MICROPROCESSOR REPORT

Literature Watch

ASICs

Analog ASICs make your circuits leaner and meaner. So, your pet analog project is extending beyond the bounds of your lab bench. Why not consolidate that rat's nest in an ASIC? John Gallant, EDN, 11/26/92, pg 53, 9 pgs.

Buses

STD bus CPUs focus on solutions. Jeffrey Child, Computer Design, 12/92, pg 115, 8 pgs.

Mezzanine buses gain respect, find

new uses. High-density chips and chip sets are bringing more and more functionality to a single board, often reducing system bus requirements. This opens the way for mezzanine boards, not only to increase available board real estate, but to become an integral part of the system architecture—in some cases to the exclusion of system buses. Warren Andrews, Computer Design, 11/92, pg 75, 6 pgs.

Development Tools

Trace issues drive 32-bit emulator choice. Jeffrey Child, Computer Design, 11/92, pg 107, 5 pgs.

DSPs

Analog Devices courts designers with open architecture DSP. Stephan Ohr, Computer Design, 12/92, pg 46, 3 pgs.

Miscellaneous

Can Europe survive the chip wars? Under fire, the continent's industry gives up on going it alone. Jonathan B. Levine, Business Week, 12/21/92, pg 56, 2 pgs.

Digital ICs become the system as complexities increase. With billion-transistor chips, designers won't lack resources for super-performing systems. Dave Bursky, Electronic Design, 11/25/92, pg 63, 7 pgs.

MCMs: 11 experts debate the future. David Maliniak, Electronic Design, 11/25/92, pg 157, 8 pgs.

IEDM spotlight IC process advances. High-capacity DRAMs and SRAMs, plus high-temperature and high-voltage SOI, head the agenda. Dave Bursky, Frank Goodenough, Electronic Design, 12/3/92, pg 39, 5 pgs.

Peripheral Chips

IC vendors integrate PC telecommunication services. First came faxmodem combo chips. Now IC manufacturers are attempting to integrate voice messaging and caller ID. They're thinking about color fax and video conferencing. Stephan Ohr, Computer Design, 11/92, pg 65, 5 pgs.

Processors

8051 tackles secure smart-card applications. Ray Weiss, EDN, 12/10/92, pg 46, 2 pgs.

At the heart of the new machine.

When Sun Microsystems decided back in late 1984 to develop its own microprocessor architecture, it set in motion a sequence of events that led to major shifts in the microprocessor marketplace. Michael Slater, Microprocessor Report; SunWorld Commemorative Issue, Fall 1992, pg 21, 7 pgs.

32-bit power and tools bring cheer to embedded system designers. Because of their increased compute power, higher integration, extensive

power, higher integration, extensive tool sets, and a desire for the friendliness provided by high-level languages, more designers are putting 32-bit microcontrollers on their wish lists for next-generation products. Don Tuite, Computer Design, 12/92, pg 91, 9 pgs.

EDN's 19th annual μP/μC chip directory. Providing at-a-glance performance and architectural data, EDN's revamped μP/μC directory details the key design info for 43 chips. Ray Weiss, Julie Anne Schofield, EDN, 11/26/92, pg 75, 48 pgs.

System Design

Choosing the right battery to power the portable product. Attention to design criteria is the key to obtaining an optimum combination of performance and cost. John Costello, Duracell, Inc.; Electronic Products, 12/92, pg 23, 6 pgs.