

Profits Elude Intel's Competitors

Intel Delivers Another Spectacular Quarter; AMD, Cyrix Stumble



Last year, Intel's competitors gained a lot of ground, exiting 1998 with high hopes. With low-cost processors becoming an increasing part of the PC market, it seemed likely that Intel's profit margin would be under intense pressure.

Now that the first-quarter results are in, Intel has emerged stronger than ever, while its competitors are losing ground. Intel's quarterly revenue of \$7.1 billion was up 18% from the same quarter last year. Net income was an impressive \$2 billion, up 57% from 1Q98.

Stung by the market-share gains made by AMD and Cyrix in 1998, Intel became much more aggressive in 1999 with its Celeron line. Nevertheless, Intel's average selling price (ASP) and gross margin remained essentially unchanged. The growth in high-priced Xeon processors apparently was enough to offset the lower prices for Celeron chips, and cannibalization of the Pentium II line by the low-cost offerings doesn't seem to have been much of a problem.

AMD's quarterly results were in stark contrast to Intel's. Plagued by manufacturing problems, AMD lost \$128 million in 1Q99 on revenues of \$632 million. The company shipped only 4.3 million processors, down from 5 million in 4Q98.

Cyrix had a similarly bleak quarter. In its fiscal quarter ended February, National lost \$27 million on \$500 million in revenue. Cyrix's shipments for the M II processor fell to 1.55 million, from 1.7 million in 4Q98. The actual drop in M II share was far greater, since IBM Microelectronics shipped at least 1.5 million on its own in 4Q98 but was entirely out of that business in 1999. Thus, total unit shipments of the M II fell by more than half from quarter to quarter.

We estimate that Intel shipped about 23 million processors in the quarter, for a unit share of 79%, up from 72% in 4Q98. Intel's tremendous financial strength comes from the much higher ASP it earns: we estimate it to be \$227, compared with \$78 for AMD, \$49 for Cyrix, and \$30 for IDT. As a result, Intel produced about \$5.2 billion in PC-processor revenue in the quarter, making AMD's \$335 million seem almost insignificant—not to mention Cyrix's \$75 million and IDT's paltry \$7 million. In terms of revenue, Intel's share of the business was 92%—and when it comes to profits, Intel was the only x86 vendor to have any!

Intel benefited not only from its vast scale but also from its competitors' troubles. AMD pushed K6 clock speeds so hard that it repeatedly encountered yield problems. As its yields on faster parts plummeted, AMD pursued customers aggressively with slower speed grades at rock-bottom prices.

This action not only dragged down AMD's ASP but hurt Cyrix as well. Once again AMD says that its yield problems are a thing of the past.

Although Intel has blundered occasionally (as with the original Celeron offering), in general its execution has been outstanding. With its broad product line, Intel can take an aggressive stance on products for which it has strong competition without greatly affecting its overall results. Because Intel has so many levers to pull when it needs to change the competitive dynamic, success for its competitors tends to be fleeting and limited.

AMD's ambitious goals—and the investments it is making to reach them—set a high bar for success. Cyrix expects to make money on about two million units per quarter, while AMD, with one large fab dedicated to PC processors and another under construction, loses money on five million units per quarter and a 50% higher ASP. AMD's economic viability depends on its ability to move beyond the entry-level market into performance-oriented markets, where profit margins are much higher. The K7 is the key to this effort. AMD has big challenges: deliver on its promises for the K7, establish the Slot A infrastructure, and roll out K7 derivatives with on-chip L2 caches to enable that core to move into the volume mainstream in 2000. Everyone except AMD is likely to offer Socket 370 parts while AMD blazes its own path.

Cyrix's more modest goals should be easier to achieve. After touting its integrated-processor strategy, Cyrix appears to be headed back to a standard socket approach—probably based on Socket 370. It has been almost two years, however, since the company has delivered a new PC processor (other than new speed grades). It will have to roll out new chips much more quickly if it is going to keep up. And its costs must be kept very low; Cyrix hopes to support its x86 business on less than half the volume AMD needs, at half the ASP AMD is targeting. IBM is rumored to be considering buying Cyrix's PC-processor business, leaving National to focus on information appliances. AMD itself might be an attractive acquisition target; some consolidation seems inevitable.

IDT has the industry's smallest die size and low overhead; it therefore hopes to be profitable at a smaller scale and lower ASP. Rise has a more difficult challenge with its larger die size and fabless model. All things considered, it remains unclear whether anyone will build a profitable business competing with Intel in the PC processor market, but the lure of the largest IC market remains irresistible. ■

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