Press Release

For Release July 5, 2006

Press Contact: Michael L. Martel
Tel. 603-595-7048 x110
E-mail: mmartel@jpsalaser.com

SEMICON Booth #5179

JPSA Announces 300mm Silicon Wafer Singulation Capability with ChromaDice™ UV Laser Systems

Hollis, New Hampshire, USA – J.P. Sercel Associates' patented ChromaDice™ UV-DPSS laser systems can now scribe and dice 300mm (12") wafers, up to 500 microns thick. The UV laser process is a fast, low-stress method of singulation that minimizes chip breakage after cutting, for higher yields, and generates minimal debris. The UV singulation process is vibration-free, unlike processing with a mechanical dicing saw. Saw-generated vibrations are most often accompanied by significant chipping and micro-cracking of the wafer and can result in unacceptable cut quality and poor die-edge fracture strength.

JPSA ChromaDice™ systems feature high-performance, ultra-precise air bearing stages that provide higher speed and acceleration in addition to greater travel for up to 300mm wafers. The system is also available with either 355nm or 266nm high-power, short pulse UV lasers for high speed, high yield processing of sapphire, silicon, and GaAs wafers, as well as other materials. 300mm processing systems are available with complete wafer handling systems including cassette loading.

An upgraded laser diode wafer edge detector is available for all wafer types on the ChromaDice system. This detector module interfaces with the new motion control system and allows any type of wafer to be processed on standard dicing tape frames with no damage to the dicing tape, thus allowing breaking and stretching for pick and place die transfer. The wafer edge detector allows partial wafers to be processed as well, with no tape damage.

In making the announcement, Jeffrey P. Sercel, President, said “With this new, larger wafer handling capability, customers can realize high yields and high-speed processing as well as increased process efficiency. Our patented ChromaDice™ system will singulate wafers up to 500 microns thick, so we’re not limited to thin wafers. Since there is little or no heat affected zone, cuts are clean and stress-free, for higher die count per wafer than traditional scribing methods, as well as greater than 99 percent yield for better economic payback.”

JPSA products and services include UV excimer and DPSS laser micromachining systems, UV and VUV laser beam delivery systems, UV laser materials processing development, optical damage testing, and excimer laser refurbishment services. JPSA operates a high-performance UV laser job shop as well as a systems engineering and manufacturing business. For more information, visit www.jpsalaser.com, or contact the company at 17D Clinton Drive, Hollis, NH 03049 USA, Tel. 603.595.7048, fax 603.598.3835.

#####