



## Applied Materials' Next-Generation E-Beam Inspection System Provides Industry's Highest Resolution

July 11, 2016

- *New PROVision™ system is the only e-beam inspection tool with 1nm resolution; critical for R&D, ramp and production control of ≤10nm multiple patterning, FinFET formation, DRAM and 3D NAND devices*
- *Delivers up to 3x faster throughput for the most challenging e-beam applications*
- *Rapid customer acceptance with more than a dozen shipments including repeat orders; built by a team with over 20 years of e-beam leadership and 2,200 e-beam metrology and review systems shipped*

SANTA CLARA, Calif., July 11, 2016 (GLOBE NEWSWIRE) -- Applied Materials, Inc. today announced its next-generation e-beam inspection system is delivering the highest resolution and image quality at the fastest throughput to leading foundry, logic, DRAM and 3D NAND customers as they move to advanced nodes.



The [Applied PROVision™ system](#) is the industry's most advanced e-beam inspection tool, incorporating innovations based on more than 20 years of leading expertise in e-beam technology for review and metrology. It is the only e-beam hotspot inspection tool offering down to 1nm resolution, allowing customers to detect the most challenging "killer" defects that other technologies cannot find, and to monitor process marginality to rapidly resolve ramp issues and achieve higher yields.

"The PROVision system is the latest addition to our leading e-beam portfolio, and is a key part of Applied's growth strategy," said Bob Perlmutter, vice president and general manager of Applied's Imaging and Process Control Group. "Our differentiated e-beam column technology is the best in the industry and when coupled with our customers' new inspection methodologies, enables the PROVision system to go beyond R&D use and into production environments."

The PROVision system is gaining momentum with already more than a dozen shipments, including repeat orders from a leading foundry and a major memory manufacturer. Additional systems are scheduled for shipment to existing and new customers in the second half of 2016.

"The PROVision system's unique combination of high resolution and massive sampling has helped accelerate time to solution and time to market for our advanced nodes," said Dr. Oh-Jang Kwon, SK hynix R&D EBI Group.

Offering 3x faster throughput over existing e-beam hotspot inspection tools, the PROVision system ensures accurate process characterization, prediction and detection of performance- and yield-limiting defects throughout the fab product life cycle. The PROVision system complements Applied's e-beam metrology and review products as well as the optical patterned wafer inspection product line.

Applied Materials, Inc. (Nasdaq:AMAT) is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. At Applied Materials, our innovations make possible the technology shaping the future. Learn more at [www.appliedmaterials.com](http://www.appliedmaterials.com).

A photo accompanying this announcement is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/970bc6aa-df95-4f6c-9715-594d20960713>

Contact:

[Kevin Winston](#) (editorial/media) 408.235.4498

[Michael Sullivan](#) (financial community) 408.986.7977



Applied Materials, Inc.