

Wireless and ATM to drive network market. The coming auction of personal-communications services will kick off a new market for wireless links. Dwight B. Davis, *Electronic Business Buyer*, 1/94, p. 79, 2 pp.

The time has come for pack purchasing. Using third-party purchasing lets competitors join forces to get the best price—the Feds say it's okay. J. Robert Lineback, *Electronic Business Buyer,* 1/94, p. 104, 4 pp.

Regulator topologies standardize battery-powered systems. Standardized approach helps designers specify and select this crucial element of portable systems. Bruce D. Moore, *EDN*, 1/20/94, p. 59, 5 pp.

Vital signs of identity. In an ever more automated world, Biometrics is emerging as the most foolproof method of identification. Ben Miller, Personal Identification News; *IEEE Spectrum,* 2/94, p. 22, 9 pp.

TTP—A protocol for fault-tolerant real-time systems. The time-triggered protocol integrates predictable message transmission and blackout handling, and it supports replicated nodes and communications channels. Hermann Kopetz, Technical University of Vienna, Gunter Grunsteidl, Alcatel Austria Research Center; *Computer,* 1/94, p. 14, 10 pp.

1993 Gordon Bell prize winners. Winners get marks almost five times higher than previous records at this year's competition. Alan H. Karp, Hewlett-Packard Laboratories, Don Heller, Rice University, Horst Simon, Computer Sciences Corporation; *Computer,* 1/94, p. 69, 7 pp.

Engineering solutions for a nomadic world. The special needs of engineers and managers who design portable equipment come into focus at the Portable-by-Design conference. Dave Maliniak, et al. *Electronic Design,* 1/24/94, p. 51, 4 pp.

Clever designs spawn 40-MHz/10-Bit/0.2-W ADCs. Fine-line CMOS process and creative architectures deliver wideband-sampling-rate ADCs needing just 75 to 350 mW of 5-V power. Frank Goodenough, *Electronic Design,* 1/24/94, p. 123, 4 pp.

Peripherals

IC puts Ethernet and SCSI on a motherboard. A one-chip Ethernet and SCSI device for PCI-bus computers eliminates the need for costly, slot-consuming adapter boards. John Novellino, *Electronic Design,* 1/24/94, p. 59, 4 pp.

ATM knits voice, data on any net. Asynchronous transfer mode looks like the most practical communications choice for the talkative data-heavy future. James Lane, TRAC Associates; *IEEE Spectrum*, 2/94, p. 42, 4 pp.

Processors

Motorola's upcoming 50-MHz 68060 marks the end of an era. Likely to be the last generation of the 68000 family, the '060 will be a key player in the embedded market. J. Robert Lineback, *Electronic Business Buyer*, 1/94, p. 27, 2 pp.

System Design

Circuit boards...bulletproof yours against EMI. Understanding that all EMI begins at the circuit level helps designers apply suppression and hardening techniques. Daryl Gerke, Bill Kimmel, Kimmel Gerke Associates; *EDN,* 1/20/94, p. 49, 9 pp.

Rate-monotonic analysis for real-time industrial computing. This collection of quantitative methods helps analyze, understand, and design the behavior of real-time systems. Mark H. Klein, John P. Lehoczky, Ragunathan Rajkumar, Carnegie Mellon University; *Computer*, 1/94, p. 24, 9 pp.

Program implementation schemes for hardware-software systems. Recent advances in ASIC synthesis lets designers apply high-level techniques to a complete system. Rajesh K. Gupta, University of Illinois, Claudionor N. Coelho Jr., Giovanni De Micheli, Stanford University; *Computer*, 1/94, p. 48, 8 pp.

Cooling hot processors. High-performance chips dissipating 15–20 W or more can be a real headache, but system designers are warming up to new cooling technology. Dan Strassberg, *EDN*, 1/20/94, p. 40, 8 pp.

