AKT Introduces AKT-40K EBT for Testing 7th Generation Flat Panel Display Substrates

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TAIPEI, Taiwan--(BUSINESS WIRE)--June 10, 2004--AKT, Inc., an Applied Materials company (Nasdaq:AMAT) and the world's leading supplier of PECVD(1) systems to the flat panel display industry, introduces the AKT-40K EBT (Electron Beam Array Tester) for pixel array testing of TFT-LCD(2) panels on 7th generation substrates. The AKT-40K EBT system boosts customers' yield and increases profitability by providing the industry's fastest, most accurate pixel test technology and lowest overall operating costs.

"With Gen 7 display fabs focused on manufacturing large flat-screen TVs, having the most advanced test technology is critical to reducing costs, increasing yields and eliminating defects from shipped products," said Wendell Blonigan, president of AKT. "The explosion in demand of large-screen LCD TVs has driven massive investment in next-generation display fab capacity. This new electron-beam test system is the perfect partner to our AKT-40K PECVD system because it helps customers quickly ramp and maintain maximum yield of these high-end consumer products."

Seventh generation TFT-LCD substrates measure approximately 1,800mm x 2,200mm (1.8 meters x 2.2 meters) and can produce up to eight 40-inch or six 46-inch large-screen TV panels per substrate. The AKT-40K EBT provides display makers with an optimized productivity solution when used with AKT's recently announced AKT-40K PECVD system, which deposits the key dielectric films used in display fabrication.

The AKT-40K EBT uses four electron beam columns to achieve increased throughput despite the larger Gen 7 glass substrate size. To enhance rapid retest of candidate defects for LCD TVs, the system's vector-addressing e-beam test technology can apply several test patterns to candidate defects with minimal impact on overall throughput. This unique approach to testing increases detection accuracy and permits superior defect classification without compromising total cost of ownership.

The system's simple mechanical design and long-lifetime electron-beam emitters provide superior uptime, while an optional automated prober exchange module increases production flexibility. Its non-contact test technology ensures safe testing of high-value LCD TV panels without damaging or scratching the display.

The AKT-40K EBT technology is also used in the new AKT-25K EBT system for testing Gen 6 substrates (up to 1,500mm x 1,850mm). This system offers Gen 6 customers the same throughput and cost of ownership benefits. AKT expects to ship its first 40K and 25K systems in mid-calendar 2004.

AKT, an Applied Materials company (Nasdaq:AMAT), is the largest supplier of PECVD products and services to the global TFT-LCD industry. Applied Materials' web site is www.appliedmaterials.com.

(1) PECVD = plasma enhanced chemical vapor deposition

(2) TFT-LCD=thin film transistor - liquid crystal display

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