

THE PUBLISHER'S VIEW

Intel's Predicament

Efforts to Boost PC Industry Have Downside for Its Biggest Customers

by Michael Slater

The personal computer industry is a strange business, and nowhere is this more apparent than in Intel's relationships with its customers. In its efforts to boost the entire industry, Intel has ended up taking actions counter to the best interests of its biggest customers. This gamble appears to be paying off for now, but there is a big risk: Intel's largest customers feel no great loyalty, and as real alternatives emerge, they may well abandon Intel as a preferred supplier.

At the heart of Intel's predicament is the commodity nature of the PC business. The standardization of the PC platform and the open availability of all the hardware and software components enabled hundreds of companies to go into the computer business. For the majority of them, a screwdriver is the most sophisticated engineering tool they possess. They buy motherboards, disk drives, power supplies, and boxes, put them together, and run ads. And they sell millions of computers.

The motherboards often are made by companies with little more engineering talent than the box assemblers. Working from schematics—and sometimes from full circuit-board layouts—provided by chip-set vendors, motherboard makers in Taiwan crank out millions of motherboards with tiny profit margins.

A few PC makers—notably IBM and Compaq—do have significant engineering resources. These first-tier vendors can charge a modest premium because of their brand names, but they would be much better off if they could use their resources to build better systems than their screwdriver-equipped competitors. In the absence of an outside source of system designs, out-engineering the cloners wouldn't be too hard.

Now, back to Intel's role. Intel wants to sell microprocessors—lots of them. The more PCs that are sold, the better Intel's business will be, as long as most PC makers continue to depend on Intel's chips.

A few years ago, Intel became dissatisfied with the slow pace of innovation in the PC business and decided to do something about it. If the PC were left on its own, there was a real danger that the advantages of the Macintosh and workstation platforms would cause a decline in its market share. As the recipient of much of the PC industry's profit, Intel was the only company in a position to make the needed investments in R&D. To advance the PC platform, Intel created the Intel Architecture Labs (IAL). The results—which include the PCI

bus, plug-and-play (developed with Microsoft), and Indeo video compression—have been impressive.

Intel also uses its system design and manufacturing capabilities to help establish the technologies it develops. To ensure a quick start for PCI, for example, Intel has manufactured Pentium-based PCI motherboards and sold them at attractive prices to many PC makers. As a result, PCI took hold quickly and Pentium system prices rapidly hit remarkably low levels.

The downside of Intel's aggressiveness in pushing the industry forward is that, ironically, it is counter to the interests of the first-tier computer makers. If Intel didn't supply PCI motherboards to mail-order PC makers, companies such as Compaq and IBM might have had a significant technology lead and been able to sell their systems at higher profit margins. Intel's new multiprocessor standard (see *080603.PDF*) is another example of an effort that will result in less expensive systems from more vendors but is the last thing the existing MP system vendors wanted to see.

The Intel Inside campaign is another Intel effort that raised the ire of the first-tier makers. By promoting the Intel brand as the thing for users to look for, Intel undercut the value of the system makers' brands. IBM and Compaq are now reportedly pulling out of the campaign, even though doing so will cost them millions of dollars in lost rebates.

This situation has left Intel vulnerable to incursions by competing microprocessor suppliers. Compaq, for example, probably was driven to its recent decision to use processors from AMD as much by its resentment of Intel's actions as by anything AMD had to offer. IBM decided not to license Intel's Pentium design, instead forging a partnership with Cyrix (see *080602.PDF*). The leading PC makers feel threatened by Intel's overwhelming power and are acting to counter it. They have nightmares of a PC industry that serves primarily as a distribution channel for Intel motherboards.

As AMD and the Cyrix/IBM partnership broaden their product lines and increase their production capacity, Intel's share of the x86 microprocessor market could drop significantly. Had Intel been a better partner to its biggest customers, it might have been in a stronger position to keep their business, but the market would not have grown as quickly. ♦

