

## U.S. Government Awards AMD Contract to Research Interconnect Architectures for High-Performance Computing

## \$3.1 Million Public-Private Partnership to Accelerate R&D of Critical Technologies Needed for Extreme-Scale Computing

SUNNYVALE, CA -- (Marketwired) -- 11/19/13 -- <u>AMD</u> (NYSE: AMD) today announced that it was selected for an award of \$3.1 million for a research project associated with the <u>U.S.</u> <u>Department of Energy</u> (DOE) Extreme-Scale Computing Research and Development Program, known as "DesignForward." The DOE award is an expansion of work started as part of another two-year award AMD received in 2012 called "FastForward." The FastForward award aims to accelerate the research and development of processor and memory technologies needed to support extreme-scale computing. The DesignForward award supports the research of the interconnect architectures and technologies needed to support the data transfer capabilities in extreme-scale computing environments.

DesignForward is a jointly funded collaboration between the DOE Office of Science and the U.S. National Nuclear Security Administration (NNSA) to accelerate the research and development of critical technologies needed for extreme-scale computing, on the path toward Exascale computing. Exascale supercomputers are expected to be capable of performing computation hundreds of times faster than today's fastest computers, with only slightly higher power utilization. Exascale supercomputers are designed to break through the current limitations of today's supercomputers by dramatically reducing the length of run time required to perform calculations and improving the capability to perform detailed simulations, modeling, and analyses of complex systems.

In order to achieve this dramatic increase in computing capability while maintaining low power consumption, leaps in research and development need to be advanced in all aspects of computing.

"This award will enable AMD to continue important research to help realize the enormous potential of extreme-scale computing," said Alan Lee, AMD corporate vice president of Research and Advanced Development. "We believe that our expertise in processors, memory, and interconnect technology can help further this groundbreaking research in large-scale systems. Also, as founding members of the Heterogeneous System Architecture Foundation, we are offering a mechanism to share our insights to benefit the industry-wide advancement of standard, open systems."

Lee oversees AMD Research, a team that performs leading-edge research and works with government organizations, universities and commercial entities to collaborate on next-generation technologies. For the DOE, its research is focused on developing more efficient and scalable systems for extreme-scale computing, with the goal of minimizing power consumption.

The DOE's strategic plan seeks to address the nation's most pressing scientific challenges by advancing simulation-based scientific discovery made possible by the world's highest performing Exascale computers. Among its priorities are: advancing medical research, alternative energy and energy storage materials, industrial design and more precise models for climate and weather change.

## Supporting Resources

- <u>AMD server products</u>
- <u>AMD SeaMicro technology</u>
- For the latest server news, follow <u>@AMDServer</u> Become a fan of AMD on <u>Facebook</u>

## About AMD

AMD (NYSE: AMD) designs and integrates technology that powers millions of intelligent devices, including personal computers, tablets, game consoles and cloud servers that define the new era of surround computing. AMD solutions enable people everywhere to realize the full potential of their favorite devices and applications to push the boundaries of what is possible. For more information, visit <u>www.amd.com</u>.

AMD, the AMD Arrow logo and Freedom fabric are trademarks of Advanced Micro Devices, Inc. Other names are for informational purposes only and may be trademarks of their respective owners.

Add to Digg Bookmark with del.icio.us Add to Newsvine

Tara Sims (415) 713-5986 tara.sims@amd.com

Marco Pena (650) 762-2861 marco.pena@edelman.com

Source: Advanced Micro Devices