

News from Plasma-Therm FOR IMMEDIATE RELEASE

MEDIA CONTACT: Nancy Messineo (727) 577-4999 / nancy.messineo@plasmatherm.com

ASE Selects Plasma-Therm's Singulator[®] MDS-100[™] to Establish Plasma Dicing Capabilities in Taiwan

ST. PETERSBURG, Fla. (Jan. 10, 2017) — Plasma-Therm LLC has been selected by the ASE Group (Advanced Semiconductor Engineering Inc.) to provide plasma dicing capability at their Chung-Li, Taiwan facility. The Plasma Dicing on Tape (PDOT) production system will be available for customer demonstrations, development and prototyping in early 2017.

The Singulator® MDS-100 performs fast, low-cost, high-quality plasma dicing of thin silicon wafers without damage to metals or dicing tapes.

Dicing quality and cost are increasing challenges for thinner and smaller devices. Standard dicing methods can induce significant mechanical and thermal damage — "chipping" and "cracking" — which constrains effective wafer layouts, die spacing, and device reliability. Mechanical dicing can be extremely slow for sensitive and small devices, because each side of the die must be diced individually (a sequential process). Plasma dicing is a chemical process that dices the entire wafer, all die, at once (a parallel process) without any mechanical damage. Besides the quality advantages, plasma dicing enables more die per wafer through more efficient wafer layouts and the freedom of design for non-rectangular die.

Thierry Lazerand, Director of Business Development at Plasma-Therm, said, "We are honored to have been selected by ASE and look forward to a closely connected long-term relationship with their teams. It also enforces our leadership position in plasma dicing. Along with our partnership with DISCO, working with ASE to offer world-class advanced packaging solutions is a key milestone in the adoption of this new technology by the semiconductor community."

"This collaboration between ASE and Plasma-Therm is a great opportunity to demonstrate a defect-free dicing process to customers, and support new design concepts with no layout constraints for fabless clients," Lazerand said.

In addition to ASE's effort to evaluate the most advanced solutions in packaging, the Singulator® MDS-100™ installation will allow the Chung Li site to offer plasma dicing as part of a fully integrated advanced packaging service from prototyping to high-volume needs.

About The ASE Group

The ASE Group is among the leading providers of independent semiconductor manufacturing services in assembly, test, materials and design manufacturing. As a global leader geared towards meeting the industry's ever growing needs for faster, smaller and higher performance chips, the Group develops and offers a wide portfolio of technology and solutions including IC test program design, front-end engineering test, wafer probe, wafer bump, substrate design and supply, wafer level package, flip chip, system-in-package, final test and electronic manufacturing services through Universal Scientific Industrial Co., Ltd. and its subsidiaries, members of the ASE Group. For more information about the ASE Group, visit www.aseglobal.com

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About Plasma-Therm

Plasma-Therm LLC is a manufacturer of leading plasma etch, deposition, and advanced packaging equipment for specialty semiconductor and nanotechnology markets. Plasma-Therm's plasma-processing and advanced-packaging solutions are used in research, pilot manufacturing, and volume production of wireless, photonics, solid state lighting, MEMS/NEMS, data storage and other devices. Learn more at www.plasmatherm.com.

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