

Off-Line Switcher ICs



Power Integrations, Inc announced the availability of a new generation of energy efficient, low power off-line switcher ICs. The new family of devices, named TinySwitch-II, maintains the simplicity of the previous TinySwitch line while providing additional features and lowering system cost. The output power capability has also been increased to 23 Watts (15 Watts with a universal input), making it an ideal energy efficient, cost-effective solution addressing most standby power requirements.

The product family of monolithic ICs, which cost effectively integrates a high voltage Power MOSFET, oscillator, and control circuitry onto a single CMOS chip, consists of eight part types ranging in power levels from 4 to 23 Watts. Built-in features include auto-restart for short circuit and open loop fault protection, frequency jittering for low EMI filtering cost, current limit and thermal protection, programmable line under-voltage detection preventing power on/off glitches, circuitry to eliminate audible transformer noise, and very tight tolerances with negligible temperature variation on key parameters, simplifying design and lowering system cost. Additionally, the internal switching frequency of 132 kHz reduces transformer size and allows the use of lower cost EF12.6 or EE13 cores. The new product family incorporates the company's EcoSmart[®] technology, which reduces energy consumption, especially in standby and no-load conditions. Applications for the new devices include low power adapters for portable equipment such as cell phones, PDAs, digital cameras, external computer peripherals, and power tools and standby power supplies found in PCs, white goods, and audio/video equipment.

The TinySwitch-II family is supported by a number of design tools including a 20-page data sheet and design spreadsheet. A Design Accelerator Kit, the DAK-14, is also offered which includes a universal input 3 Watt power supply, an unpopulated printed circuit board of the power supply, and TinySwitch-II samples. All design tools are available through the company's website.

Source URL (retrieved on 10/25/2014 - 6:29am):

<http://www.wirelessdesignmag.com/product-releases/2001/04/line-switcher-ics>