## ■ THE PUBLISHER'S VIEW

## Intel's New World View

## Market Growth, Not Competition, Is the Top Concern

For most of its existence, Intel has been known as a tough competitor with a "take no prisoners" approach to business. In the past two years, however, a subtle but profound shift has occurred. Intel now realizes, it appears, growth in the PC market—not competition—is the company's most important limiter.

The shifts in Intel's relationship with AMD are indicative of the company's changing attitudes. For nearly a decade, Intel fought AMD bitterly in court, using any argument it could contrive—generally without success—to challenge the legitimacy of AMD's microprocessors.

This approach came to a dramatic end 13 months ago, when the two companies signed an agreement ending all pending litigation. As part of the January 1995 settlement, the companies agreed to negotiate a new patent cross-license agreement, because the one in place since 1976 expired at the end of 1995. Last month, Intel and AMD announced that they had, in fact, reached a new agreement.

The surprise in the new agreement was its broad scope (see 1001MSB.PDF). The old Intel would have fought vigorously to narrow the agreement as much as possible. Instead, the "kinder, gentler" Intel negotiated an agreement that is quite broad, including not only all patents but also certain copyrights, with the goal of ensuring AMD's ability to produce binary-compatible microprocessors without concern about legal challenges. One exclusion is that AMD is not allowed to build parts beyond the P55C level that are 100% socket or interface compatible with Intel's.

The key technology that no doubt caused some second thoughts at Intel is MMX, its multimedia extensions to the x86 instruction set. By excluding MMX from the license agreement, Intel could have forced AMD to develop its own version of MMX. The result would have been a fragmenting of the instruction set, with Intel and AMD each pursuing separate extensions. The old Intel surely would have seen this as a benefit. The new Intel realizes that, one way or another, AMD and others are going to be there—and as long as they are, having a single instruction-set architecture will benefit software developers and ultimately lead to faster market growth.

Intel's shift in approach no doubt comes, in part, from the company's growing confidence in its ability to continue to dominate the market. With a capital spending rate that will break \$4 billion this year, Intel is making an investment in manufacturing capacity that all but ensures it will be the dominant supplier. To justify this investment, Intel must keep its fabs full. Prices—and profits—will be cut as necessary to make this so. In some sense, the variable is not Intel's market share, but its profit margin.

Intel's competitors have indirectly strengthened Intel's position. The prospect of PowerPC and a host of x86 challengers lit a fire under Intel's engineering efforts and spurred the company to move even faster from one processor generation to the next and one process technology to the next. Intel has pushed process technology harder than ever before—at a pace that has left its competitors struggling to catch their breath.

Intel has good reason, then, to feel secure in its position. If there is a reason for Intel to be worried, it is because of the prospects for slowing growth—not increasing competition. Intel's massive investment in new fabs demands continuous growth in the market; the overhead of partially utilized facilities could drag down the company if business dropped sharply. If PC users stop demanding more and more performance, then upgrade cycles will slow, which could dramatically slow market growth.

In this context, Intel's efforts beyond the processor make more sense. Desktop videoconferencing isn't going to be a huge business for Intel—but it could give business users a reason to buy faster systems. Chip sets and motherboards aren't going to come close to the profits earned by Intel's microprocessors—but they enable the company to push the pace of innovation in the PC market and drive the latest processors into volume use more quickly.

Intel's competitors can hardly afford to breathe easily, but they could benefit from worrying less about how Intel may be out to get them and more about how to encourage market growth. Intel isn't out to eliminate them—indeed, Intel needs them to service demand for low-price products and to keep the Department of Justice at bay. As long as the PC market keeps growing, there is enough business for all the suppliers to prosper, though not at Intel's scale.

To some degree, the combined market share of Intel's competitors is fixed, and the challengers are competing with each other as well as with Intel. If Intel's competitors grab too much market share, especially near the high-profit high end, Intel will crank down its prices to put them back in line. The challenge for Intel's competitors is to get enough of the market for them to prosper, but not so much that Intel is motivated to squash them.

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