

# SoftIron Announces the World's First Production 64-bit ARM-Based Enterprise Server Motherboard using X-Gene™ Technology

***ARM 64-bit Technology Delivers Enterprise-class Performance with Ultra-low Power Consumption to the Server Market***

Southampton, UK, 19<sup>th</sup> June 2014 - SoftIron® today announced it will showcase its 64-bit ARMv8 based enterprise-grade server motherboard at the 2014 International Supercomputing Conference (ISC), taking place in Leipzig, Germany from June 22-26, 2014. The SoftIron 64-0800 server motherboard introduces technology partner Applied Micro Circuits Corporation (NASDAQ: AMCC) 64-bit ARM-based Server on a Chip™ solution to the high performance computing and data-centre markets ISC attendees can see the technology first-hand in the AppliedMicro booth, No. 506.

“We are excited to announce the launch of the first production X-Gene 64-bit ARM enterprise server motherboard today,” said Norman Fraser, CEO, SoftIron. “Our server motherboard delivers high performance 64-bit ARM enabled computing with full virtualisation to the enterprise space for the first time. Until now, all ARM based servers have been microservers; our server is the first ARM ‘macroserver’ which is a genuine alternative to mainstream x86 servers for a wide range of scale deployment scenarios.”

## **SoftIron 64-0800 Server Motherboard**

SoftIron's 64-0800 server motherboard uses AppliedMicro's X-Gene ARMv8 64-bit Server-on-a-Chip technology. It offers up to twice the performance-per-watt of leading x86 alternatives and has the potential to be deployed at twice the rack density. Initially available in an eight core processor unit, the server boasts many power-saving and performance-enhancing innovations.

Product features:

- MicroATX form factor motherboard
- 8 core ARM-based 64-bit X-Gene CPU
- 2x memory channels (240-pin 72bit DIMM) up to 128 GB memory
- 4x SATA 3.0 ports
- 2x 10GigE ports
- 2x 1GigE RJ45 ports
- 2x USB3.0 connector
- PCIe 3.0 (8-lane) connector

The SoftIron 64-0800 server motherboard offers an integrated security subsystem with a fully featured, packet-processing engine for offloading cryptographic operations from the CPU. This provides hardware support for industry-standard, cryptographic algorithms and protocols, dramatically improving the performance of many compute-intensive security tasks. “Our server motherboard has been designed from the ground up to deliver the features and performance required by the demanding high performance computing market place,” added Fraser. “Our design takes AppliedMicro's market leading X-Gene silicon and integrates it with an ultra-efficient board and power supply design, to deliver server technology that maximises efficiency and improves Total Cost of Ownership.”

The team behind Southampton-based SoftIron, are all seasoned innovators with experience gained at companies such as 3Com, Micronas, Cisco, DEC and Intel. Fraser adds, "Our team has worked together successfully on previous market-changing ventures over a period of many years and we are confident this is the start of a major new era for the enterprise server".

"The combination of our proven X-Gen silicon with SoftIron's ultra-low power server technology delivers performance at substantially lower power and provides meaningful TCO savings for the enterprise market," said Gaurav Singh, Vice President of Technology Strategy, AppliedMicro. "This announcement is a proof point of the enterprise-class performance, reliability, flexibility, and compelling TCO benefit that the X-Gen solution provides. We are thrilled to partner with SoftIron."

"We commend SoftIron's pioneering work to help make ARM based servers a reality for the HPC segment," said Ian Ferguson, VP Segment Marketing, ARM, "The availability of hardware platforms is a crucial step in enabling customers to quantify the benefits of highly integrated, ARM based solutions for their specific workloads."

#### **About SoftIron.**

SoftIron is an enterprise technology innovation company founded in 2012 and based at the University of Southampton Science Park, in the South of England. Its next generation enterprise computing products are focused on ultra-low-energy servers which re-write the rules of power consumption, reliability, robustness and performance, enabling massive cost savings and CO<sub>2</sub> emission reductions.

#### **About AppliedMicro.**

Applied Micro Circuits Corporation is a global leader in computing and connectivity solutions for next-generation cloud infrastructure and data centers. AppliedMicro delivers silicon solutions that dramatically lower total cost of ownership. Corporate headquarters are located in Sunnyvale, California. [www.apm.com](http://www.apm.com).

#### **About ARM.**

ARM is at the heart of the world's most advanced digital products. Our technology enables the creation of new markets and transformation of industries and society. We design scalable, energy efficient-processors and related technologies to deliver the intelligence in applications ranging from sensors to servers, including smartphones, tablets, enterprise infrastructure and the Internet of Things. Learn more and join the conversation at <http://community.arm.com>.

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