

Everspin Readies Industry's First 256Mb Perpendicular Spin Torque MRAM for Production and is Now Sampling Customers

Everspin to demonstrate the benefits of its proprietary pMTJ MRAM technology at Flash Memory Summit

Chandler, AZ, August 3, 2016

Everspin Technologies strengthens its leadership position in MRAM by shipping the world's first product using perpendicular magnetic tunnel junction (pMTJ) based ST-MRAM to customers. This 256Mb DDR3 product is the highest density commercially available perpendicular ST-MRAM in the market. Everspin has now successfully developed its third generation MRAM technology and is preparing for production of its next ST-MRAM product offering improved performance, higher endurance, lower power, and better scalability than previous products. Everspin's latest ST-MRAM is offered with a proven DDR3 interface compatible with DDR3 controllers used in FPGAs, ASIC designs and currently available in SSD and RAID controller products. It can be readily designed into high performance systems that require power safe reliability for securing critical data in enterprise systems or cloud computing.

Customers needing both non-volatility and DRAM speed can use Everspin's ST-MRAM to improve system reliability and simplify system designs. Everspin's ST-MRAM will eliminate the need for batteries or supercapacitors that are required in today's designs to protect critical data in case of unexpected power-down occurrences. Storage applications such as enterprise-class SSDs, RAID systems, storage appliances and servers will benefit from the data persistence and high cycle endurance of Everspin's ST-MRAM products. Everspin's ST-MRAM will allow hot data to be written faster than any other non-volatile memory on the market while still ensuring data integrity. To enable customer designs, Everspin has built an ecosystem which includes DDR3 memory controller and SSD controller IP from multiple vendors, as well as FPGA-based tools for test and validation of the 256Mb DDR3 pMTJ ST-MRAM.

Everspin will be showcasing the 256Mb DDR3 pMTJ ST-MRAM at the Flash Memory Summit in Santa Clara, CA from 8/9 through 8/11. The demonstrations at the show will include a PCIe NVMe SSD with write performance at an unprecedented 1.5 Million IOPS, made possible by Everspin's newest ST-MRAM.

The release of pMTJ-based ST-MRAM products will enable Everspin to provide solutions for the multi-billion dollar market requiring persistent memory. Storage and server OEMs have already been evaluating Everspin's ST-MRAM products and are planning to use these higher density devices. Everspin will also offer a 1 Gigabit DDR4 ST-MRAM product that is in development now, based on a scaled down version of our 256Mb pMTJ. Everspin's newest ST-MRAM using pMTJ delivers the following advantages:

- Supports over 100,000 times faster write speeds than NAND flash
- Persistent data with retention that meets the requirements of many enterprise and cloud computing applications
- DDR3 interface compatibility with symmetrical read and write speed
- Provides the highest endurance of currently available non-volatile memories
- No wear leveling required
- Compatible with standard CMOS and is scalable to Gigabit+ densities

Everspin has shipped more than 60 million discrete and embedded MRAM products into data centers, cloud storage, energy, industrial, automotive, consumer, and transportation markets.

“By implementing our patented perpendicular MTJ technology in a 256Mb ST-MRAM commercial product, we have solidified our leadership position as the provider of the fastest non-volatile products to our customers,” said Everspin CEO Phill LoPresti. “By working closely with our partner, GLOBALFOUNDRIES, we brought up the MRAM technology faster than planned on their 300mm line, achieving our target yield and product performance objectives. Everspin and GLOBALFOUNDRIES are now focused on the successful production ramp of the 256Mb MRAM. Everspin has consistently demonstrated the unique ability to bring the latest in MRAM technology into production – from our first-generation field switched products to our in-plane MTJ based 64Mb, and now our perpendicular MTJ 256Mb. The successful launch of our pMTJ process in our 256Mb device adds confidence in our ability to scale to higher density products such as our 1Gb in development. Everspin is bringing MRAM to the mainstream.”

About Everspin Technologies

Everspin Technologies is the leading provider of MRAM solutions. Everspin’s MRAM solutions offer the persistence of non-volatile memory with the speed and endurance of random access memory (RAM), and enable the protection of mission critical data particularly in the event of power interruption or failure. Everspin’s MRAM solutions allow its customers in the industrial, automotive and transportation, and enterprise storage markets to design high performance, power efficient and reliable systems without the need for bulky batteries or capacitors. Everspin is the only provider of commercially available MRAM solutions and over the past eight years has shipped over 60 million MRAM units. For more information, visit www.everspin.com.

Cautionary Statement Regarding Forward-Looking Statements

The statements in this press release regarding the expected benefits and customer usage of Everspin’s ST-MRAM solutions, the availability of its 1 Gigabit DDR4 ST-MRAM product, and that it is ready to scale up to volume production, are forward-looking statements that are subject to risks and uncertainties. Risks that could cause these forward-looking statements not to come true include, but are not limited to: the risk that unexpected technical difficulties may develop in the final stages of

development or production of these products; and that customers may not perceive the benefits of Everspin's ST-MRAM solutions to be as Everspin perceives them to be.

Everspin Contact:

Michael Schoolnik

Story Public Relations

415-674-3816

Michael@storypr.com