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By: Ionut Arghire, Hardware Editor



Micron 256GB SSD  
Micron

## **Micron Demonstrates 1 GB/s SSD**

*The drive connects through a PCIe interface*

According to a video posted on Micron's new blog, the company managed to develop a solid state drive that could reach the fastest speeds ever recorded by such a product. To be more specific, the video demonstrates a SSD that reaches data transfer rates of 800 MB/s while also being able to expand to apparently about 1 GB/s. This speed would be approximately twice the highest performance peak seen until today.

As the video shows, the system used for demonstration included two eight-core Intel Xeon processors and two SSDs. In addition, the two drives were not connected through a traditional PATA or SATA interface, which means they were not limited to the bandwidth barrier of 300 MB/s of SATA II. The drives used a PCIe interface, also including flash data management enhancements, as Micron states.

According to Micron's Joe Jeddelloh, during the demonstration, the two cards managed to hit a data throughput of about 800 MB/s and 150,000 to 160,000 random IOPS. Jeddelloh also showed a flash PCIe card which combined the two cards in one device with 16 flash channels. He said that this card would be able to reach a bandwidth of 1 GB/s and "at least 200,000 IOPS". The fastest enterprise SSDs available today from big manufacturers can hit about 250 MB/s and approximately 30,000 IOPS. When it comes to hard disk drives, the fastest one is considered to be WD's Velociraptor, which clocks in at about 100 MB/s.

The PCIe concept of SSDs is not a new one, as Fusion IO has already unveiled similar products, the most notable of them hitting about 100,000 IOPS a year ago. The company has recently launched a "consumer version" of its PCIe card, which is said to offer data throughput of 500-700 MB/s and about 50,000 IOPS for around \$1000. Micron said its drive would be available soon, but gave no reference to a possible price tag.