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**NEWS RELEASE:**

**28 October 2011**

**MICRON COLLABORATES WITH A\*STAR  
ON NEXT-GENERATION MEMORY TECHNOLOGY**

***Micron and Singapore's A\*STAR Data Storage Institute  
to Develop Spin Transfer Torque Magnetic Random Access Memory***

**Singapore, Oct. 28, 2011** – Micron Technology, Inc., and Singapore's A\*STAR Data Storage Institute (DSI) jointly announced today that the two companies have entered into an agreement to collaborate on the development of spin transfer torque magnetic random access memory (STT-MRAM), a promising alternative non-volatile memory technology for next-generation storage.

Current commercial solid state drives (SSDs) use NAND Flash memory, a type of non-volatile memory, to store data. Demand for these types of drives has been increasing rapidly. SSDs, unlike hard disk drives (HDDs), contain no moving parts and are less susceptible to physical shock and vibration than HDDs. SSDs are also capable of retaining their memory without power and are very durable. However, as the memory industry continues to scale NAND Flash

memory, it sees issues such as limited endurance and high write power. Therefore, the industry is currently researching alternative non-volatile memory solutions such as STT-MRAM. STT-MRAM also has potential to address technology scaling roadmap challenges of volatile memory such as Dynamic RAM (DRAM) and hence can greatly enhance the performance for many volatile memory applications as well.

As part of the collaboration, Micron and DSI will invest in joint research to develop high-density STT-MRAM devices during the next three years. Researchers from both Micron and DSI will work together to develop high-density STT-MRAM devices.

“Micron is actively working on multiple emerging memory development programs, and we are pleased to collaborate with DSI to explore the potential of STT-MRAM,” said Scott DeBoer, Micron Vice President of Research and Development.

“DSI is excited about this collaboration with Micron. It signifies our progressive success in attracting the world’s best to develop an R&D ecosystem in Singapore for next generation non-volatile memory,” said Dr. Pantelis Alexopoulos, Executive Director of DSI. “I believe this is a good opportunity for DSI, as we combine our technological expertise in STT-MRAM with Micron’s expertise in memory product development in an advanced fabrication facility.”

### **About Micron**

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets a full range of DRAM, NAND and NOR flash memory, as well as other innovative memory technologies, packaging solutions and semiconductor systems for use in leading-edge computing, consumer, networking, embedded and mobile products. Micron's common stock is traded on the NASDAQ under the MU symbol. To learn more about Micron Technology, Inc., visit [www.micron.com](http://www.micron.com).

### **About Data Storage Institute**

The Data Storage Institute (DSI) is a member of the Agency for Science, Technology and Research (A\*STAR). Established in 1992 as the Magnetics Technology Centre (MTC), it was renamed Data Storage Institute in 1996. The research institute's vision is to be a vital node in a global community of knowledge generation and innovation, nurturing research talents and capabilities for world-class R&D in next generation storage technologies. For more information, please visit <http://www.dsi.a-star.edu.sg>

### **About the Agency for Science, Technology and Research (A\*STAR)**

The Agency for Science, Technology and Research (A\*STAR) is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A\*STAR oversees 14 biomedical sciences and physical sciences and engineering research institutes, and six consortia & centres, located in Biopolis and Fusionopolis as well as their immediate vicinity.

A\*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, and with other local and international partners. For more information about A\*STAR, please visit [www.a-star.edu.sg](http://www.a-star.edu.sg).