

By: [Enrico Bottezzato](#), Hardware Editor

## [AMD's Upcoming CPU Architecture Will Be Built from Scratch](#)

*No Phenom influence, and especially, no TLB bugs*

AMD's upcoming CPU micro-architecture will be built from the ground up, or at least that is what the company claimed yesterday. According to the chip manufacturer's executives, the next generation of processors will be radically different from the existing Phenom chips and will pack extra features. The AMD64 micro-architecture was one of AMD's biggest cash cows since its introduction in 2003 and has been successfully recycled in the latest K10 core used in the Phenom chips (except for the refurbished cache system). However, the increased computing demands in modern applications and Intel's pressure on the CPU market forced AMD to come up with new and viable technologies. "If I look at the next generation architecture of our CPU, then it will definitely not be, how can I say, comparable with the Phenom. It will look completely different", claimed AMD's technical director of sales and marketing for EMEA, Giuseppe Amato in an interview for tech website Custom PC. Although there are no other details about what's cooking in AMD's laboratories, Amato stated that it would "solve problems that today we think can never be addressed by hardware." The previous AMD64 micro-architecture came with a plethora of new features, including 64-bit support and an integrated memory controller. In fact, the first AMD64-based chips torn Intel's domination on the CPU market and gave Intel's NetBurst architecture an extremely rough time. AMD's chips surpassed the Pentium 4 counterparts in public benchmarks and brought the company a significant market share. However, those days are long gone. Despite the fact that the new Phenom processors are based on the same micro-architecture, they can't keep up with Intel's Core 2 Quad counterparts. AMD was forced to lower the prices, and high-end quad-core Phenoms are now selling for the same price as Intel's entry-level quads.