

## Literature Watch

## Buses

**Treat PC-board traces as transmission lines to specify drive buffers.** The Peripheral Component Interconnect (PCI) specification simplifies the design of buffer circuitry in high-speed interface systems. Donald Telian, Intel; EDN, 9/2/93, p. 129, 6 pp.

## Development Tools

**Submicron technologies require floorplanning.** Submicron ASIC technology can produce million-gate designs, but the increasing interconnect delays will have you circling through layout unless you use a floorplanner. Doug Conner, EDN, 9/2/93, p. 61, 6 pp.

**Improved Spice model simulates transformer's physical processes.** An improved method of simulating a transformer with Spice includes separate modeling of magnetizing and leakage inductances. L. G. Meares, Charles Hymowitz, Intusoft; EDN, 8/19/93, p. 105, 5 pp.

## DSPs

**DSP algorithms: Make your own—or buy?** You no longer need to create DSP algorithm code from scratch. Many ready-to-run algorithms are already available—and more are on the way in the immediate future. David Shear, EDN, 8/19/93, p. 51, 6 pp.

**DSP chip set does 24-bit, 1024-point FFT in 129  $\mu$ sec.** Ray Weiss, EDN, 9/2/93, p. 144, 2 pp.

## Miscellaneous

**Porting to NT.** Expand your market by making your applications portable between Solaris and Windows NT. Carl Dichter, Motorola; SunWorld, 9/93, p. 86, 7 pp.

## Peripheral Chips

**Mixed-mode ICs put complete systems on a single chip.** Let's face it—digital circuits can't get along without analog circuits, and vice versa. But it takes a special IC "justice of the piece" to marry the two onto a single IC. John Gallant, EDN, 9/2/93, p. 49, 6 pp.

**Low-voltage analog ICs: devices progress below 5V.** After years of analog design using  $\pm 15$  and  $\pm 5$ V supplies, trying to use even lower supply voltages seems ludicrous. But more applications are beginning to demand low-voltage operation and more analog ICs are available to make it possible. Anne Watson Swager, EDN, 9/2/93, p. 77, 9 pp.

**ICs let you program application-specific  $\mu$ Cs.** WSI's PSD4xx and PSD5xx programmable  $\mu$ C subsystem chips let you extend your 8- or 16-bit  $\mu$ C. Ray Weiss, EDN, 9/2/93, p. 142, 2 pp.

**ICs and modules for digital wireless telecommunications.** Europe has emerged as the world leader in defining digital wireless telecommunications standards. Now IC vendors worldwide have to decide whether to design general-purpose front-end chips that would satisfy many specifications or integrated chips and chip sets that completely implement a specific standard. John Gallant, EDN, 8/19/93, p. 77, 10 pp.

## System Design

**Add flexibility to control systems.** A family of flexible system support chips combine logic, memory, I/O and dedicated functions to supplement microcontrollers. Dave Bursky, Electronic Design, 9/2/93, p. 140, 3 pp.

**In >50-MHz digital design, measurements are a must.** Dan Strassberg, EDN, 8/19/93, p. 65, 7 pp.

**Follow these guidelines to design testable ASICs, boards, and systems.** In this era of complex ASICs, surface-mounted parts, and multilayer boards, the only way to make parts, boards, and systems testable is to design them that way from the start. Kumar Venkat, Silicon Graphics; EDN, 8/19/93, p. 117, 6 pp.