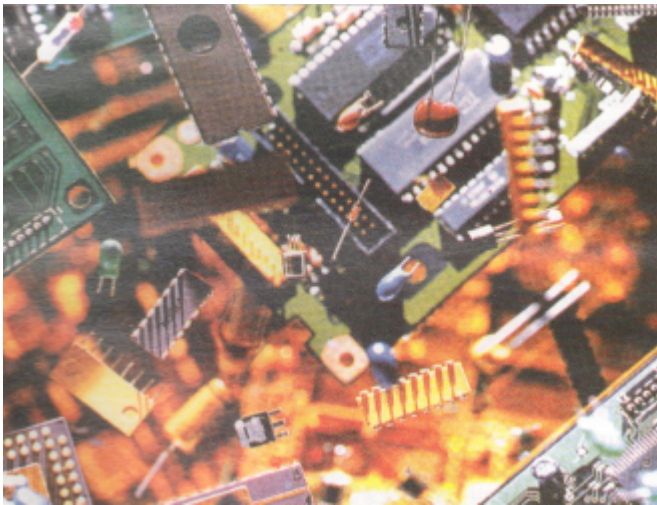


Cheaper PCs

If you want to buy a fast computer, this is a good year to do it. One of the computer's most expensive components – the microprocessor – is going to come down in price. Rapidly. That's because the leading manufacturer of that chip is finally getting some serious competition.

One of the big surprises is Advanced Micro Devices Inc. Long an also-ran in the microprocessor derby, AMD has suddenly overtaken Intel with cloned chips that run faster and costless. And don't forget Computer, Apple which is selling systems that run faster than either Intel- or AMD-based machines. The computer company is having trouble persuading users to switch to its alternative system and software. But in terms of raw speed, it's leading all the consumer-desktop machines.



All this is excellent news for the computer buyer, who can expect aggressive price cuts in the next 12 months. 'It's starting to get a little more interesting,' says Rob Chaplinsky, a semiconductor analyst with Hambrecht & Quist in San Francisco. He predicts Intel's high-end 200 megahertz (MHz) chips will start showing up in US\$1,500 machines before June and in US\$1,200 computers by the end of September.

Of course, chip prices naturally fall anyway because of continuing manufacturing improvements. The new competition, particularly from AMD, will keep the price-cutting aggressive, says Michael Slater, publisher of Microprocessor Report, a

Sebastopol, Calif, industry newsletter.

Last year, another competing manufacturer, Cyrix, launched its own chip that rivaled all but the speediest of Intel's microprocessors. But Cyrix lacked the manufacturing capacity that AMD has. AMD last month shipped 10,000 units of its new K6 chip and expects to ship several million in the second half of the year. So far, you can find K6 chips in the computers of only two foreign manufacturers Fujitsu ICL and Vobis. AMD still has to persuade top American computer companies, such as Compaq and Dell, to use the K6. But by offering at least a 25% discount to Intel's prices, AMD believes it will make headway. The new chips come in three models running at 166 MHz, 200 MHz, and (the Intel-beating) 233 MHz. (The higher the megahertz, the faster the chip.) AMD has also demonstrated a K6 running at 266 MHz. There's no question that 266 is soon to come,' says company spokesman Scott Allen.

Cyrix is also preparing to launch a comparable series of chips, dubbed the M2, later this year. Of course, Intel is not standing still in the microprocessor derby. Next month, it is expected to retake the lead with a new class of faster Pentium II chips. Just as important, the new chips will come in a new form housed in a cartridge instead of slipping into the traditional socket.

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Intel claims the new format will enhance performance, especially three-dimensional graphics. But it's no coincidence that the new format will also make it harder for the clonemakers to compete, analysts say. If Intel can persuade computer manufacturers to switch to the slot technology – and many analysts believe that they will switch – then the clonemakers will once again have to scramble to catch up.

And what of Apple, which is leading the whole pack with a 300 MHz computer? Bad news keeps rolling in, like the announcement of a US\$708 million quarterly loss – a

little more than most analysts expected and caused in part because sales of its machines fell more than expected. On the other hand, executives and even analysts are upbeat that the worst is over and that the company's new technology will attract computer users.

It's going to be a great micro- processor race this year. Computer buyers should smile.