Texas Instruments Delivers a Better Way to the Cloud

Texas Instruments Incorporated

DALLAS – Texas Instruments Incorporated (TI) [1] [NASDAQ: TXN [2]] has announced its participation in HP Project Moonshot and the HP Pathfinder Innovation Ecosystem and affirmed its commitment to helping HP develop innovative, energy-efficient server technology optimized to address new styles of IT workloads.

TI's KeyStone II-based multicore System-on-Chips (SoCs), now shipping, further advance efforts to design, deliver, standardize and deploy innovative solutions that are uniquely tuned for today's extreme-scale demands.

HP Project Moonshot, a multi-year, multi-phased program, is dedicated to the development of a new family of software-defined servers, including extreme low-energy processing technology purposefully built to address surging infrastructure pressures from emerging application trends.

Pioneering the future of extreme-scale technology, the HP Moonshot System is the first solution with a modern architecture engineered for the new style of IT, utilizing a revolutionary server designed to help customers significantly reduce physical space requirements, energy use and costs.

The close collaboration between TI and HP over the last year ensures that TI's SoCs are the right fit for the HP Moonshot System. TI's KeyStone II-based SoCs, which integrate fixed-and floating-point TMS320C66x digital signal processor (DSP) cores with multiple ARM Cortex-A15 MPCore processors, packet processing, security processing and Ethernet switching, give customers the performance, scalability and programmability needed for a variety of applications in the high performance compute, cloud computing and communications infrastructure markets.

These new SoCs offer customers more than four times the capacity and performance at the same power relative to existing solutions*. This is due, in part, to the C-programmable floating point C66x DSP cores that bring about a tremendous amount of compute performance at low power. These SoCs are best-in-class in terms of performance and power efficiency due to their all-in-one nature and functionality. Other key features of the KeyStone architecture include:

- It's the industry's first implementation of quad ARM Cortex-A15 MPCore processors in infrastructure-class embedded SoC, offering developers exceptional capacity and performance at significantly reduced power for networking, high performance computing and more.
- It provides an unmatched combination of Cortex-A15 processors, C66x

DSPs, packet processing, security processing and Ethernet switching, transforming the real-time cloud into an optimized high performance, power efficient processing platform.
- It features 20 plus software compatible devices across KeyStone I and KeyStone II generations, enabling customers to more easily design integrated, power and cost-efficient products for high-performance markets from a range of devices.

“The scalability and high performance, coupled with the low power requirements of the HP Moonshot System, enables customers to develop solutions that address ever-changing and demanding market needs in the high performance computing, cloud computing and communications infrastructure markets,” says Brian Glinsman, vice president, processor, Texas Instruments. “Our SoCs are an ideal solution for customers requiring this level of performance and a low power envelope, and we are excited about the opportunities our collaboration with HP brings to the market.”

To help advance HP Moonshot, the expanded HP Pathfinder Innovation Ecosystem establishes a close collaboration of industry-leading technology partners dedicated to accelerating the development and deployment of energy-efficient, workload optimized servers. As a member of the HP Pathfinder Innovation Ecosystem, TI is committed to working with HP and nearly 25 silicon, operating system and independent software vendors (ISVs) to accelerate innovation that deliver breakthroughs in efficiency and scale.

“In today’s world, where everything and everyone is connected, the stress on existing IT infrastructures is unrelenting,” says Paul Santeler, vice president and general manager, Hyperscale Business Unit, Industry-standard Servers and Software, HP. “Through collaboration and an increased cadence of innovative solutions jointly developed with our ecosystem of industry-leading partners, HP Moonshot will forever change how customers and consumers interact.”

For more information visit www.ti.com/multicore [1].

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[1] http://www.ti.com/multicore
[2] http://www.google.com/finance?q=NASDAQ%3A+TXN&ei=DMBsUZChD8KwqwHEzgE