

# Scorched Earth Blocks Intel Competitors

*National Bails Out, IBM Sits Out, Rise Remains Out of Sight*



Intel ignited a price war earlier this year with aggressive Celeron price cuts, leaving no one but Intel able to profit selling PC processors (see MPR 5/10/99, p. 23). With this price war, Intel has scorched the earth in the entry-level segment, creating a barren no-man's-land. This shrewd tactic blocks the advance of any would-be competitor.

Of Intel's four major market segments—mobile, server, low-cost desktop, and performance desktop—the low-end segment has been the most popular point of attack for x86 competitors. It requires the least advanced technology and is much bigger than the mobile or server segments. Some competitors have ended up there not by choice but by aiming at the performance segment and missing.

With its broad product portfolio and brand proliferation, Intel has an array of pricing options. The company is willing to accept low margins on its Celeron products due to its high volumes. In addition, Intel makes most of its profits from Pentium II and Pentium III, products that competitors have yet to match. Vendors with lower volumes and no high-end products can't survive on Intel's Celeron margins.

The first casualty in this campaign is National's Cyrix group (see last issue's news flash and page 12 in this issue). With the Cyrix processors selling only in the entry-level segment, that company bore the brunt of Intel's Celeron firestorm and made a strategic retreat.

With National in trouble, rumors swirled that IBM would step back into the PC processor market by acquiring Cyrix. IBM has many advantages as an x86 vendor, including an unrestricted Intel patent license, highly advanced IC processes, a large fab, extensive resources to rework designs for new processes or new interfaces, and strong supplier relationships with many major PC makers.

Today, the company lacks one key ingredient: an x86 processor core. Buying Cyrix would fill that need, but sources indicate that IBM has decided to pass on that deal. In fact, the Microelectronics Group is now focused mainly on embedded applications, as evidenced by its hot Nintendo deal (see MPR 5/31/99, p. 5). Six months ago, the company was looking to hop back into the PC processor market, but now it sees no profits in such a venture.

Companies with far fewer resources than IBM are more motivated to enter the PC processor market, but they are, for the most part, failing. IDT, nursing a 1% market share, still can't get its faster parts to market. Its WinChips are small, inexpensive—and slow. But if IDT can increase its clock

speed, WinChip's low manufacturing cost may allow it to survive on barren ground.

Rise, on the other hand, has little chance in this segment, as its bloated mP6 costs more to build than its competitors' parts, particularly since Rise (see MPR 5/31/99, p. 15) is paying the markup of two foundries while its competitors all use in-house fabs. The small startup cannot afford to subsidize its parts enough to compete against IDT's low-cost chips and Intel's low-profit Celeron processors.

Rise has performance problems as well. The company has taken advantage of the M II's poor performance, particularly on FP and MMX, to give the mP6 an inflated performance rating, but this scheme will fall apart if, as appears likely, Cyrix departs from the market. The mP6 doesn't look as good when benchmarked against a K6-2 or Celeron.

Rise has one possibility for success: a move into the mobile segment. The company plans to deploy the mP6 II in this segment, which Intel has yet to scorch. With its new Mobile Celeron brand, however, Intel has prepared a killing field for any competitor that ventures into the low end of the mobile space. Unless Rise can match the capabilities of Intel's Mobile Pentium II (soon to be Mobile Pentium III) processors, it isn't likely to accomplish anything other than setting off a price war in the Mobile Celeron segment.

More than \$20 billion in annual revenue and billions of dollars in profit flow from PC processors. Although growth rates will be higher in emerging embedded applications, we expect the PC processor market will continue to grow steadily. This market is just too big to leave to one vendor. As dominant as Intel is, the company has historically left about 20% of the market for its competitors. Surely someone wants a piece of that business.

But Intel's latest pricing strategy has extended the battle lines. Using the low end as a base to attack the performance segment is no longer a viable plan. This change has led to the common perception that competing with Intel is a money-losing proposition. But I believe a vendor with the technology to compete in multiple segments at once can easily and profitably supply 10–20% of the PC processor market. Today, AMD is the only vendor with a shot at executing this strategy. If AMD cannot, however, surely IBM or another major semiconductor vendor will decide that a \$20 billion market is just too big to ignore. ■