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Darnell Group

NEWS

Who Are the Silent Killers of Micro Fuel Cells?

Corona, California, May 21, 2008 – Darnell Group has identified a conspiracy against the successful development of a meaningful market for the use of micro fuel cells (MFCs) in portable electronic devices such as mobile phone handsets and laptop computers. System makers, producers of Li-ion batteries and consumers have unwittingly entered into a conspiracy that continues to keep MFCs from gaining traction in the marketplace. MFCs were expected to offer “significant” performance improvements compared with Li batteries, such as longer operating times and “instant recharging.”

“Unfortunately for MFC developers, the market has not evolved in their favor. System makers are to blame for developing systems that do more with less energy. Makers of lithium batteries are to blame for doubling the energy-storage capabilities of their technology in the past 5 years,” stated Jeff Shepard, President of Darnell Group. “Consumers, especially energy vampires, may be most to blame for this conspiracy. Their attitude appears to be: Why should they pay to buy a fuel cartridge for a MFC, when they can plug into any available electrical outlet for free?”

While MFCs struggle to capture sales of a few thousand units, Darnell’s latest market analysis projects that the worldwide market for energy harvesting devices and thin-film batteries is projected to reach over 200 million units within 24 months. Energy Harvesting, thin-film batteries, and power management solutions for low-power wireless systems will be spotlighted at Darnell’s second annual nanoPower Forum. All are critical technologies enabling wireless applications such as mesh networks, wireless sensor and control applications, microelectromechanical (MEMs) systems, etc.

The Plenary Session will include Peter Spies, Group Manager with the **Fraunhofer Institute** talking about, “*Requirements of Power Management ICs for Energy Harvesting Transducers*,” Pranav Meha, Sr. Principal Engineer and CTO, Embedded & Communications Group, with **Intel** focusing on, “*Rethinking Low Power*,” Mark E. Buccini, Director with **Texas Instruments** revealing how “*Efficient Regulation and Dynamic Voltage Scaling Enable Practical Usage of Thin-Film Batteries with Single Supply Technology*,” Charles Lakeman, Vice President with **TPL, Inc.** will close the session by presenting, “*EnerPak: Combining Energy Harvesting and Power Management for a Complete Wireless Sensor Power Solution*.”

Information on Darnell’s market analysis of “**Ultra-Low Power Wireless Components and ICs**” is available at <http://www.darnell.com/eh>. Details on the **nanoPower Forum** can be found at: <http://nanopower.darnell.com/>.

Media sponsors for Darnell’s nanoPower Forum include Darnell’s **PowerPulse.Net**, and the Penton Electronics Group, including: **Electronic Design, Power Electronics Technology, Microwaves & RF**, and **RF Design**.

Darnell Group is the leading source for worldwide strategic information covering the full spectrum of power electronics, energy storage and generation. Darnell publishes the industry’s daily news on www.PowerPulse.net and specializes in the economic/business analysis of emerging power markets and technologies. Complete information on nPF ’08 is available at: <http://nanopower.darnell.com>

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