Fairchild Semiconductor Highlights Power Supply Solutions and Design Tools at APEC 2012

At APEC 2012, February 5-9, 2012, at Disney's Coronado Springs Resort, Orlando, Fairchild Semiconductor(R), FCS +2.43% a leading global supplier of high performance power and mobile products, will address the real energy challenges designers face every day, and will demonstrate power supply solutions featuring mWSaver(TM) technology, including energy efficient controllers for flyback designs.

Fairchild will highlight its dual switch QR flyback topology and secondary synchronous rectification solution for power supply applications (75W~230W). The Dual Switch topology consists of the FAN6920MR integrated critical mode PFC and Quasi-resonant Current Mode PWM controller, the FAN7382 gate driver, in tandem with the FAN6204 secondary synchronous rectifier controller for flyback topology and forward freewheeling rectification- providing good overall efficiency and managing low power loss at light load, while providing ease of design.

Also on display will be Fairchild's Power Supply WebDesigner (PSW) -- an easy to use, powerful online simulation tool that allows designers to throw the application note away and "Auto Design," optimize or "Advance Design" like a power supply expert.

Other demonstrations in the Fairchild booth (#701) include solutions for:

LED Lighting -- demos focusing on low to high power LED lighting applications, including the FL7730 dimmable single-stage PFC PSR off-line LED driver (TRIAC dimmable) for residential applications, as well as a complete driver solution for applications >150W.

Power Supplies -- highlighting solutions that showcase Fairchild's mWSaver technology, including the FAN6756, which provides designers <30mW low standby power; and a high-efficiency dual-switch Flyback solution that provides designers with a reduced bill of materials and an easy to design topology that meets 2013 ErP requirements.

Sustainable Energy -- solutions including the FAN9611 interleaved dual BCM PFC controller for solar micro inverters, as well as a smart meter power solution using the FSL137H power switch and Fairchild's new ESBC(TM) switch series which provides increased efficiency, flexibility and robustness.

Motion Control -- demos focusing on Fairchild solutions including BLDC controllers, smart power modules (SPM(R)), high voltage MOSFETs and IGBTs that allow designers to improve the efficiency and reliability of the industrial controls and home appliance designs.

DC-DC Conversion - high-performance point-of-load digital power solutions using an advanced configurable digital controller and DrMOS as well as Fairchild's new power stage dual-asymmetric MOSFETs that address the power supply designers' need for high power density and ease of design in notebook, point-of-load, server, gaming and telecommunication applications.

Also during the show, experts from Fairchild will present on various topics including:

Fairchild's chief technology officer and senior vice president, Dan Kinzer, will deliver the opening plenary session on Monday, February 6, at 1:30 p.m. His topic, "Maximizing Fossil Fuel Savings Through Power Electronics," will discuss how power electronics technologies are fundamental to reducing energy consumption in many applications, as well as to the development of cost-effective energy alternatives to fossil fuels. The total fuel savings opportunities will be analyzed in applications like HVAC, industrial drives, lighting, automotive, appliances, power grid, energy storage, internet, communications, computing, and entertainment. New power electronic technologies will be compared for their impact. Examples will be drawn from wide band gap and silicon power device performance improvement, module and component level packaging, power distribution architecture, and advanced power control techniques.

Technical sessions include:

An interleaved single-stage flyback AC-DC converter with wide output power range for outdoor LED lighting systems, Sangcheol Moon, Gwan-Bon Koo, Gun-woo Moon, Technical Session: AC-DC Converter II, Wednesday, Feb. 8, 2 p.m. to 5:30 p.m., Fiesta 9-10

Design optimization of TRIAC-dimmable AC-DC converters in LED Lighting, Hyunchul Eom, Chun Ching Lee, Ta Yung Yan, Seunguk Yang, Technical Session: AC-DC Converter II, Wednesday, Feb. 8, 2 p.m. to 5:30 p.m., Fiesta 9-10

New Power MOSFET Technologies Optimized for Efficient and Reliable Telecommunication Power Systems, Wonsuk Choi, Sungmo Young, Dongkook Son, Poster Session: Devices and Components, Thursday, Feb. 9, 11:30 a.m. to 1:30 p.m., Veracruz

Fairchild provides leading-edge silicon and packaging technologies, manufacturing strength and system expertise for consumer, communications, industrial, portable, computing and automotive systems. An application-driven, solution-based semiconductor supplier, Fairchild provides online design tools and design centers worldwide as part of its comprehensive commitment to customer satisfaction.

www.fairchildsemi.com [1]

Posted by Janine E. Mooney, Editor

January 25, 2012

Source URL (retrieved on *12/13/2013 - 4:41pm*):
http://www.wirelessdesignmag.com/news/2012/01/fairchild-semiconductor-highlights-power-supply-solutions-and-design-tools-apec-2012

Links:
[1] http://www.fairchildsemi.com