

AT A GLANCE

ARM Grabs Embedded Speed Lead 1
 Digital's first StrongArm processor, the SA-110, offers a potent combination of low power consumption, moderate price, and high performance. In fact, at 230 MIPS, the 200-MHz device outperforms all other embedded processors while consuming only 900 mW. Power consumption can be reduced further by operating the part at 1.65 V, although this cuts the clock speed slightly. The \$49 device is ideal for PDAs, set-top boxes, high-end printers, and other embedded products that can take advantage of its high performance. In particular, the SA-110 is likely to appear in future Newton products, improving their performance by an order of magnitude.

Editorial: Intel's New World View 3
 In the past two years, Intel's focus has shifted from market share to market growth. To help the PC market grow, Intel has invested in developing new technologies, such as PCI and USB, and sharing them broadly. It appears that Intel will even share its new multimedia extensions with AMD and other x86 competitors.

Most Significant Bits 4
 Digital regains performance lead; R10000 R5000 set for extended rollout, performance records; Sun to market Java chips; Intel confirms 200-MHz pentium plan; Triton gains USB, SDRAM support; First alternative PPro chip set from VIA; Exponential tapes out; ARM proliferates to Oki; Errata: R5000 cycle times.

Cyrix, IBM Push 6x86 to 133 MHz 11
 By moving its 6x86 design to a 0.5-micron process, Cyrix boosted its clock speed to 133 MHz while cutting the die size nearly in half. The smaller die enables both Cyrix and its foundry, IBM, to put the 6x86 into volume production. At 133 MHz, the chip delivers better performance than a 166-MHz Pentium, according to tests performed by MDR Labs, a new benchmarking lab run by the publisher of *Microprocessor Report*. To help users compare processors, Cyrix and IBM will use a "P" rating; for example, the 133-MHz 6x86 will be sold as the 6x86-P166+, indicating better-than-Pentium-166 performance.

Multimedia Chips Complicate Choices 14
 Nvidia is the only company shipping a multimedia accelerator today, but its chip lacks video and modem capabilities. Chromatic's Mpact, due in 2Q96, provides a broader feature set at a price similar to Nvidia's. Philips' TM-1 is similar to Mpact but lacks Sound Blaster compatibility, which could be critical, and won't be out until 1H97. IBM is developing an Mfast chip with even more capabilities for 1997 deliveries, but it is unclear whether the market will need these features. Except for Nvidia, all these vendors must demonstrate the ability to deliver working hardware and software.

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