

# New AMD Opteron Processors Unveiled for Ultimate Datacenter Performance-Per-Watt

February 7 2007

---

AMD today announced availability of new AMD Opteron processor models in both highly efficient (68 watt) and mainstream (95 watt) thermal envelopes.

AMD has expanded the breadth of its low-power solutions with AMD Opteron processor Models 1218 HE, 2218 HE and 8218 HE. Designed to offer industry-leading performance-per-watt at only 68-watt maximum thermal design power, these processors are ideal for energy-conscious customers looking to reduce power and cooling bills and to achieve greater density in the datacenter. AMD Opteron HE processor models now include three 1000 Series models, bringing the benefits of reduced thermals over previous AMD Opteron 1000 Series processors to entry-level server customers while preserving the enterprise reliability they value.

All of the new processors feature AMD PowerNow! technology which is designed for reduced system level energy consumption, with multiple levels of lower clock speed and voltage states that can reduce processor power consumption by as much as 75 percent during idle times.

“Datacenter managers often tell me how important power management technology is for staying within their energy budgets,” said Jonathan Koomey, consulting professor at Stanford University and one of the world's foremost experts on electricity use in datacenters. “Having the ability to significantly reduce power at idle times is increasingly critical, particularly for datacenters that have extreme fluctuations in workloads

from peak to off-peak times.”

The scalability and efficiency of the unique AMD Direct Connect Architecture deliver an overall performance advantage over the competition’s dual-core two- and four-socket offerings and enable systems to draw less power. Top-performing AMD Opteron processor Models 2220 and 8220 (2.8 GHz) are now immediately available in the 95-watt maximum thermal design power. These new processors, along with AMD Opteron processor Model 1220, are designed to offer leading-edge performance-per-watt and price-performance for mainstream server and workstation customers.

The latest AMD Opteron processors, part of the industry’s most stable roadmap, will complement and are designed to enable a seamless upgrade path to AMD’s native quad-core processors, codenamed “Barcelona.” These processors are expected to feature substantial core enhancements in mid-2007 and to offer a 40-percent performance advantage over the competition’s quad-core offerings, all based on the same infrastructure and thermal envelopes customers depend on today.

“With our design leadership focused on performance and performance-per-watt, it is clear that AMD is the smart choice for IT professionals and datacenter managers today and tomorrow,” said Randy Allen, corporate vice president, Server and Workstation Division, AMD. “This long-term approach means our OEM and system builder partners benefit from a consistent and common architecture that scales to meet changing customer needs and escalating demands on quad-core ready platforms today. AMD can provide IT professionals what they truly need: reduced total cost of ownership (TCO) and platform stability that is second to none.”

Global tier one server providers Dell, Inc., Fujitsu Siemens Computers, HP, IBM and Sun Microsystems plan to incorporate the new AMD

Opteron processors into their platforms, along with leading platform providers such as Appro International, Cray, Rackable Systems and Verari Systems.

Source: AMD

Citation: New AMD Opteron Processors Unveiled for Ultimate Datacenter Performance-Per-Watt (2007, February 7) retrieved 27 April 2024 from <https://phys.org/news/2007-02-amd-opteron-processors-unveiled-ultimate.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.