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Darnell Group

NEWS

Profits Will Be Harvested

Corona, California, November 6, 2008 – Unlike the general electronics industry that is braced for a negative impact from today’s subprime market conditions, various energy harvesting technologies, micro batteries and related power management ICs are poised for rapid and profitable growth in 2009. A convergence of several factors ranging from the commercial rollout of thin-film batteries from several companies to new government regulations and economic incentives is resulting in a favorable environment for wireless sensor systems incorporating power sources based on energy harvesting. The Second Edition of Darnell’s “Energy Harvesting, Micro Batteries and Power Management ICs, Market Forces and Demand Characteristics” identifies and details the critical success factors that will determine the winners and losers in this rapidly emerging area of opportunity.

Numerous incentive programs exist around the world that can actually pay for the installation of wireless sensor and control networks. For example, the U.S. Energy Policy Act of 2005 (EPAct 2005) contains an “Energy-efficient Commercial Building Deduction.” This provision allows a tax deduction for energy-efficient commercial buildings that reduce annual energy and power consumption by 50% compared to the ASHRAE 2001 standard. The deduction equals the cost of energy-efficient property installed during construction, with a maximum deduction of \$1.80 per square foot of the building. This deduction was extended through December 31, 2013.

“Emerging technologies struggle to gain a significant commercial foothold even in boom times, so a deep financial crisis is not likely to make their situation significantly worse. In this case, today’s economic challenges could make these products more attractive,” observed Linnea Brush, Senior Analyst with Darnell Group. “Energy efficiency regulations and tax credits are making these systems more affordable both at initial installation and over the lifetime of the system. Wireless approaches are generally less expensive than wired solutions, and when the need for battery replacement is eliminated, they are even more attractive,” Brush continued.

Energy harvesting, small-format batteries and power management ICs are technologies enabling the commercial rollout of next-generation ultra-low-power electronic devices and systems. Such devices are being deployed for wireless as well as wired systems such as mesh networks, sensor and control systems, micro-electro-mechanical systems (MEMS), radio frequency identification (RFID) devices, and so on.

“We have identified and quantified six “critical success factors” that could open opportunities for energy harvesting. These include early adopter application segments, new architectures, power costs, installation costs, new process technologies and new materials. The resulting analysis has identified near-term opportunities that will generate significant profits.” Brush concluded.

The Second Edition of Darnell’s “Energy Harvesting, Micro Batteries and Power Management ICs, Market Forces and Demand Characteristics” report is available for immediate delivery. For more information, please contact Traci at Darnell by phone at (951) 279-6684 x251; by e-mail tshepard@darnell.com; or visit

http://www.darnell.com/store/product_info.php?cPath=2_36_21&products_id=41.

Darnell Group is the leading source for worldwide strategic information covering the full spectrum of power electronics, energy storage and generation. The company specializes in the economic/business analysis of emerging power markets and technologies.

