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# Darnell Group

# NEWS

## nanoPower Forum to Highlight High-Growth Opportunities

Corona, California, April 11, 2007 – Up to a quarter of all portable electronic devices, including mobile phone handsets, MP3 players and laptop computers as well as wireless networking devices, will employ some form of energy harvesting within the next few years. Depending on the application, energy harvesting devices will provide the primary power source or will be used to supplement on-board batteries. Energy harvesting and related power management technologies are the “next big thing” for the power electronics industry and will be the focus of the 2007 nanoPower Forum (nPF ‘07) to be held at the Marriott, San Jose, California on June 4 to 6.

“Adding even a 10-milliAmp trickle charge from a nano-sized solar cell to a mobile phone handset can extend battery life to a week or longer,” stated Jeff Shepard, President of Darnell Group. “Looking at opportunities in wireless networking is equally exciting. Copper wiring is increasingly expensive. The latest wireless networking systems promise substantial savings and improved performance compared with traditional wired alternatives. For example, use of a piezoelectric-based energy-harvesting wireless lighting control in a recently built warehouse saved over 70% in construction costs compared with the equivalent wired solution.”

nPF ‘07 will be the premiere event for the wireless networking and portable electronics industry in 2007. Low-power devices (LPDs) are being deployed for wireless applications such as mesh networks, wireless sensor and control systems, microelectromechanical systems (MEMS), radio frequency identification (RFID) devices, and so on. Energy harvesting, energy storage and power management are some of the major issues in terms of the commercial rollout of next-generation LPD systems. Delegates will have a chance to meet and talk with top executives and technical professionals in the fields of advanced batteries, power management ICs, ultra-low power RF technologies, energy harvesting, networking protocols, and related fields.

“Piezoelectric Energy Harvesting,” “Fuel Cells and Thin-Film Batteries,” “Radio Frequency Energy Harvesting,” “Wireless Sensor Networks,” “Energy Harvesting Components,” and “System Design Considerations” are among the general session topics that will be discussed at nPF ‘07. Speakers and topics at the Plenary Session will include: Bradley J. Mitchell, Product Development Manager with The Boeing Company (“Energy Harvesting Applications and Architectures at Boeing Commercial Airplanes”), Peter Spies, Group Manager with the Fraunhofer Institute (“Power Management for Energy Harvesting Applications”) and Roy Freeland, CEO of Perpetuum, Ltd. (“Practical Alternatives for Successful Energy Harvesting”). This year’s nPF will also feature a Roundtable Discussion titled: **“Can Energy Harvesting Support the Power Needs of Low-Power Devices?”**

*EDN Magazine* is the Media Sponsor for nPF ‘07. The nPF ‘07 Advisory Committee includes representatives from Advanced Cerametrics, Advanced Analog Devices, Analogic Technology, EnOcean, Fraunhofer Institute, Georgia Institute of Technology, Intel, LV Sensors, Microchip, Moteiv, Motorola, Nanotron, Powercast, Lightning Switch, Texas Instruments, Tyndall Institute, Ubiwave, University of California Berkeley Wireless Research Center, Varta Microbattery, and the ZigBee Alliance. Delegates to nPF ‘07 will include: Executives and engineers from LPD wireless system companies, MEMS engineers, Advanced battery technology executives and engineers, Energy harvesting technology specialists, Power management and power conversion design professionals, Applications engineers, Commodity managers, and Industry/Financial analysts.

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. Global Information, Inc. represents Darnell and nPF ‘07 in Asia ([www.gii.co.jp](http://www.gii.co.jp)). The nPF ‘07 web site is at: <http://nanopower.darnell.com>.

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