Solid State TECHNOLOGY®
Insights for Electronics Manufacturing

Close

Microsoft joins Hybrid Memory Cube Consortium

May 16, 2012 -- The Hybrid Memory Cube Consortium (HMCC), led by Micron Technology Inc. and Samsung Electronics Co. Ltd., is a collaboration of original equipment manufacturers (OEMs), enablers and integrators developing and implementing an open interface standard for Hybrid Memory Cube (HMC) semiconductor memory architectures. Microsoft Corp. has now joined the consortium.

Also read: The Micron Hybrid Memory Cube consortium

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 this dilemma. Breaking through the memory wall requires architecture such as the HMC that can provide increased density and bandwidth at significantly reduced power consumption.

HMC capabilities will leap beyond current and near-term memory architectures in the areas of performance, packaging and power efficiencies. "HMC technology represents a major step forward in the direction of increasing memory bandwidth and performance, while decreasing the energy and latency needed for moving data between the memory arrays and the processor cores, " said KD Hallman, general manager of Microsoft Strategic Software/Silicon Architectures.

The technology will enable highly efficient memory solutions for applications ranging from industrial products to high-performance computing and large-scale networking.

The HMCC's team of developers plans to deliver a draft interface specification to a growing number of adopters joining the consortium. Adopter membership in the HMCC is available to any company interested in joining the consortium and participating in the specification development. The HMCC has responded to interest from more than 75 prospective adopters.

The combined team of developers and adopters will refine the draft and release a final interface specification at the end of this year. HMCC members: Micron, Samsung, Altera, IBM, Open-Silicon, Xilinx, and Microsoft.

Additional information, technical specifications, tools and support for adopting the technology can be found at www.hybridmemorycube.org

Visit the Semiconductors Channel of *Solid State Technology*!

To access this Article, go to:
http://www.electroiq.com/content/eiq-2/en/articles/sst/2012/05/microsoft-joins-hybrid-memory-cube-consortium.html