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Darnell Group

NEWS

Immediate HEV Market Growth Detailed by Darnell

Corona, California, February 24, 2009 – The just-released First Edition of “Vehicle Electrification: Worldwide Forecasts” provides a detailed roadmap of the successive application segments that will push growth for vehicle electrification between now and 2014. Like many emerging technologies, vehicle electrification has been around for a long time, but until recently, the technology has not really “taken off.” Even though the automotive (i.e. passenger cars and light trucks) portion of the vehicle electrification market is expected to be large, the non-automotive segments represent a potential \$893 million opportunity in 2009, growing to approximately \$2 billion worldwide in 2014, a compound annual growth rate of 17.1%.

“Passenger hybrid-electric vehicles (HEVs) get a lot of press, but they do not necessarily represent the best opportunity for suppliers attempting to get into the vehicle electrification market,” stated Linnea Brush, Senior Research Analyst with Darnell Group. “Environmental regulations and fuel efficiency do provide a strong stimulus to adopt HEVs and plug-in hybrids, but they do not benefit from the technology as much as the other vehicle types. The automotive market is also very price-sensitive, and vehicle electrification is still an expensive proposition.”

The economic and business forces affecting these markets are currently in flux. Global automakers are focusing more on hybrid-electric and electric vehicles, due to the provisions of the US Congressional “Financial Stimulus” package as well as efforts by other governments. One of the most critical components needed for the adoption of hybrid-electric, plug-in hybrid and pure electric vehicles is batteries and their concurrent battery management systems. The financial stimulus package allocates \$300 million for a federal fleet of hybrid and electric vehicles but more importantly, it also provides \$2 billion for grants that would support the manufacturing of advanced vehicle batteries and components.

The two most important technology drivers for powertrain vehicle electrification are stop-start function and varying loads. Commercial Vehicles and Off-Road Vehicles particularly benefit from stop-start functionality; while Small Task-Oriented Vehicles, Heavy-Duty Trucks and Off-Road Vehicles have varying loads. Most of these applications are less price-sensitive, as well. These and other factors went into the assumptions for the forecasts included in this report. Looking at trends in power management ICs can also help gauge the readiness of the vehicle electrification market. Even with the economic downturn, power ICs are expected to be fairly resilient due to the emphasis placed on greater power efficiency within many applications.

In addition, the emphasis on infrastructure spending in many national fiscal stimulus packages will be good for some of the non-automotive markets discussed in this report, such as heavy-duty trucks. Additional factors are pointing toward increased adoption of electric and hybrid-electric vehicles in a variety of transportation markets. For example, 2008 saw the “first commercial volumes” of hybrid trucks go into production. Growth will accelerate in 2009 and beyond.

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. Complete information on the First Edition of “Vehicle Electrification: Worldwide Forecasts” is available at: <http://www.darnell.com/vehicle>



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