

AMD SERVES UP AN 800-MHZ ATHLON

By Kevin Krewell {1/31/00-03}

The megahertz battle continued into the new millennium as AMD announced production shipments of its 800-MHz Athlon processor in response to the 800-MHz Pentium III Intel announced in late December. The 800-MHz Athlon was widely sampled in December, and

its announcement was anticipated for early Q1. In a striking coincidence, the new Athlon's list price of \$849 (1,000 units) is only two dollars shy of the \$851 Intel charges for the Pentium III-800.

Gone are the days of the 25% discount that AMD espoused with its K6 family. In fact, checking the list price for the K6-2/533 shows it to be exactly the same as the Celeron-533 at \$167 (1,000 units). The reality, however, is that AMD will heavily discount list prices to major OEMs. Intel, on the other hand, is under less pressure to discount when there is a shortage of high-speed Pentium IIIs.

Unfortunately, commodity SRAMs are not keeping pace with processors in the race to higher frequencies. The

result is that AMD had to increase the ratio of the processor clock to the L2-cache clock from 2:1 to 5:2 for the 750- and 800-MHz versions of Athlon. This will hamper performance on benchmarks and applications that do not fit into Athlon's 128K L1 caches. About midyear, AMD will introduce two new Athlons, Thunderbird and Spitfire, with on-chip L2 caches that will correct this deficiency.

Manufacturers that offer 800-MHz Athlon-based systems include Compaq, CyberMax, and IBM. AMD 800-MHz Athlon Presario 5900Z systems are sold through Compaq's "Built for You" program. IBM will use the 800-MHz Athlon in its Aptiva PC 880, and CyberMax will use it in select Enthusiast Series PCs.

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