

Power Integrations' High-Frequency Two-Switch-Forward IC Slashes System Cost and Footprint

11/12/2013

Higher switching speed and increased integration yield smaller magnetics, reduce component count

SAN JOSE, Calif.--(BUSINESS WIRE)-- **Power Integrations** (Nasdaq: **POWI**), the leader in high-voltage integrated circuits for energy-efficient power conversion, today announced the **HiperTFS™-2** family of ICs, combining two-switch-forward and flyback power-supply controller ICs with integrated high-voltage MOSFETs. This high level of integration saves more than 20 components, resulting in a smaller form factor and higher power density. The main converter provides a selectable switching frequency between 66 kHz and 132 kHz, which reduces system cost by enabling the use of very small magnetics.

HiperTFS-2 ICs enable efficiencies of more than 90% at full load. They also provide 175% peak power, a requirement of next-gen Intel CPUs. This single-chip implementation of a two-switch-forward main (66/132 kHz) and flyback (132 kHz) standby power supply delivers up to 364 W total output power (586 W peak) in a compact, two-row eSIP™ power package. Safety features include undervoltage, overvoltage, over-temperature, overcurrent and short-circuit protection. A transformer-reset control function prevents saturation under all conditions.

Comments Chris Lee , product marketing manager at **Power Integrations**: “**HiperTFS-2** ICs enable power supply miniaturization in applications including 80 PLUS® Bronze and 80 PLUS® Silver PCs, gaming-console adapters and industrial products. The inclusion of the high-side MOSFET driver allows designers to eliminate the pulse transformer and many other supporting components, simplifying design and reducing the size (and cost) of the magnetics.”

A new reference design based on the **HiperTFS-2** IC, **DER368**, describes a 12 V, 180 W power supply with 250 W peak power load and 10 W standby power - see

<http://www.powerint.com/sites/default/files/PDFFiles/der368.pdf>. HiperTFS-2 IC samples are available now, and cost \$1.74 each in 10K quantities.

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.

Power Integrations, HiperTFS, EcoSmart, and the Power Integrations logo are trademarks or registered trademarks of Power Integrations, Inc. All other trademarks are the property of their respective owners.

Source: Power Integrations, Inc.

Media Contact

Power Integrations, Inc.

Peter Rogerson, 408-414-8573

progerson@powerint.com

or

Press Agency Contact

BWW Communications

Nick Foot, 44 (0) 1491-636 393

nick.foot@bwwcomms.com