



New Power Integrations IC Family Enables World's Simplest Cell-Phone Chargers

LinkSwitch[®]-LP Enables Energy-Efficient Low-Power Chargers Using Only 14 Components

SAN JOSE, Calif. – October 17, 2005 – Power Integrations (Nasdaq: POWI), the leader in high-voltage analog integrated circuits for power conversion, today introduced a new family of ICs designed for use in ultra-low-cost battery chargers. The new LinkSwitch-LP family offers the simplest energy-efficient replacement for unregulated line-frequency transformers with up to three watts of output power. Such chargers are commonly sold with products such as cell phones, cordless phones, portable audio players, shavers and other personal electronics.

Chargers using LinkSwitch-LP require just 14 components—the lowest component count available for energy-efficient switched-mode chargers. This circuit simplicity is enabled by a number of Power Integrations innovations:

- Clampless[™] design methodology uses proprietary IC trimming technology and innovative transformer construction techniques to eliminate RCD clamp circuitry
- Primary side control of charger output voltage and current to eliminate the need for an opto coupler and associated components
- Integrated frequency jitter and unique Filterfuse[™] input stage achieve EMI filtering with a single capacitor
- E-Shield[™] transformer design eliminates the need for a Y capacitor
- Hysteretic thermal shutdown feature removes the need for external thermal protection components
- EcoSmart[®] energy-efficiency technology enables compliance with all current and proposed energy standards worldwide.

"Recent energy-efficiency standards practically eliminate the use of linear-transformer-based external power supplies in key markets such as California," noted Doug Bailey, vice president of marketing for Power Integrations. "LinkSwitch-LP is ideal for designers whose mandate is to meet these standards at the lowest possible cost."

"Chargers using LinkSwitch-LP are vastly simpler than discrete designs, which typically contain dozens of components," Bailey continued. "LinkSwitch-LP also offers integrated energy-efficiency and safety features that are either unavailable in discrete designs or, at best, require additional components and design effort."

LinkSwitch-LP features a 700 V power MOSFET integrated with control and fault protection circuitry on a single silicon chip. The ICs operate across the universal input range of 85 to 265 VAC and achieve an extremely low no-load power consumption of less than 150 mW at 265 VAC. The simple ON/OFF control scheme of LinkSwitch-LP provides constant efficiency even at light loads, enabling easy compliance with recent efficiency standards.

LinkSwitch-LP is available in lead-free, plastic through-hole DIP-8 and surface-mountable SMD-8 packages. Pricing in 1000-piece quantities for the LNK562PN, a 1.9 W part in a DIP-8 package, is \$0.45 each. The LNK564PN, a 3 W part, is priced at \$0.49 each. Small quantities of each type are available from factory stock, with production quantities available 4 weeks ARO.

Complete documentation for the LinkSwitch-LP family, including Clampless designs, can be found on the Power Integrations website at <http://www.powerint.com/linklpproduct.htm>. The new product family is also supported by a reference design kit, the DAK-85, which includes a fully tested 6 V, 330 mA charger, an engineering test report and product samples.

About Power Integrations

Power Integrations, Inc. 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 \$1.2 billion on their electricity bills since its introduction in 1998. For more information, visit the company's Web site at www.powerint.com. For information on global energy-efficiency standards and EcoSmart solutions, visit the Power Integrations Green Room at www.powerint.com/greenroom.