

INTEL OUTGUNS AMD FOR X-BOX

By Keith Diefendorff {3/13/00-06}

At the Game Developers Conference in San Jose, Bill Gates shot holes in the hopes of AMD and GigaPixel when he announced that Microsoft had selected a 600MHz Pentium III (Coppermine), accompanied by a custom 200-million-polygon-per-second 3D-graphics

engine from NVidia, to power its long-rumored X-Box game console. AMD was hoping for a spot in the box for Athlon, which would have rescued 3DNow from its inevitable slow death. Instead, the design win for Intel drives another nail in 3DNow's coffin. With the Pentium III-based X-Box looming, game developers are sure to focus on SSE even more tightly than before, making it imperative that AMD upgrade Athlon to SSE so it can at least play in game market on PCs.

X-Box is expected to hit the streets in 2H01, a year after Sony's new PlayStation 2 (see [MPR 4/19/99-01](#), "Sony's Emotionally Charged Chip") makes its debut in the U.S. (Sony sold almost a million PlayStation 2s during the weekend of its release in Japan.) Microsoft says the X-Box will have even higher 3D performance than PlayStation 2, drawing 150

million transformed and lit polygons per second. X-Box will use the DirectX API and include 64M of 128-bit-wide 200MHz DDR SDRAM memory (in a unified-memory architecture), a high-quality 3D-audio processor, an 8G hard drive, DVD, four USB-compatible game-controller ports, and 100Mbit/s Ethernet.

AMD was obviously disappointed by Microsoft's choice, but said it simply could not afford to give away Athlon chips to gain the incremental business. We suspect AMD was underbid by Intel, as the loss of X-Box would have been a serious blow to the company's ego and to the future of SSE. It is also possible that Athlon's much-higher power dissipation played a role in Microsoft's decision to go with Pentium III. ♦

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