

NXP launches new flexible digital LED driver IC platform

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NXP Semiconductors N.V. today unveiled a new family of single stage driver ICs for compact, high-efficient, high-performance and cost-effective general LED lighting solutions. Complementing NXP's broad range of GreenChip SSL products, the new platform includes the SSL5301T, SSL5306T, SSL5307T, SSL5511T and SSL5101T LED driver solutions from 4 Watt up to 50 Watt of lamp power. All products have been designed in the compact and economical SO-8 package.

The product family is applicable for Buck, Buck-Boost or Flyback, in non-isolated or isolated topologies and includes three selectable modes: Low ripple, Eco-Low THD (PF>0.75) or Low THD (PF>0.9). The solutions also provide benefits through accurate LED current and line regulation and compatibility with wall switches with built-in indication light during standby. The LED driver ICs have been designed to start up directly from the high-voltage (HV) supply by an internal JFET current source and incorporate all required protection features.

The SSL5301T, SSL5306T, SSL5307T single stage LED driver ICs are designed and optimized for mains-dimmable (phase cut dimmable) LED driver solutions. The SSL5301/06/07T can detect all known mains dimmer types and translate the dimmer setting to a continuous LED current in multiple ways. This means that they have an extremely high dimmer compatibility and are suitable for use with a bleeder.

The SSL5301T, SSL5511 and SSL5101, drive an external switch for easy power scaling up to 50Watt of lamp power. The SSL5306T and

SSL5307T have an incorporated MOSFET of 700V/100Ohm to support compact solutions up to 10Watt of lamp power. The SSL5306T is designed for Buck topology and the SSL5307T Buck-Boost Topology and will be released for mass production in Q3 2014.

The SSL5511T is a compact single stage LED driver IC for offline dimmable LED driver solutions with a control input signal for dimming such as remote-controlled luminaires and smart lamps. The SSL5101T targets non-dimmable LED fixture solutions or higher power isolated LED retrofit solutions. With the introduction of the platform, NXP also adds fourteen new reference boards to the NXP LED Driver Solutions Selection Guide. NXP's cost-effective LED Driver Solutions simplify lamp design with the right form factor to streamline the design-in process, and extend lifetime and reliability.

"With the introduction of our new single stage driver ICs we are able to offer LED lamp manufacturers even better performance at a lower overall system cost," said Ryan Zahn, general manager, lighting solutions product line, NXP Semiconductors. "These solutions provide maximum configuration flexibility and are supported by our high quality and reliable supply chain." The new platform will be showcased at the Guangzhou Lightfair in China, June 9-12 2014. NXP welcomes visitors at booth 13.2, hall B02.

Free calculation tool and reference boards orders are now available from NXP.com.

Provided by NXP

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