



Egenera Uses Micron's Aspen Memory® Modules To Reduce Data Center Server Power Consumption

May 12, 2008 at 12:00 AM EDT

Boise, Idaho , Monday, May 12, 2008 – Micron Technology, Inc. today announced that Egenera Inc., a global leader in Infrastructure Virtualization solutions, has designed Micron's line of energy-efficient Aspen Memory products into its Egenera® BladeFrame® platforms to reduce data center power consumption. Egenera is experiencing up to a 17 percent reduction in server memory power consumption by utilizing Micron's 1 Gb-based 1.5-volt DDR2 Aspen Memory modules in its platforms.

There are three primary reasons CIOs and IT managers are looking to create more energy efficient data center servers: they have reached, or will soon reach, capacity with their incoming power infrastructure; they are receiving more scrutiny to reduce their carbon footprint; and their electricity bills have skyrocketed. One way data center operations are looking to reduce their power consumption is by implementing virtualization software, which reduces the total number of physical servers in a data center. Virtualization, however, puts more demands on the remaining hardware technology, specifically the memory, which can be a gating factor on how many virtual environments you can run on a hardware platform.

"Everything runs better with more memory," said Dick Csaplár, senior product manager at Egenera. "But, as we add more memory to our systems for increased performance, power consumption rises. This is why we looked to take advantage of Micron's low-voltage Aspen Memory products."

The BladeFrame system features Egenera's patented Processing Area Network (PAN) architecture, which combines stateless, diskless Processing Blade™ (pBlade) modules with Egenera® PAN Manager™ virtualization software to dramatically reduce data center complexity through an agile, highly-available infrastructure. Unlike many other bladed servers, Egenera pBlade™ modules contain only processors and the memory, allowing customers to build both flexible and quickly scalable environments. To keep power consumption down, Egenera has designed Micron's low-voltage 1 Gb-based DDR2 Aspen Memory modules into its two-processor pBlade module configurations based on the Intel® Xeon™ x86 microprocessor technology. Egenera's pBlade module memory configurations range from 4 gigabytes (GB) to 96 GBs in a 1U configuration.

"We are currently going through the process of migrating all of our FB-DIMM-based server blades to Micron's low-power memory, making it a standard offering in all of our systems," continued Csaplár.

Don't Forget the Memory – Energy-Efficient Memory Designs for Data Center Servers

"As the world continues down the digital path for banking, shopping and researching information online, technology demands are on the rise. For memory, a technology that always draws power and is growing at an exponential rate in today's server systems, the drive toward energy-efficient designs has never been greater," said Bill Lauer, senior director of marketing for Micron.

It is estimated that memory consumes approximately 15 percent of power in data center server systems today, a figure which is expected to rise with the increased memory requirements needed for virtualization and multi-core data processors. Micron's Aspen Memory family of energy-efficient memory products are designed to lower data center server power consumption. By implementing Micron's Aspen Memory products, data centers could reduce memory power consumption up to 60 percent.

Standard next-generation DDR3 memory technology operates at 1.5-volts, where standard DDR2 memory operates at 1.8-volts. With Micron's Aspen Memory family of energy-efficient memory modules, server manufacturers are given the option to choose the best memory solution that meets their design requirements, whether they are interested in using low-voltage mainstream DDR2 memory or next-generation DDR3 memory. Micron's Aspen Memory portfolio includes:

- 1.35-volt DDR3 server modules (registered DIMMs), available in densities up to 4 GBs using 1 Gb chips. Micron's low-voltage DDR3 Aspen Memory uses 21 percent less power in comparison to standard 1.5-volt, 1 Gb-based DDR3 memory modules. Micron is now taking orders for samples of its low-voltage DDR3 server memory modules with mass production expected in Q4 2008.
- 1.5-volt DDR2 server memory modules (fully-buffered DIMMs), available in densities up to 8 GBs using 2 Gb-based chips and 4 GBs using 1 Gb-based chips. Micron's 2 Gb-based DDR2 Aspen Memory modules can achieve a 58 percent power reduction over standard 1 Gb-based 8 GB 1.8-volt DDR2 memory modules, benefiting both from the reduced voltage as well as the reduction in overhead power from the use of higher density components. Micron's 1Gb-based DDR2 Aspen Memory modules can achieve a 20 percent power reduction over standard 1 Gb-based 4 GB 1.8-volt DDR2 memory. Micron is currently sampling its 2 Gb-based DDR2 server memory modules and mass production is expected in Q3 2008. Micron's 1 Gb-based 1.5-volt DDR2 Aspen Memory modules are currently designed into production data center server systems.

Additional information about Micron's Aspen Memory family of energy-efficient products including a white paper, case study and implementation technology notes can be found on its website at www.micron.com/aspen. Also, visit Micron's data center memory power calculator to estimate the cost-benefit of using Micron's Aspen Memory modules at www.serverenergysaver.com.

About Micron

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets DRAMs, NAND flash memory, CMOS image sensors, other semiconductor components, and memory modules for use in leading-edge computing, consumer, networking, and mobile products. Micron's common stock is traded on the New York Stock Exchange (NYSE) under the MU symbol. To learn more about Micron Technology, Inc., visit www.micron.com.

This press release contains forward-looking statements regarding the production of Micron's new DDR2 and DDR3 Aspen Memory modules. Actual events or results may differ materially from those contained in the forward-looking statements. Please refer to the documents the Company files on a consolidated basis from time to time with the Securities and Exchange Commission, specifically the Company's most recent Form 10-K and Form 10-Q. These documents contain and identify important factors that could cause the actual results for the Company on a consolidated basis to differ materially from those contained in our forward-looking statements (see Certain Factors). Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update any of the forward-looking statements after the date of this press release to conform to actual results.

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