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Darnell Group

NEWS

Emergence of DC-DC Converter PSiP Market Identified and Quantified

Corona, California, November 15, 2011 – Darnell Group’s first-edition analysis, “DC-DC Converter ICs: Power System in Package, Worldwide Technology Trends, Forecasts and Competitive Environment” identifies and quantifies where PSiP products are encroaching certain dc-dc converter IC markets and could replace traditional solutions over the next five years. The total Worldwide PSiP dollar market is projected to grow from approximately \$65 million in 2011 to \$284 million in 2016, a compound annual growth rate (CAGR) of 34.4%. High growth rates are expected for all the application segments targeted by companies making PSiP products.

This report provides a detailed and quantitative analysis of the global market for Power System in Package (PSiP) dc-dc converter modules. In many instances, unit sales, dollar sales and pricing trends are discussed. This 77-page quantitative analysis includes 12 Tables and 28 Figures. Topics covered include: Definitions and Factors Driving Adoption, System Maker Demand Characteristics, IC Developments and Packaging Trends, Materials Challenges, Application Demand Characteristics, Worldwide PSiP Forecasts, Commercial Development, and Competitive Overview.

“The engineering innovations that have led to PSiP, PCiP and PwrSoC designs will have an impact on different levels and functions of existing dc-dc power converter ICs and modules. PSiP and PCiP (and eventually PwrSoC) products are expected to encroach on the current levels occupied by LDOs, switching regulators, and controllers/FETs,” stated Linnea Brush, Senior Analyst with Darnell Group and author of this analysis. “The best opportunities are in communications and computers, where unit compound annual growth rates (CAGRs) are expected to range between 35% and 50% between 2011 and 2016; and revenue CAGRs will be around 23% to 38% over the forecast period. Industrial applications will see good growth, as well, around 55% for unit sales and 44% for dollar sales, she concluded.

“Power System in Package” is a term that encompasses several new package styles that could replace certain existing dc-dc converter IC solutions in the future. The bulk of this report focuses on “Power Supply in Package” (PSiP) designs, which are highly integrated micro-modules and the most commercially advanced, although still considered an emerging solution. It also includes “Power Supply on Chip” (PwrSoC), which is a complete switch-mode dc-dc converter solution integrated onto a single piece of silicon (not yet commercially available); and “Power Converter in Package” (PCiP), where some components are integrated, but other components are external.

PSiP devices could replace LDOs, for instance, since they can address space constraint challenges while tripling power efficiency in ultra-low-noise environments. They could also replace noisy dc-dc switching regulators with ultra-quiet, high-efficiency dc-dc converters and miniaturize traditional discrete dc-dc converters.

This report identifies the functions that require the specific benefits offered by PSiP/PCiP/PwrSoC products; and then identifies the applications that need these functions, which are presently being met by LDOs, switching regulators, and so on. Due to pricing constraints, however, these products are expected to be a very small portion of the overall dc-dc converter IC market, but their share is growing.

The 77-page, First Edition of Darnell’s “DC-DC Converter ICs: Power System in Package, Worldwide Technology Trends, Forecasts and Competitive Environment” report is available for immediate delivery. For more information on this report, please contact Darnell by phone at (951) 279-6684 x240; by e-mail Traci at tshepard@darnell.com; or visit <http://www.darnell.com/dcdc11>.

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