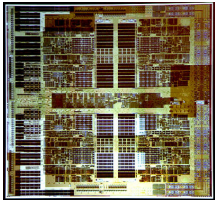


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By: Ionut Ciocirlie, Hardware Editor



AMD's Barcelona
Internal Architecture
www.ixbt.com

AMD Ready to Roll Out the FX-80 and FX-90 Series

The Phenom FX line is ready

At least on paper it is. Because in practice, Barcelona's appearance was almost inexistent. Few benchmarks ran on AMD's native quad-core series and I have to say that I wasn't very impressed. Barcelona's 128-bit FPU's coupled with a tuned memory controller helped it perform on par with INTEL's quad cores (in terms of clock/clock benches). Unfortunately INTEL has about 1GHz over Barcelona and while it's not faster it still manages to perform pretty well. And since AMD's biggest problem at the moment is its availability, INTEL keeps on gaining market share. The Phenom and Phenom FX series will probably come out in November (1S FX series) and December (2S FX series). That is if we were to speak "officially". The first Phenom FX series will be 1S FX-80 clocked at 2.2-2.4GHz. Soon a 2S FX-90 clocked at the same speeds will follow and at about the same time AMD will also roll out its fastest FX CPU, the FX-91 clocked at 2.4-2.6GHz. TDP is currently unknown but when the CPUs come out, their TDP will be easy to identify due to AMD's intelligent 4-character numbering. The TDP classes are XY with Y=P being 89W TDPs or higher, S = 65W and E = 45W. The next two digits will be related to stepping and market segment but currently we're pretty unsure about their meaning. As for the non-FX Phenoms, two series will come out in the beginning of 2008: the 7xxx for four cores and 6xxx for dual cores. All CPUs will be single socket variants with the GP-7000, 7100 and GS-6550 coming out in late December (or the first days of January). In Q1/08, new CPU will follow: the GP-6800, GS-6650, GE-6600, 6500 and 6400. All xxx and 6xxx AM2+ chips. The only 1207+ chips are the FX-9x series, the FX-80 will also be based on AM2+ socket 940 design. Regarding the speeds of 7xxx and 6xxx CPUs, the 7100s will have a clock speed of 2.2-2.4GHz and the 7000 line will work at 2.0-2.2GHz. The 6800 series will work between 2.4 and 2.8GHz, the 6650 could work in the 2.2-2.6GHz range and the lower-clocked 6550 between 2.0-2.4GHz. Nice roadmap, I wonder how much of it will turn out to be true in practice. We are just a few, but there are many of you, Softpedia users, out there. That's why we thought it would be a good idea to create an email address for you to help us a little in finding gadgets we missed. Interesting links are bound to be posted with recognition going mainly to those who submit. The address is .