

AT A GLANCE

Mitsubishi Designs DVD Decoder 1
 Mitsubishi has developed a media processor intended for DVD players and other consumer products. The programmable LIW core runs at 250 MHz, providing a peak rate of one billion operations per second on 16-bit data. The chip can perform DVD decoding with enough spare cycles to drive the user interface, eliminating the need for a separate host CPU. These features should make the D30V, when it appears late next year, a low-cost solution for DVD players, but it is not well suited as a PC multimedia accelerator.

Editorial: The Many Faces of Network Computers 3
 As part of the NC frenzy, vendors have announced NCs for the home, NCs for business, and the Intel/Microsoft NetPC, which isn't really an NC at all. These systems all address different needs.

Most Significant Bits 4
 Klamath to use SEC daughtercard; AMD demos 200-MHz K6 and K5-PR166; MMX prevalent at Comdex; 3Dfx's Voodoo Rush improves integration; Digital shows chilled 767-MHz Alpha; Chromatic takes SGS-Thomson as third source.

Soft Modems Take Cheap Shot at DSPs 10
 Motorola's own modem hardware division has forecast that most PCs won't have a hardware modem within five years. The company is now offering software that does away with the DSP chip in the modem hardware. This software consumes half of a fast Pentium's processing power, making it unwieldy in current systems, but this figure will drop to a quarter of a P55C and a tenth of a Klamath (P6). General Magic separately announced similar modem-emulation software aimed at PDAs and other embedded devices.

Microprocessor Pioneers Gather at Forum 12
 This photo series illustrates the gathering of 15 designers of early microprocessors, including all four designers of the Intel 4004, the first commercial microprocessor. To commemorate the microprocessor's 25th anniversary, the Microprocessor Forum also featured many systems and development boards based on these early CPUs.

Bringing Parallelism Out of the Closet 14
 At this year's Microprocessor Forum, a group of processor experts discussed how new instruction-set architectures (ISAs) will impact microprocessor design. Several panelists built a case that new ISAs will provide a significant performance boost, but there was some debate over whether current ISAs will keep pace. Vendors offering a new ISA must solve the problem of compatibility with existing software while convincing software makers to support the new ISA. One possibility is to combine on a single die a processor based on a current ISA with a media processor using a new ISA.

Literature Watch 16

Recent IC Announcements 17

Patent Watch 18

Chart Watch 19

Resources 20

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