# Literature Watch

# **Development Tools**

Standard DOS tools generate
ROMable 80x86 code. Engineers
face a growing need to produce
ROMable code for 80x86 µPs. The
low cost, high quality, and ready
availability of standard DOS tools
make them attractive candidates as
ROMable-code generators. James D.
Broesch, Science Applications
International Corporation (SAIC);
EDN, 1/7/93, p. 85, 8 pgs.

DSP development tools engage mainstream designers. Equipped with compilers, source-level debuggers, C-callable libraries, realtime operating systems, and automatic code generation tools, mainstream designers are finally finding DSPs less formidable. Ken Marrin, Computer Design, 1/93, p. 65, 7 pgs.

## The VHDL/Verilog debate continues.

How will they share the coveted crown? Verilog has refused to die and OVI's patrons are breathing new life into it. At the same time, VHDL is thriving in the worldwide arena. Will you have to choose between the two? Or can we uncover a grail that will let them work together? Barbara Tuck, Computer Design, 1/93, p. 77, 10 pgs.

#### DSPs

Significant distinctions exist among fixed-point DSPs so compare your choice for each application carefully. Winthrop Smith, E-Systems; Personal Engineering and Instrumentation News, 1/93, p. 71, 5 pgs.

DSP walk-through. Digital Signal Processing (DSP) helped in the solution of a speech synthesis project recently. I'll relate my experiences with a relatively recent DSP chip, the Analog Devices ADSP-2105. Dale Grover, Red Cedar Electronics, Midnight Engineering, 1-2/93, p. 80, 10 pgs.

#### Miscellaneous

Pen power. ZD Labs finds handwriting recognition and horsepower almost ready for prime time. Kevin Bachus, Rusty Weston, Corporate Computing, 1/93, p. 69, 19 pgs.

Are you ready for NT? Microsoft's Windows NT may be the most talked-about operating system yet. Possibly a year away from commercial release, the powerful product will go head-to-head against UNIX in a number of markets. We look at how the UNIX industry is preparing itself, how NT stacks up against UNIX technically, and how Microsoft is masterfully marketing it. Frank Hayes, Rik Farrow, Gary Andrew Poole, UnixWorld, 2/93, p. 42, 12 pgs.

MCM designs require exhaustive thermal analysis. By modeling MCM thermal characteristics with CAD analysis software, you'll obtain data that flags thermal dangers so you can modify your design before the prototype reaches the manufacturing stage. Darren M. Brewer, Lesley P. Burnette, Intergraph Corporation, EDN, 12/24/92, p. 96, 7 pgs.

A neural-network audio synthesizer. Mark Thorson, F. Warthman, M. Holler, Dr. Dobb's Journal, 2/93, p. 50, 8 pgs.

Dream machines come closer to reality. Performance of desktop systems to hit 1000 MIPS. Dave Bursky, Electronic Design, 1/7/93, p. 63, 7 pgs. Multimedia technology is best consumed one byte at a time. The four components—audio, storage, video, and networking—will arrive in that order. Satish Gupta, Media Vision; Electronic Design, 1/7/93, p. 96, 4 pgs.

Benchmark suites help evaluate fuzzy logic performance. Tom Williams, Computer Design, 1/93, p. 42, 3 pgs.

## Peripheral Chips

IC makers belly up to the disk drive bar. With users demanding higher capacity at lower cost, disk drive makers are asking for greater integration and faster data rates from their IC vendors. The trend, set by desktop computer makers, encourages IC makers to create digital solutions to current mixed-signal problems. Stephan Ohr, Computer Design, 1/93, p. 55, 6 pgs.

#### **Processors**

Mitsubishi M38802Mx runs keyboards, input peripherals. Ray Weiss, EDN, 1/21/93, p. 55, 2 pgs.

## Programmable Logic

Source list: gate arrays. Covers gate arrays offered for new designs. This list does not include old arrays that many manufacturers continue to produce for existing customers.

Electronic Products, 1/93, p. 30, 4 pgs.

Standardized benchmarks peg big PLDs' performance. Because of the games vendors play with FPGA and HDPLD specs, an independent organization is stepping forward with impartial benchmarks to dispel the fog. Charles H. Small, EDN, 1/21/93, p. 29, 4 pgs.