

Literature Watch

Buses

PCI promises solution to local-bus bottleneck. Warren Andrews; Computer Design, 8/92, pg 36, 3 pgs.

Ring datapath speeds 200-Mbyte/s transfers. Tom Williams; Computer Design, 8/92, pg 42, 2 pgs.

Memory

Introduction to IDT's FourPort RAM. IDT's FourPort RAM is an innovative memory device with each of its four ports independent in terms of the byte that it can read or write to. John R. Mick, Integrated Device Technology; Microprocessors and Microsystems, v16 #2, 1992, pg 101, 10 pgs.

Miscellaneous

Enclosures and card cages. Spencer Chin; Electronic Products, 8/92, pg 49, 5 pgs.

Low-cost control LANs add automation to homes, autos, and offices. From smart houses to industrial automation, control LANs now provide standard protocols and software interfaces to simplify development of automatic distributed control applications. Maury Wright; EDN, 7/20/92, pg 182, 7 pgs.

MCMs push design and test tools to the limit. Mike Donlin; Computer Design, 8/92, pg 59, 7 pgs.

Special tools and chips make fuzzy logic simple. Inexpensive software tools make fuzzy logic easy to learn and apply. Dedicated fuzzy processors and enhanced microcontrollers make applications run fast. Gary Legg; EDN, 7/6/92, pg 68, 8 pgs.

Peripheral Chips

Low-cost Ethernet chip enables mother-board network controllers. John Gallant; EDN, 7/20/92, pg 66, 2 pgs.

Low-cost single-chip IC enhances gray scales. Laser-printer controller improves text, line art, and half-tone images. It also works with 600-dot/in engines. Richard Nass; Electronic Design, 7/9/92, pg 85, 2 pgs.

MPEG video-decoder chips target low-cost applications. Gary Legg; EDN, 7/20/92, pg 71, 1 pg.

Silicon chips simplify gigabit data-link design. Bipolar chip set emulates gigabit ribbon cable to lighten data-link design burdens and lower cost. Milt Leonard; Electronic Design, 7/9/92, pg 47, 5 pgs.

Processors

16-bit μ C bulks up for automotive control. EDN, 7/6/92, pg 52, 2 pgs.

8-bit 80C52 hits 40-MHz clock rate. Ray Weiss; EDN, 7/6/92, pg 54, 2 pgs.

DSP boards reach performance highs. Despite a slow start as a mainstream technology, DSP is performing tasks ranging from speech and image processing to embedded control. Warren Andrews; Computer Design, 8/92, pg 69, 7 pgs.

High-speed next-generation 8051 runs at 3V. Ray Weiss; EDN, 7/20/92, pg 76, 2 pgs.

Hot DSP market tantalizes analog and digital IC makers. Stephan Ohr; Electronic Business, 7/92, pg 106, 4 pgs.

IC signal processor runs 45 billion MACs/s. Frank Goodenough; Electronic Design, 7/23/92, pg 51, 4 pgs.

Microcontroller integrated 8051 with CAN serial automotive bus. Ray Weiss; EDN, 7/20/92, pg 73, 2 pgs.

Precision-architecture RISC module attains 100-MHz. Ray Weiss; EDN, 7/6/92, pg 49, 3 pgs.

Single-chip PC adds value to personal electronic products. John Gallant; EDN, 7/6/92, pg 43, 1 pg.

Transputer-based parallel-processing boards. Brian Upper, Parasytec Inc.; Electronic Products, 8/92, pg 31, 4 pgs.

μ P links PC bus to two serial channels. Ray Weiss; EDN, 7/20/92, pg 74, 2 pgs.

Programmable Logic

Skirt glitches with proper programming algorithms. Kim Durwood, Ron Evans, Data I/O Corporation; Electronic Design, 7/9/92, pg 57, 6 pgs.

Trimmed-down FPGAs fit in tight spaces and fit on PCMCIA cards. Ray Weiss; EDN, 7/20/92, pg 65, 1 pg.

System Design

DSPs in multiprocessing. Tony Agnello, Ariel Corporation; Computer Design, 8/92, pg 25, 3 pgs.

Making the 400-MHz computer a reality. After clock distribution and caching architectures, the design of high-speed digital systems demands careful component selection and attention to physical layout. Stephan Ohr; Computer Design, 8/92, pg 83, 11 pgs.

Ultracomputers: a teraflop before its time. Gordon Bell; Communications of the ACM, 8/92, pg 27, 21 pgs.