



FOR IMMEDIATE RELEASE

## Micron and Samsung Launch Consortium to Break Down the Memory Wall

*Joint Effort Intended to Accelerate Hybrid Memory Cube Interface Adoption,  
Enable Rapid Pace of Technology Advancements and Future Generations of Electronics*

BOISE, Idaho, and SEOUL, Korea, Oct 6, 2011 - Samsung Electronics Co., Ltd. and Micron Technology, Inc., – world leaders in memory technology – today announced the creation of a consortium for OEMs, enablers and integrators that will collaborate in developing and implementing an open interface specification for an innovative new memory technology called the Hybrid Memory Cube (HMC).

Micron and Samsung are the founding members of the Hybrid Memory Cube Consortium (HMCC), and will work closely with fellow developers Altera Corporation, Open-Silicon, Inc., and Xilinx, Inc. to collectively accelerate industry efforts in bringing to market a broad set of technologies. The consortium will initially define a specification to enable applications ranging from large-scale networking to industrial products and high-performance computing.

One of the primary challenges facing the industry—and a key motivation for forming the HMCC—is that the memory bandwidth required by high-performance computers and next-generation networking equipment has increased beyond what conventional memory architectures can provide. The term “memory wall” has been used to describe the problem.



Breaking through the memory wall requires a new architecture that can provide increased density and bandwidth at significantly reduced power consumption.

HMC capabilities are a leap beyond current and near-term memory architectures in the areas of performance, packaging and design efficiencies. By defining an industry interface specification for developers, manufacturers and architects, the consortium is committed to making HMC a successful new high-performance memory technology.

“This collaborative industry effort will serve as an accelerator for highly promising technology that will benefit the entire industry,” said Jim Elliott, Vice President, Memory Marketing and Product Planning, Samsung Semiconductor, Inc. “The consortium will help to bring about a game-changing system solution for system designers and manufacturers that is expected to outperform memory options offered today.”

HMC could lead to unprecedented levels of memory performance and facilitate new applications in networking, medical, energy, wireless communications, transportation, security and other markets. For example, the development of systems and technologies will enable a more efficient, reliable and secure smart grid infrastructure with integrated renewable energy resources.

“HMC is unlike anything currently on the radar,” said Robert Feurle, Micron’s Vice President for DRAM Marketing. “HMC brings a new level of capability to memory that provides exponential performance and efficiency gains that will redefine the future of memory. Guidance by the industry consortium will help drive the fastest possible adoption of the technology, resulting in what we believe will be radical improvements to computing systems.”

The HMCC’s memory specifications will be co-developed among the consortium members. The consortium is open to an unlimited number of adopters, with the opportunity to receive early access to draft specifications and participate in specification discussions and



development. Additional information, technical specifications, tools and support for adopting the technology can be found at [www.hybridmemorycube.org](http://www.hybridmemorycube.org).

### **About the HMCC**

Founded by leading members of the world's semiconductor community, the Hybrid Memory Cube Consortium (HMCC) is dedicated to the development of an industry interface specification for the Hybrid Memory Cube technology. Members of the consortium presently include Micron Technology, Samsung Electronics, Altera Corporation, Open-Silicon, Inc., and Xilinx, Inc., with additional companies in discussion to join. To learn more about the HMCC, visit [www.hybridmemorycube.org](http://www.hybridmemorycube.org).

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Contacts

#### **Micron:**

Scott Stevens  
+1.512.288.4050  
[sstevens@micron.com](mailto:sstevens@micron.com)

#### **Samsung:**



In U.S.

John Lucas, APR

Samsung Semiconductor, Inc.

408-544-4363

[j.lucas@ssi.samsung.com](mailto:j.lucas@ssi.samsung.com)

Outside U.S.

Sunghae Park

Samsung Electronics

+82-31-209-7037

[sunghae\\_park@samsung.com](mailto:sunghae_park@samsung.com)