



Excellence In Nanometrology

November 08, 2007 05:00 AM Eastern Time

Park Systems Signs Agreement with Seagate Technology to Develop and Supply Next-Generation AFMs

SANTA CLARA, Calif.--(BUSINESS WIRE)--**Park Systems Corp.**, a global provider of nanoscale measurement systems for research and industry, announced today that it has entered into a master development agreement to develop and supply next-generation [Atomic Force Microscopes \(AFM\)](#) to **Seagate Technology (NYSE:STX)**, the worldwide leader in the design, manufacture and marketing of hard disc drives.

“As the density of hard disk storage increases, the design rules of hard drive sliders rapidly decreases,” said Park Systems CEO Dr. Sang-il Park. “Atomic force microscopes must make reliable and repeatable PTR measurements of less than a tenth of a nanometer.”

Dr. Park explained that traditional AFMs use piezoelectric tubes for X-Y-Z scanning. The X-Y motion relies on the bending of the tube, which causes Z position errors and introduces background curvatures. “Thus, it is fundamentally impossible for the previous generation of AFMs to provide the high level of metrology sought by storage manufacturers,” he said.

To overcome these limitations, **Park Systems developed the Cross-Talk Elimination (XE) AFM**, featuring decoupled X-Y and Z scanners. Park’s XE Series of AFMs minimize background curvature to one nanometer over 100 micrometers in-plane. There is no intrinsic bowing, even on the flattest sample. This ensures accurate images and

enables observation of even the most subtle surface features, since no raw data correction needs to be applied. **Park Systems will exhibit their new [XE and NSOM](#) systems in Booth 101 at the 2007 Fall Materials Research Society (MRS) Exhibition, November 27-29, Hynes Convention Center, Boston, Massachusetts.**



Park Systems XE Series AFMs conduct measurements in true non-contact mode, preserving the sharpness of the tip and ensuring that nanoscale metrology can be conducted without corrupting the sample. Park Systems (formerly PSIA) began working with Seagate in 2004 and was awarded the master development agreement in 2006. Park Systems supplies Seagate with

next-generation AFMs with full automation capabilities.

Park Systems, one of the earliest manufacturers of AFMs, produces AFMs and SPMs for both small- and large-sample measurements, Near-field Scanning Optical Microscopy (NSOM), Raman Spectrometry, and for industrial applications, including hard disk inspection, next-generation sliders, sidewall/overhang imaging and profiling, and semiconductors.

<http://www.parkafm.com/>.

Contacts:

[Sung Park](#), VP Operations, Park Systems 408-986-1110

[Mar Junge](#), c3PR: 408-730-8506