



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

# Darnell Group

# NEWS

## Darnell Details Markets for 12 Billion Digital Power ICs

Corona, California, August 20, 2009 – The worldwide digital power IC market (including controller ICs, converter ICs and system management ICs) is expected to grow from over 5 billion units in 2009 to 12.3 billion units in 2014, a compound annual growth rate of 19.8%, according to Darnell Group’s just-released third-edition analysis of “**Digital Power Electronics: Worldwide Forecasts.**” This will be spread out over a diverse market of power supplies, including external ac-dc and embedded ac-dc power supplies, dc-dc modules, embedded dc-dc converters, telecom rectifiers and external dc-dc, lighting ballasts and inverters.

“Although digital solutions are still primarily being used in high-performance applications, the pervasive emphasis on energy efficiency is pushing digital from high-end-only into the mainstream,” observed Linnea Brush, Senior Analyst at Darnell Group and the report’s author. “Digital control is now implemented in just about all application segments, from catalog power supplies to power supplies used in medical, solid-state lighting and consumer devices,” Brush concluded.

The digital power landscape is undergoing rapid change. Adaptive controllers, parameter estimation and sophisticated control algorithms have become much more economically reasonable to implement in a variety of systems. But there is still a “perceived expense” of going digital, compared to using similar bandwidth analog components. In certain applications, however, digital penetration is already exceeding 50%.

Projections of when digital power management and control will become a “mainstream” technology vary, from 2015 to 2018. Availability, standardization, longevity and customer-recognized value are considered requirements to be recognized as mainstream. Adding to a slower adoption rate is the current economic crisis that makes it more difficult for companies to raise money while trying to expand product offerings. Still, some of the smaller companies are shipping in the millions of quantities in markets/applications where the solution cost is at parity with competing analog solutions.

Major shifts in market share of each IC type have been occurring since 2005, and these are expected to continue through 2014. During the “emerging years” of digital (2005-2008), sales were less differentiated between IC types, particularly for ac-dc power supplies and dc-dc modules. Beginning in 2009, however, we expect changes in the market that will alter the mix more quickly through the remainder of the forecast period. These shifts can be analyzed as part of the traditional “Product Life Cycle Curve,” with digital power just entering the “Growth” phase, and Maturity expected around 2014.

The market at both the semiconductor and power conversion levels is expected to remain extremely competitive, with large multinational corporations competing with smaller regional companies for market share. In addition, a growing number of partnerships, acquisitions and alliances among companies are expected to have a significant impact in the growth and development of this industry.

Darnell’s Digital Power Electronics report is now available. For more information, or to order the report, please contact Darnell by phone at (951) 279-6684 x251; by e-mail at [tshepard@darnell.com](mailto:tshepard@darnell.com); or visit [http://www.darnell.com/store/index.php?cPath=2\\_24\\_33](http://www.darnell.com/store/index.php?cPath=2_24_33) to view the abstract, outline, brochure and order form.

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**

## Product Life Cycle Curve for Digital Power ICs

