

Intel Locks Out P6 Chip-Set Vendors

Reducing Choices for OEMs Could Ultimately Haunt Intel



The difference between a market share of 90% and 100% may seem small, but that last narrow slice is what separates power from absolute power. Intel's vast share of the CPU and chip-set markets has given it great power, but the company is now angling to completely eradicate competition in the merchant chip-set market. That monopoly power is already leading to abuses against PC vendors—a situation that is likely to hurt Intel itself in the long run.

Intel gained its dominant position in the system-logic chip-set market during the transition to the Pentium generation. There were many vendors of 486 chip sets, but when the first Pentium processors came out, Intel made a major investment to bring out chip sets that were better than its competitors' products in both schedule and features. Since Intel could invest more resources in its chip sets, it could—and eventually did—drive most other chip-set vendors out of the market. Still, a few companies such as VIA, SiS, and Acer Labs have stubbornly held on to the last 10% or so of the Pentium chip-set market.

When Pentium Pro was first introduced, it appeared the same state of affairs would continue, with several vendors supplying system logic. Indeed, VIA announced a P6-bus chip set (see MPR 2/12/96, p. 6) only a few months after Pentium Pro began shipping. The VIA chip set was superior to Intel's existing products in some ways, but mysteriously, the device never shipped. Since Pentium Pro didn't become a large portion of the market, this failure was not significant; the alternative chip-set vendors continued to ship Pentium-based products.

Over the past several months, however, Pentium sales plummeted as Intel brought down the price of Pentium II. Intel's latest moves (see MPR 4/20/98, p. 14) show Pentium's remaining lifetime is limited, with new P6-bus processors poised to take over the entire PC market. Yet there are still no P6-bus chip sets available from any vendor other than Intel.

The reason: Intel has threatened to sue any chip-set vendor that brings a P6-bus chip set to market unless it has an Intel patent license; among the major chip-set vendors, only Intel itself has such a license. In the past, Intel encouraged and assisted other companies in developing and deploying chip sets for its processors, providing a no-cost license for any required patents or intellectual property. Sources indicate the company provided similar assurances to VIA for its P6 chip set, but somewhere along the way, Intel changed its mind about allowing other vendors to sell P6 chip sets.

Intel claims the P6 bus is so complicated that the company doesn't have the resources to support multiple chip-set vendors. Yet even without this support, VIA and others have developed products they want to bring to market. Intel also says it wants compensation for the intellectual property (IP) embodied in the P6 bus. All of this IP, however, was developed by Intel's microprocessor group and freely provided to its own chip-set group—but not to any other merchant chip-set vendors.

This is a clear case of a company using its dominant position in one market to eradicate competition in another. Antitrust laws forbid Intel from forcing its customers to buy an Intel chip set in order to get an Intel processor, but by eliminating all other options, the company has achieved the same result.

We could hope Intel would use its chip-set monopoly to spur PC sales by providing low-cost but powerful system logic. No such luck. In a classic monopolist ploy, Intel will apparently use its dominant position to raise chip-set prices. The new 440BX chip set (see MPR 4/20/98, p. 18), which replaces the \$38 440LX, lists for \$52. At the low end, PC makers that adopt Celeron will no longer have the option of using non-Intel chip sets that list for \$25 or less; instead, they must use the 440EX, which lists for \$34.75.

In the short term, this strategy should be profitable for Intel, assuming its customers play along. In the long run, however, it may draw the wrath of government antitrust watchdogs and ultimately engender financial and legal sanctions that could dwarf any new profits. Furthermore, reducing the number of chip-set options inevitably leaves some market needs unmet. Over time, this shortsightedness could reduce PC sales, particularly at the low end.

The alternative for makers of low-cost PCs is to ignore Intel entirely and use alternative CPUs and chip sets. AMD has been forced to launch its own chip-set products and may purchase one of the independent system-logic vendors if the chip-set business collapses. Other chip-set vendors may seek shelter with Intel-licensed fabs such as National or IBM.

Thus, Intel's heavy-handed maneuvers could force PC vendors directly into the arms of its biggest competitors. Perhaps Intel will change its P6 chip-set strategy before such unintended consequences ensue. If not, PC makers will have yet another reason to do business with AMD and Cyrix. □

Ainley Gwenny