

INTEL MOVES MOBILE CELERON TO 0.18 μ

By Keith Diefendorff {2/28/00-06}

Intel has announced the availability of three new models of faster, lower-power Mobile Celeron processors based on the Coppermine core. Using the lower voltage and higher speed of Intel's 0.18-micron P858 process, the new processors bring frequencies of up

to 500MHz into the traditional 11W thermal envelope of PC notebooks.

The new Mobile Celerons differ from their Mobile Pentium III brethren in that they offer only 128K of on-chip L2 cache (rather than 256K), do not include the SpeedStep battery-saving feature, and operate at a top speed of 500MHz instead of 600. But with a 7% higher frequency than current 0.25-micron Mobile Celerons, and with streaming SIMD extensions (SSE) and a 50%-faster 100MHz system bus, the new parts offer a significant step up in performance over Intel's existing value-line of notebook processors.

The new Celerons will be offered in three speed grades: a 500MHz part that operates at 1.6V and dissipates 11.2W (TDP); a 450MHz version that operates at the same voltage but burns only 10.2W; and a low-power version that runs at 400MHz and dissipates only 6.5W at 1.35V. The two higher speed grades are available in BGA, micro-PGA, or Mobile Module packages, while the low-power processor is available in BGA only.

All three processors are available immediately. In 1,000-unit quantities, the 500MHz part carries a list price of \$134, while the 450MHz part sells for \$96. The 400MHz low-power version is also \$96. For more information on Intel's mobile processors see www.intel.com/mobile.

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