



Power Integrations Unveils Three New Off-Line LED Lighting Application Designs

Targets Wasteful Incandescent Bulbs and Enables High Efficacy LED Street Lights

SANTA CLARA, Calif., Feb 14, 2008 (BUSINESS WIRE) -- Power Integrations (NASDAQ:POWI), the leader in high-voltage analog integrated circuits for power conversion, today announced three new Design Ideas at the Strategies In Light Exhibition and Conference, designed to make implementing LED lighting faster, simpler and more efficient.

Worldwide energy efficiency legislation coupled with ongoing improvements in the performance of high brightness LEDs are accelerating the uptake of LED technology in the lighting market, and Power Integrations has developed a number of power conversion IC solutions that address the novel power needs of the emerging LED applications. The company's TinySwitch-III, TOPSwitch-GX and LinkSwitch-TN devices are amongst the smallest and most efficient power conversion ICs available, and combine high performance with extensive integrated functionality. The versatility of the PI devices is demonstrated by the simplicity of the circuits released today to implement constant current LED lighting drivers.

Design Idea DI-173 describes a high efficiency LED driver power supply circuit that uses Power Integrations' TNY279GN, a member of the TinySwitch-III offline switcher family. The circuit operates in high ambient temperatures of up to 75 degrees centigrade, and meets the requirements of energy efficiency standards including the proposed requirements of ENERGY STAR 2.0, CEC 2008 and the EU CoC. The 14 W design can be used for LED replacement of halogen spotlights and, coupled with high efficiency LEDs, replaces standard 60W incandescent bulbs in general lighting applications.

Design Idea DI-172 details a circuit design for a high efficiency constant current, offline, buck converter able to drive a long string of up to 20 LEDs delivering a constant current of 130mA . The circuit is based on the company's LinkSwitch-TN family of lowest component count, energy-efficient, off-line switcher ICs. This circuit is optimized for LED based replacement of existing bulbs in domestic appliances and is dimmable for general LED lighting applications.

Design Idea DI-136 describes a high efficiency 75W single stage flyback power supply with power factor correction for use with LED Lighting ballasts, based on Power Integrations' TOP250YN, a member of the TOPSwitch-GX family. Combining the high voltage power MOSFET, PWM controller, fault protection and other control circuitry onto a single CMOS chip, TOPSwitch-GX reduces system cost and improves design flexibility, performance and energy efficiency. This design is suitable for LED based streetlight ballasts, neon sign replacement and high power residential or commercial lighting applications.

Comments Silvestro Fimiani, Product Marketing Manager at Power Integrations: "Energy efficiency is grabbing headlines worldwide as governments, corporations and individuals look to reduce waste, comply with legislation and live in a more environmentally-friendly manner. The lighting industry has a tremendous opportunity to make a real difference, and these Design Ideas show how designers can maximize the benefits offered by LED lighting technology, as well as simplifying and speeding up the design process."

DIs 136, 172 and 173 are available for free download at:

<http://www.powerint.com/appcircuits.htm>

About Power Integrations

Power Integrations is the leading supplier of high-voltage analog integrated circuits used in power conversion. The company's breakthrough integrated-circuit technology enables compact, energy-efficient power supplies in a wide range of electronic products, in both AC-DC and DC-DC applications. The company's EcoSmart energy-efficiency technology, which dramatically reduces energy waste, has saved consumers and businesses around the world more than an estimated \$2.7 billion on their electricity bills since its introduction in 1998. For more information, visit the company's website at www.powerint.com.

SOURCE: Power Integrations

Power Integrations

Peter Rogerson, 408-414-8573

progerson@powerint.com

<http://www.powerint.com>

Copyright Business Wire 2008

News Provided by COMTEX