Semisouth Laboratories Receives $4.9m For Silicon Carbide Advancements

"Task Order 3" In a Continued Series of Awards

AUSTIN, Texas, May 28, 2008 - The Air Force Research Laboratory (AFRL) at Wright-Patterson Air Force Base in Dayton, Ohio has awarded SemiSouth Laboratories, Inc. "Task Order 3," totaling $4.9M, against a previously won, Small Business Technology Transfer (STTR) award. This contract is part of a five-year STTR, Phase III contract awarded in 2006, designated for the advancement of silicon carbide (SiC) power semiconductor devices for harsh environment applications.

After successfully delivering on previous task orders focused on the design and reproducible manufacture of silicon carbide based power semiconductors, "Task Order 3" focuses on design advances, device reliability and manufacturing qualification for these SiC devices in preparation of their use in critical military applications.

This task order also funds the development of advanced prototype reference designs for power conversion systems in high-temperature or high-performance applications using the manufactured SiC devices. One of the target applications is AFRL's More Electric Aircraft (MEA) initiative that requires advanced high-efficiency and high-temperature transistors that can only be realized with SiC. Dr. Jeffrey B. Casady, SemiSouth Chief Technology Officer, remarked, "Many of the DoD applications are limited by energy efficiency. In MEA applications, removing size and weight is absolutely critical for mission integrity. The energy-efficient, rugged nature of silicon carbide based power electronics enables smaller, lighter, and faster aircraft. Both the design and production work for this award are performed in our Mississippi facility, which has been very effective in helping DoD meet their target goals. We've

received broad support for this effort across DoD, as well as clear vision and support from the Mississippi Congressional delegation, in particular US Senators Thad Cochran and Roger Wicker."

Dr. David Sheridan, Principal Investigator for Task Order 3 indicates, "This award reaffirms SemiSouth's leadership position in this critical, next generation silicon carbide device technology. As a spin-off of Mississippi State University, SemiSouth has patented, energy-efficient and weight-saving silicon carbide power electronics technology. By creating energy-efficient, silicon carbide based power electronics, silicon carbide can help reduce the world's energy consumption. Our customers are very excited about working with us on this new award to accelerate system insertion of the technology."

About SemiSouth Laboratories, Inc.

Founded in 2000, with headquarters in Austin, Texas and manufacturing in Starkville, Mississippi, SemiSouth is a privately held silicon carbide (SiC) based semiconductor company. As an industry leader in the development and manufacture of SiC electrical components and materials for high-power, high-efficiency, harsh-environment power management applications, SemiSouth provides discrete power devices, and SiC epiwafers. SiC-based semiconductor devices offer significant advantages over competing products based on silicon and other semiconductor materials for power management applications.

 For more information, visit us on the website at http://www.semisouth.com