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# Darnell Group

# NEWS

## AC-DC Power Paradigm Shift Identified by Darnell

Corona, California, January 14, 2009 – In the just-released Ninth Edition of “**AC-DC Power Supplies: Economic Factors, Application Drivers, Architecture/Packaging Trends, Regulatory and Technology Developments.**” Darnell Group describes a major paradigm shift in the global market for ac-dc power supplies. According to Darnell’s in-depth analysis, starting in the next few years, ac-dc power supplies will represent a faster growth opportunity than board-mounted dc-dc converter modules. This is a major development and marks a significant departure from past patterns. Historically, power converter makers have turned to dc-dc converter modules for high growth rates. That will no longer be possible. As a result of numerous factors, ac-dc power supplies now represent a better long-term growth opportunity than dc-dc converter modules.

“By 2013, ac-dc power supplies will be experiencing an annual growth rate of about 6.0%, compared with an annual growth of only 5.5% for board-mounted dc-dc converters,” observed Richard Ruiz, Research Analyst with Darnell Group. “That may not sound like much difference, but as recently as 2007, ac-dc power supplies also experienced an annual growth of 6.0%, compared with a growth rate of 8.6% for dc-dc converter modules in the same year. For the past 15 years, dc-dc converter module sales have consistently grown faster than sales of embedded ac-dc power supplies. This impending shift marks a major change in future opportunities,” Ruiz concluded.

Two particularly significant technological and architectural trends include the continued move towards single-output power supplies and the further adoption of front-end power supplies. Evidence of this can be seen in the complexity of today’s electronics applications, which use an increasing number of voltage rails, making multiple-output power supplies impractical in many devices. The emergence of LED lighting as a major application area is another instance where single-output power supplies will have a strong positive impact on the market.

Digital power management and control have also made significant strides in ac-dc power supplies over the past several years. Digitally controlled architectures for power conversion and power management have emerged as an accepted technology. In addition to the applications and trends driving the industry, the market for ac-dc power supplies is strongly influenced by a number of technological and regulatory factors. These factors vary from application to application and represent both opportunities and threats to the market. They include: the growing need for power factor correction as the average wattage for applications has increased; the further development of PoE; the development of ATCA; and the increasing importance of power supply efficiency, stemming from both regulatory bodies and economic conditions.

Over 25 tables, graphs and illustrations are presented depicting a variety of power system schematics and comparisons, architectural standards, product introductions, packaging solutions, efficiency standards and other relevant information. The focus of this comprehensive 70+ page analysis provides decision makers with an insightful look into the current and future opportunities and threats available in the embedded ac-dc power supply market.

“**AC-DC Power Supplies: Economic Factors, Application Drivers, Architecture/Packaging Trends, Regulatory and Technology Developments**” is now available. For more information, or to order the report, please contact Darnell at +1-951-279-6684; by e-mail at [tshepard@darnell.com](mailto:tshepard@darnell.com); or visit [http://www.darnell.com/store/product\\_info.php?cPath=2\\_24\\_31&products\\_id=84](http://www.darnell.com/store/product_info.php?cPath=2_24_31&products_id=84).

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.

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