

First Public Demonstration Of World's First Holographic Drive Prototype

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InPhase Technologies, the leader in holographic data storage systems and media, today announced that it will conduct a public demonstration of the world's first prototype of a commercial holographic storage device using video clips provided by Turner Entertainment Networks. The demonstration of the InPhase Tapestry drive will be conducted with Hitachi Maxell at the National Association of Broadcasters (NAB) convention in Las Vegas, April 18 through April 21, at the Maxell Corporation of America booth #C8530 in the Central Hall of the Las Vegas Convention Center. The prototype is the foundation for a 300 gigabyte (GB) drive that can store more than 35 hours of broadcast-quality high-definition video on a single disk. The family of InPhase Tapestry holographic drives will have capacities that range to 1.6 terabytes (TB) on a single disk.

A breakthrough in data storage, the InPhase prototype demonstrates a new generation of data storage, well beyond magnetic and optical formats, which capitalizes on the company's leadership position in both holographic drive and media development. InPhase has created a new class of photopolymers, and the delivery of a stable recording device, to achieve a working commercial holographic system. The initial commercial units will be delivered to original equipment manufacturer (OEM) customers in 2006.

InPhase has architected an advanced technique, polytopic recording, which provides greater data density by overlaying "books" of data, rather than pages of data. The InPhase polytopic technique eliminates the space

between books of data, thereby increasing data densities. This innovative technique will be implemented in all generations of the InPhase Tapestry product family.

"Today, the professional video industry will see a conclusive demonstration of the next phase in digital recording. The InPhase Tapestry prototype heralds a new era of storage, moving holographic storage from research to commercialization," said Nelson Diaz, president and CEO of InPhase Technologies. "We have successfully developed, through a collaborative approach, a breakthrough for a wide array of recording and archive applications – from enterprise to consumer – that will lead to more secure, high-capacity, long-life storage at more cost-effective prices."

The InPhase Tapestry system has been evaluated by numerous leaders in the professional film and video industry for a wide range of applications, including archive, acquisition, editing, and effects for high-resolution video.

"We have the need to archive high-definition movies as large files and, yet, be able to retrieve them quickly when needed for air. Until now, there has been no cost-effective, practical way to meet our volume and throughput requirements. Holographic storage appears to be the perfect answer," said Ron Tarasoff, Vice President of Broadcast Technology & Engineering at Turner Entertainment Networks.

The prototype drive records data into InPhase's patented two-chemistry Tapestry photopolymer write-once material. The recording material is 1.5 mm thick and is sandwiched between two 130 mm diameter transmissive plastic substrates. Hitachi Maxell, Ltd., a key investor and development partner of InPhase, is developing high-volume media manufacturing technologies and has designed and developed the disk cartridge for easy integration in automated library systems.

The Tapestry prototype drive has a small computer systems interface (SCSI) interface and is using the Pegasus Disk Technologies Windows device driver. InPhase is working with Pegasus to provide file system connectivity for the Windows operating system as part of a total data storage solution. From a system perspective, the device presents itself like a drive letter with complete random access, in less than 200 milliseconds, to any file on the holographic disk. This demonstrates the ease of use and integration of holographic technology by hardware OEMs, original design manufacturers (ODMs), and software providers.

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