



Applied Materials Introduces Advanced Technology for Manufacturing High-Performance Mobile Displays

March 7, 2011

- **Smart phones, tablet PCs driving market for larger, higher resolution OLED and high-performance TFT-LCD screens**
- **New system meets urgent need for higher productivity, lower cost display manufacturing**

SANTA CLARA, Calif., March 7, 2011 - Applied Materials, Inc. today announced its new [Applied AKT-20K PX PECVD](#) system for manufacturing high performance [active matrix OLED](#)* and [TFT-LCD](#) displays used in the most advanced smart phone and tablet PC applications. Using critical [LTPS](#)* technology, the system deposits highly-uniform films on 1.95m² glass sheets that are three times larger than the previous standard size. This capability enables manufacturers to significantly increase production and drive down cost - helping to accelerate the transition to larger, high resolution screen sizes for mobile consumer products.

The rich colors and low power consumption of OLED display technology have resulted in strong demand for 4-5 inch displays in smartphones. The next generation of tablet computers is expected to employ larger, 7-12 inch OLED displays, which will require greatly expanded production capacity to meet the demand. In addition to larger OLED displays, Applied's AKT-20K PX system enables ultra-high definition TFT-LCD screens with more closely-packed pixels, resulting in brighter, sharper, lower energy displays compared to previously available technology.

Key to the AKT-20K PX system is its advanced LTPS technology which Applied has enhanced over the last 10 years. Applied has shipped nearly 100 systems worldwide for depositing LTPS films on smaller substrates. According to market researcher [DisplaySearch](#), spending on equipment used to perform LTPS deposition is expected to surge to an all-time high of US\$2.4 billion in 2011.

"We are leveraging over a decade of leadership in large-area PECVD deposition technology to help our customers meet the surging consumer demand for OLED displays," said Tom Edman, group vice president and general manager of Applied's Display Business Group. "We've scaled up our production proven LTPS deposition technology and deployed it on our latest multi-chamber platform to deliver state-of-the-art performance and productivity to customers. We're experiencing high demand for the AKT-20K PX system, with multiple units shipped to major display manufacturers."

For more information about Applied's innovative solutions for display manufacturing, please visit www.appliedmaterials.com/display.

Applied will showcase the new AKT-20K PX system at [FPD China 2011](#) to be held in Shanghai from March 15-17. To learn more about Applied's activities at the show, visit www.appliedmaterials.com/events/semicon-china-2011.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in providing innovative equipment, services and software to enable the manufacture of advanced semiconductor, flat panel display and solar photovoltaic products. Our technologies help make innovations like smartphones, flat screen TVs and solar panels more affordable and accessible to consumers and businesses around the world. At Applied Materials, we turn today's innovations into the industries of tomorrow. Learn more at www.appliedmaterials.com.

###

* OLED = organic light emitting diode; LTPS = low temperature polysilicon

Contact:

Betty Newboe (editorial/media) 408.563.0647

Michael Sullivan (financial community) 408.986.7977

[Applied Materials New AKT-20K PX PECVD system for AMOLED Manufacturing](#)

HUG#1494468