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**MEARS TECHNOLOGIES APPOINTS ROGER BITTER
VICE PRESIDENT OF SALES AND BUSINESS DEVELOPMENT**

*Seasoned Corporate Executive to Drive MEARS Technologies' Rapid Growth
and Maximize Worldwide Sales and Marketing Efforts.*

Waltham, Mass., July 16, 2007 — MEARS Technologies, Inc., a provider of advanced silicon processes and engineering services to semiconductor device manufacturers and contract foundries, today announced the appointment of Roger Bitter as the company's vice president of sales and business development. With the addition of Bitter, MEARS Technologies is positioned to further capitalize on the \$260 billion semiconductor market by providing customers with advanced silicon technology that increases semiconductor performance and efficiency and reduces static power at the 65-nm and 45-nm process nodes and beyond. Bitter brings 27 years of international technology, sales and management experience that includes a track record building and launching commercial and public sector companies and running high-performing sales teams in extremely competitive global markets. In his new role, Bitter will lead market development for MEARS Technologies' MST™ for CMOS, a new approach to silicon engineering that helps IC makers simultaneously increase performance and reduce static power, while maintaining compatibility with standard CMOS manufacturing equipment and processes.

"Roger's familiarity with the semiconductor industry, knowledge of the IP business model, and his leadership and business development skills will enable MEARS Technologies to continue executing our plan to propagate MST for CMOS technology throughout the industry," said Steve Levy, CEO of MEARS Technologies. "We are thrilled to have Roger on board. He is a tremendous asset to our management team."

Bitter's management experience includes business development, finance, international relations, marketing and the creation and supervision of alliance and partner programs. He launched operations for a number of U.S. and Japanese EDA (electronic design automation) firms, including Summit Design Inc., which he helped guide to a successful IPO (initial public offering); Compass Japan KK, where he generated more than 40 percent of the firm's revenue and 60 percent of its profitability from Far East

operations; and Silicon Compiler Systems, where he increased international revenues from 30 percent to 60 percent of total company revenue.

“The MEARS Technologies’ management team has done an incredible job establishing an early position in a growing, exciting market space aimed at helping the chip industry increase performance and dramatically reduce static power loss due to transistor leakage,” said Bitter. “I look forward to being a part of MEARS Technologies’ rapid expansion and enabling the semiconductor industry to continue reaping the benefits of Moore’s Law.”

Bitter most recently served as CEO of Y Explorations Inc., a pioneer in the field of electronic design automation software. During his tenure, Bitter established and ran global operations and was vital in leading the company into more lucrative technology markets. Prior to Y Explorations, he held senior sales positions at several technology companies, including Teseda Corporation, Xpedion Design Systems, Virage Logic, Inc., and Magma Design Automation, where his efforts were instrumental in launching one of the EDA software industry’s most successful IPOs.

About MEARS Technologies’ Management Team

MEARS Technologies’ management team combines a unique blend of materials engineering and physics expertise with a strong knowledge of semiconductor process technologies. Dr. Robert J. Mears, MEARS Technologies’ founder, president and chief technology officer, has 25 years of research experience in electronics and photonics and is the inventor of the erbium-doped fiber amplifier (EDFA), which helped enable the broadband Internet. He has been developing the MST™ for CMOS technology since 2001. Steve Levy, chief executive officer and director, has more than 24 years of experience in electrical engineering, artificial intelligence and computer science with companies such as Macgregor, Putnam, Salomon Brothers, Xerox Palo Alto Research Center and the MIT Sloan School of Management Center for Information Systems Research. Scott Kreps, vice president of engineering, has more than 25 years of experience in semiconductor product development and manufacturing with companies such as Harris Semiconductor (now Intersil) and Applied Micro Circuits Corporation (AMCC).

About MST for CMOS

Static power dissipation can account for as much as 60 percent of the total power budget of devices manufactured at the 65-nm process node. Using a breakthrough silicon engineering technique, MEARS Technologies has developed its patented MST for CMOS technology to provide a simultaneous increase in transistor performance with dramatically reduced static power, providing a significant advantage for all applications that benefit from reduced power consumption or need to optimize performance per Watt. MEARS Technologies' MST for CMOS is designed to be fully compatible with semiconductor manufacturers' baseline processes, whether bulk CMOS, strained silicon, silicon-on-insulator or high-k / metal gate. The improvements are achieved through a band engineering approach that is based on a deep understanding of the quantum mechanics of modern deep-submicron devices. In its first implementation, MST for CMOS is a precision nano-doped silicon layer that is integrated into a standard CMOS flow. The channel replacement layer can be added without introducing new materials in the fabrication process. This "silicon-on-silicon" solution adds only a few steps to the standard CMOS manufacturing flow—at virtually no additional manufacturing cost or yield impact.

About MEARS Technologies

MEARS Technologies is an emerging materials technology company that provides advanced silicon processes and engineering services to semiconductor device manufacturers and contract foundries. The company combines a core competency in materials engineering and quantum mechanics with practical semiconductor process technology know-how to optimize the power efficiency and performance of integrated circuits manufactured on deep sub-micron processes. With a licensing model and strong patent position covering breakthrough silicon structures, methods and processes, MEARS Technologies enhances the fundamental electronic properties of silicon without requiring new manufacturing equipment or the use of exotic materials. For more information about MEARS Technologies, please visit www.mearstechnologies.com.

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