

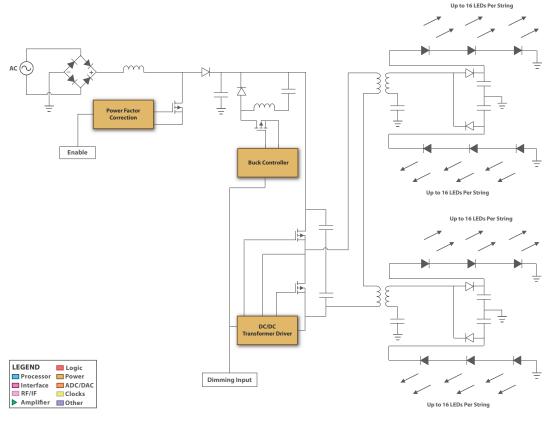
## **LED Lighting Solutions**

Reliable and efficient lighting designs from Texas Instruments address critical design challenges.

## **Innovative and Affordable LED Lighting Solutions**

Customers seeking the latest in innovative and affordable LED lighting solutions can benefit from Texas Instruments' (TI's) broad product portfolio of AC/DC, DC/DC, LED drivers, power management devices, wireless and wired interface control and embedded processors.

LED lighting designers are challenged with meeting their efficiency and reliability goals faster in advanced lighting designs. TI's high-efficiency conversion topologies, using the UCC28810 and UCC25600, are helping designers achieve their goals at a faster rate. The lack of an output rectifier, in the topology below, further increases the efficiency of the overall system and provides simple and robust control. Transient immunity and the current matching characteristic of the multi-transformer topology make it extremely reliable and the system re-balances automatically in case of an LED failure. Scalability is another key advantage in LED design and the number of LEDs in a string can be scaled up to 16, allowing for up-to 64 LEDs per lamp. Designs integrating communications capabilities benefit from TI's TMS320C2000™ microcontrollers (MCUs) for a wide range of lighting applications, from LED backlighting to commercial lighting.



**Special Offer.** Register at www.em.avnet.com/maytechreview to receive the Texas Instruments' LED Drivers Catalog and Microcontrollers Brochure, and qualify to win a Digital Power Experimenters Kit plus Blackhawk Emulator, and two UCC28810EVM-003. Offer ends July 31, 2009.

## C2000<sup>™</sup> MCU Benefits:

- Power management (PFC, AC/DC, DC/DC, among others)
- Communications/ control (power line communications, DALI, DMX512, 0 to 10 V, ZigBee®, among others)
- Flexibility for on-the-fly brightness or color temperature changes
- LED temperature sensing for increased reliability
- Adaptive dimming based on usage or ambient light

## **Learn More:**

- Visit www.ti.com/ lighting for TI solutions on general lighting, signage, backlighting and automotive, complimented by a comprehensive customer support network
- Visit www.ti.com/ applications for complete TI solutions offering



