



For more information, contact:
Jeff Shepard, President
jshepard@darnell.com
(951) 279-6684
<http://www.darnell.com>

Darnell Group

NEWS

Shifting Competitive Advantages in DC-DC Converter Markets

Corona, California, June 28, 2011 – The opportunities for gaining competitive advantage in the global dc-dc converter market are changing in important ways. According to the 11th edition of Darnell’s report on “Worldwide DC-DC Converter Module Forecasts,” digital control, digital power management and the ability to adapt to changing system power architectures are replacing efficiency improvements and lower prices as the key opportunities for gaining competitive advantage and deriving increased value-added for the next five years.

The overall dc-dc converter market is projected to grow at a healthy rate, growing to about \$4.3 billion by 2016. Over the recent past, dc-dc converters have become increasingly efficient and higher levels of integration have led to lower parts counts and lower costs. In both cases, dc-dc module designers have reached an era of significantly decreasing opportunities for either significant efficiency improvements or significantly lower costs.

“As a result of these developments, dc-dc module makers will have to find new opportunities for value-added and competitive advantage,” stated Linnea Brush, senior analyst with Darnell and author of this latest analysis. “Several areas are emerging that will provide competitive opportunities including the increasing use of digital loop control and digital power management, adapting to new and emerging power architectures and the effective adoption of new materials such as GaN.”

This is the only report to quantify the impact that emerging system power architectures will have on dc-dc module design. In addition to today’s dominant Intermediate Bus Architecture (IBA), there will be significant opportunities in the Centralized Control Architecture (CCA), Dynamic Bus Architecture (DBA) and even in Spot powering. For example, in the case of the new DBA, by 2016, worldwide unit sales will reach about 5.5 million dc-dc converter modules with an annual growth rate of over 80%. And this analysis identifies the specific application segments that will lead in the adoption of the DBA and the other power architectures.

Historically, the dc-dc converter module market has been driven by sales in the Communications segment. That began to change with the emergence of the IBA, when the Computer segment began to grow rapidly, catching up with the Communications segment in terms of dominance. Applications continue to drive sales of dc-dc converter modules, however. System sales are coming from the demand for energy efficiency, lower cost, smaller size, and configurability. These complex demands are driving the development and adoption of new system-level power architectures, and the changes in power architectures are having a strong and direct impact on demand for dc-dc converter modules.

“So, even as the dc-dc converter module market continues to evolve, the emerging changes provide opportunities that power supply companies can capitalize on,” Brush continued. “Demand for dc-dc modules is expected to be strong over the next five years. The forecasts – and the trends they reflect – will create a competitive, integrated environment for dc-dc module makers to introduce new designs and offer cost-effective, innovative solutions,” she concluded.

The Eleventh Edition of Darnell’s “Worldwide DC-DC Converter Module Forecasts: Power Architectures, Product Types, Voltage Trends and Applications” report is available for immediate delivery. For more information please contact Darnell by phone at (951) 279-6684 x240; by e-mail Traci at tshepard@darnell.com; or visit http://www.darnell.com/market/product_info.php?cPath=2_24_27&products_id=229 .

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.

The World’s Power Electronics Specialist

