IBM could quadruple clock speeds with 486SLC technology

BY ED SCANNELL

IBM's delivery of a 40-MHz 386SLC chip by year end will be the first of an ambitious series of chips that could see clock speeds triple or even quadruple those of a system's clock.

In the next year or two, IBM could deliver systems anchored by a 486-based version of its SLC chip that eventually could run at a multiple of 20/100 MHz.

Such systems would clearly differ from 486SX-based systems in price/performance capabilities and be positioned accordingly.

"Right now we have a 20-MHz chip we can double to 40 MHz," said Paul Ledak, manager of microprocessors design for IBM, in Burlington, Vermont. "But as we announce 25- and 33-MHz 386SLCs, which the processor can handle easily, we can upgrade those to 50 and 60 MHz."

IBM has already indicated that the 386SLC chip will be used in a portable system due late this year, as well as in some lower end Personal System/2 models such as Models 35 and 40.

IBM also plans to migrate the chip with 486SLC technology, placing it in systems that would clearly supercede the price/performance of the company's existing Models 70 and 80.

These systems, with higher disk capacities than existing models, would be better equipped to churn the mountain of code in IBM's recent delivery of OS/2 2.0.

"For entry-level servers, the [SLC] chip is a possibility," said David Hauger, manager of IBM's entry systems division. "There are lots of LAN applications that don't require a big processor to drive them."

The 486SLC chips would be offered initially as board upgrades to existing 386SLC-based systems such as the Models 56 and 57, which were recently announced.

The snap-in version of the 386SLC is now the best-selling hardware upgrade in IBM's microcomputing history, Ledak said.

The 386SLC is a 5-volt, 1-micron CMOS technology with an 8K cache, whereas the 486-like version is a 3.3-volt, .8-micron technology with a 16K cache.

While IBM and Intel's clock-doubling strategies are similar, there are some minor, but important, differences, Ledak said.

Intel is primarily interested in doubling the clock speed of chips, whereas IBM's approach is to provide improved speed and other system efficiencies that result in a more balanced performance.

Users can send faxes remotely with Avanti 025

Beaver Computer Corp. is shipping a Windows notebook computer that lets users communicate on the road.

The Avanti 025 bundles WinFax 2.0 software, enabling users to fax documents from within their Windows 3.0 applications.

The computer is capable of receiving faxes, even when its power management features put it into suspend mode. FutureSoft's Terminal Plus communication software allows users to communicate with other computers. Other bundled software includes Windows 3.0 and DOS 5.0.

The Avanti 025 itself uses an AMD 386SXL processor, which has power management features.

The notebook weighs between 6 and 7 pounds and comes in three configurations. The base model has 2 megabytes of RAM and a 60-megabyte hard drive. Other models include 4 megabytes of RAM and either an 80- or 130-megabyte hard drive.

It has a 10-inch monochrome VGA LCD monitor capable of displaying 32 shades of gray.

The internal fax/modem sends at 9,600 bits per second (bps) and receives at 4,800 bps. It sends data at 2,400 bps.

The Avanti 025 is scheduled to ship now, but the company had not set prices by press time.

Beaver Computer, located in San Jose, California, can be reached at (809) 994-9000.

— Yvonne Lee

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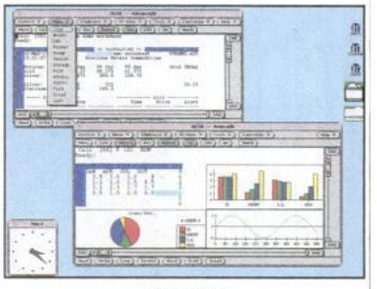

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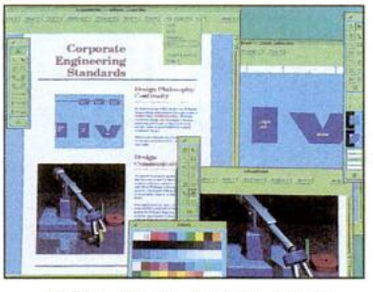

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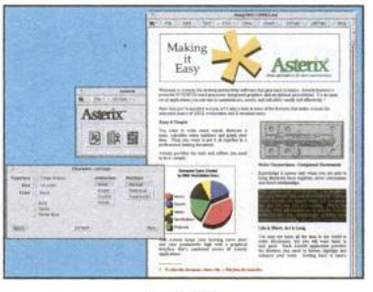

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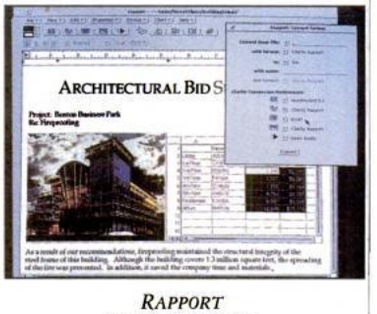

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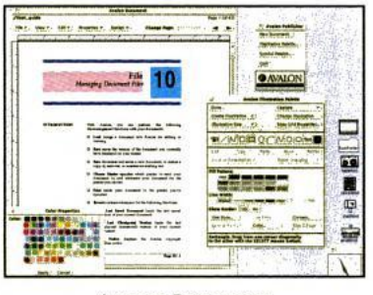

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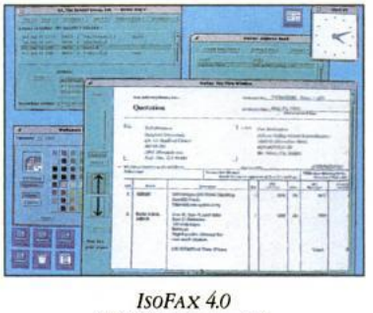

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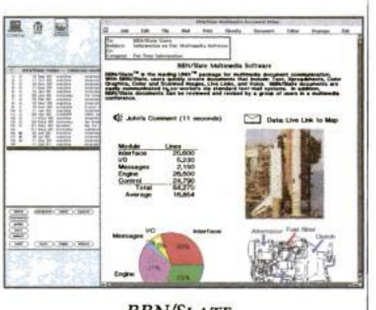

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