HP picks Intel's Centerton for low-power server rollout

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(Phys.org) -- Hewlett-Packard has a longer term message that reaches over all company announcements. HP wants the world to know that, never mind hasty CEO exits and entrances, never mind killing off brand-conscious products, never mind laying off floors and floors of expert workers; what it wants people to notice are the areas of outstanding expertise that remain. Namely, HP wants to make impressive waves in improving data center efficiencies. Despite all the drama, HP engineers who remain have been working on a data center server design, initially called Project Moonshot, that can help customers reduce server complexity, save on energy use and cut their costs. HP's ambitious-sounding Project Moonshot this week is turning another corner.

HP and Intel have announced that Project Moonshot will be codenamed "Gemini" and will be powered by Intel Atom processors codenamed "Centerton." The servers are being prepared for eventual rollout at [HP](#)'s Discovery Lab in Houston as a low-energy server solution for data centers.

HP believes the Gemini servers offer a much improved level of [efficiency](#) in server systems. According to HP, the program "reinvents the traditional approach to hyperscale computing." It leverages workload-optimized, extreme low-energy server cartridges in an enclosure that pools resources across thousands of servers. The Gemini server system will be able to accommodate thousands of Atom processors per rack and, using Intel's Centerton, will be able to handle specific workloads while drawing less power than Intel's Xeon servers,

Centerton is a version of the Atom chip especially suited for power-efficiency and in turn for energy-saving server systems in data centers.

HP says its decision to have the initial system rollout with server cartridges featuring the Centerton processor has to do with the Centerton's suitability for hyperscale workloads, using many extreme low-energy servers densely packed into a small footprint. More specifically, HP said reasons for its Centerton decision included Centerton's 64-bit support, hardware virtualization (VTx), error correcting code (ECC) memory, lower power requirements, increased performance, and software ecosystem.

The Gemini system was put through its paces earlier this week at a San Francisco demonstration event. "We're going to disrupt the market overall," claimed Paul Santeler, vice president and general manager of HP's Hyperscale business unit. The Gemini server with Centerton-based cartridges are housed at HP's Discovery Lab in Houston. This is the site that calls on engineering expertise to come up with customer solutions

for data-center systems that can sell on the promise of reduced complexity, lower costs of ownership and energy savings. The lab invites customers to run their own benchmarks on the servers and to test-drive applications on them. The Gemini [servers](#) will become available for customer testing shortly and will begin shipping by year's end.

More information:
www.hp.com/hpinfo/newsroom/press/2012/120619a.html