

Power Integrations Announces New Reference Design for Efficient PAR38 LED Spotlight

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DER-350 achieves excellent dimming performance for all TRIAC dimmer types

SAN JOSE, Calif.--(BUSINESS WIRE)-- **Power Integrations** (Nasdaq: **POWI**), the leader in high-efficiency, high-reliability LED driver ICs, today announced a reference design for a dimmable PAR38 spotlight, developed in collaboration with Cree, Inc. (Nasdaq: **CREE**), a leading LED lighting company. The new reference design, described in **DER-350**, uses Power Integrations' new LYT4317E, a member of the company's **LYTSwitch™-4** family of single-stage drivers, along with Cree's MT-G2 EasyWhite® LEDs.

DER-350 includes an isolated, high-power-factor, TRIAC-dimmable LED driver optimized to deliver an LED current of 550 mA at 36 V (nominal) from an input voltage range of 90 VAC to 132 VAC. The combined PFC and CC single-stage, isolated topology of the **LYTSwitch™-4** IC delivers excellent efficiency, power factor of 0.98, and low component count. Over-voltage, overcurrent and over-temperature protection features are built-in.

DER-350 also showcases the **LYTSwitch™-4** IC's excellent TRIAC dimming with very fast sub-200 ms start-up, reduced pop-on and no dead-travel, easily satisfying NEMA dimming curve requirements, for both leading-edge and trailing-edge dimmers.

Comments Andrew Smith , product marketing manager at **Power Integrations**: "The combination of the high lumen output, excellent optical control and color consistency of Cree's MT-G2 EasyWhite LEDs makes it ideal for directional luminaires such as the PAR38 replacement lamp." Adds David Cox, Cree's director of alliance development: "**Power Integrations'** low-cost, high-efficiency drivers complement our LEDs and facilitate designs that are compact, require little heatsinking and provide excellent dimmability. The result is LED-lighting solutions that are being readily accepted by customers."

DER-350 can be downloaded at: <http://www.powerint.com/sites/default/files/PDFFiles/der350.pdf>.

About Power Integrations

Power Integrations, Inc., is a Silicon Valley-based supplier of high-performance electronic components used in high-voltage power-conversion systems. The company's integrated circuits and diodes enable compact, energy-efficient AC-DC power supplies for a vast range of electronic products including mobile devices, TVs, PCs, appliances, smart utility meters and LED lights. CONCEPT IGBT driver systems enhance the efficiency, reliability and cost of high-power applications such as industrial motor drives, solar and wind energy systems, electric vehicles and high-voltage DC transmission. Since its introduction in 1998, Power Integrations' EcoSmart® energy-efficiency technology has prevented billions of dollars' worth of energy waste and millions of tons of carbon emissions. Reflecting the environmental benefits of the company's products, Power Integrations' stock is included in the NASDAQ® Clean Edge® Green Energy Index, The Cleantech Index®, and the Ardour Global IndexSM. For more information, including design-support tools and resources, please visit www.powerint.com; visit Power Integrations' **Green Room** for a comprehensive guide to energy-efficiency standards around the world.

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