

Intel Sacrifices Share on ASP Altar

Despite Plunging PC Prices, Intel's Average Selling Price Remains Steady



We have all seen reports of plummeting PC prices. Some indicate that the average selling price (ASP) of desktop PCs has fallen by 20% or more during the past two years. Yet Intel continues to report that the ASP of its processors has dropped only slightly during this period. How can the largest PC processor maker defy gravity so brazenly?

The first part of the trick is that PC prices and processor prices are not directly related. Most of the drop in PC prices has been due to falling prices of DRAM and disk drives. During the first half of this year, an overstuffed channel resulted in even more price competition than usual, leaving PC makers with dwindling margins. As a result, processor vendors saw only a fraction of the decline in system price.

The decline in processor ASP has been manifested as a modest shift toward low-cost processors. We estimate that this shift has reduced the ASP of x86 PC processors by less than 10% since early 1997. Intel has shielded itself from much of this reduction by shifting low-cost processor demand to its competitors, primarily AMD.

As the figure below shows, Intel's market share reached 89% in the summer of 1997, as AMD's K5 sales dissolved before it could reliably manufacture the K6. Since then, AMD's shipments have surged, but Intel's have not, resulting in a shift in market share of 8% by the end of 1998, according to our estimates.

AMD's gains, however, have come at fairly low prices; at just over \$100, the company's PC processor ASP is less than

half of Intel's. Thus, for every two share points that Intel gives to AMD, the overall PC processor ASP falls by 1%. The 8% drop in Intel's share could reflect a 4% reduction in PC processor prices, assuming Intel's ASP has been steady. In fact, we believe Intel's ASP has fallen by only a few percent during this period.

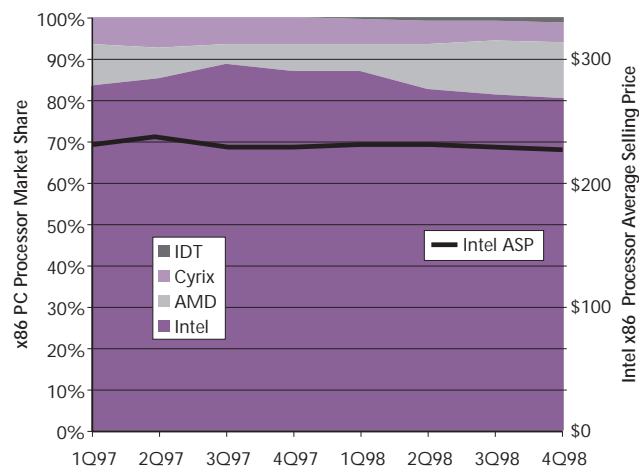
At this time, the combined share of Intel's competitors is approaching 20%, a high-water mark that has rarely been breached in the past decade. We don't expect Intel to continue to sacrifice market share to protect its ASP. Such a strategy would give AMD the field, making it difficult to regain market share in the future. Instead, we expect Intel to try some different tactics in 1999.

First, Intel will be more aggressive in protecting its low-end market share. The market leader was slow in responding to the emerging sub-\$1,000 PC market and then misfired with the original cacheless Celerons. But the new Mendocino Celerons, with a small but fast on-die cache, are stronger contenders for low-end design wins. Mendocino should solidify Intel's position in \$800 PCs in 1H99. By 2H99, the combination of Mendocino and the integrated Whitney chip should make Intel popular even in \$600 PCs. These products will make it harder for low-cost competitors to gain ground against Intel.

Second, Intel will try to boost demand for its more expensive processors. The company hopes that the Katmai New Instructions will quickly become popular, forcing end users to buy up into the Pentium II line. Intel is working with many software vendors to develop new applications that require KNI, or at least a fast Pentium II, to run well. Some of these applications will start appearing in 1999.

If all else fails, Intel hopes its new Xeon line will counter reductions in the ASP of its PC processors. With an ASP in excess of \$1,200, Xeon could increase Intel's overall ASP by as much as 5% in 1999. Intel would like to bank the profits from Xeon, but if competition at the low end gets brutal, it can use these profits to subsidize its Celeron line. Ultimately, Intel must hope that new applications succeed in building demand for its high-end processors, but in the interim, these other tactics could keep its revenue on the upswing. □

For more information on Intel's processor roadmap and sales, order the newly revised Intel Microprocessor Forecast, Fourth Edition, at www.MDRonline.com/tl/intel.



Intel's share of the x86 PC processor market has fallen from a peak of 89% in 3Q97 to a projected 79% in 4Q98. (Source: MDR)

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