LED driver ICs Tout High Efficiency

ZMDI, a global supplier of analog and mixed-signal solutions for automotive, industrial, and medical applications, announced its entry into the LED market with the first three energy-efficient LED driver ICs of a new family. The drivers achieve up to 95% efficiency and demonstrate ZMDI's commitment to green technology.

"LEDs are very energy-efficient light sources and ZMDI has the mixed-signal expertise to deliver LED driver ICs which maximize the potential of these efficient light sources", stated Carlo Rebughini, vice-president worldwide sales & marketing at ZMDI. "Our new integrated devices make it possible for companies to build cost-effective LED lighting solutions for home, consumer and industrial lighting applications."

ZMDI's LED driver portfolio is designed for all types of internal and external lighting applications. The ZLED7000 and ZLED7010 drive single or multiple LEDs from a supply voltage range of 6 to 40 volts, using continuous-mode inductive step-down converters. The ZLED7001 is a peak current mode control LED driver which operates within a wide input range from 8VDC to 450VDC or 110VAC / 220VAC, making it ideal for direct line-powered applications. All three devices have a very small footprint and are highly integrated thus enabling a very low bill of materials (BOM) cost.

The ZLED7000 and the ZLED7010 LED driver both feature an integrated current-switching transistor and require only four external components for a complete driver. Both support wide-range dimming. The ZLED7010 also has integrated LED temperature compensation to insure that the LED lifetime is maximized. The measured temperature information for the compensation can be cascaded through the ZLED7010 to serve up to 13 LED drivers. Both devices can drive up to 750 mA of LED current, and feature regulation better than 2 mA. This means the LEDs deliver consistent, flicker-free brightness.

For line-powered applications, the ZLED7001 universal LED driver allows efficient operation of High Brightness (HB) LEDs with voltage sources ranging from 8 VDC to 450 VDC, including rectified 110 VAC / 220 VAC. Direct connection to the power line dramatically reduces the cost and size of LED lamps, and makes it possible to create LED lamps which are direct replacements for conventional incandescent and fluorescent lamps. The ZLED7001 delivers excellent dimming response and can be dimmed using either Pulse-Width-Modulation techniques or via a linear input control pin. A temperature-compensation input can be used to insure maximum LED lifetime.

Full application kits including application notes and an evaluation board are available now for all three products. The ZLED7000 comes in a SOT89-5 package, making it ideal for space-constrained applications such as signage or specialty

architectural lighting. The ZLED7001 and ZLED7010 are available in a SOP-8 package. For 1,000 pieces, the ZLED7000 is priced at 0.36€, ZLED7001 at 0.40€ and ZLED7010 at 0.63€.

Product information can be found at http://www.zmdi.com/products/led-drivers/ [1]

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