

NEWS RELEASE

Power Integrations' HiperPFS-4 Power Factor Correction IC Delivers 98% Full-Load Efficiency

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Integration of Qspeed boost diode results in simplest active PFC solution; targets PC and TV power supply applications

SAN JOSE, Calif.--(BUSINESS WIRE)-- Power Integrations (Nasdaq: **POWI**), the leader in high-voltage integrated circuits for energy-efficient power conversion, today announced that its HiperPFS™-4 power factor correction (PFC) controller IC is now available with an integrated Qspeed™ low reverse recovery charge (Qrr) boost diode. This combination delivers greater than 98% full-load efficiency in PC, TV, and similar applications between 75 W and 400 W.

This press release features multimedia. View the full release here:

<https://www.businesswire.com/news/home/20210413005496/en/>

Power Integrations' HiperPFS-4 family is ideal for PCs and TVs, and also for battery chargers, power tools, industrial power supplies and LED lighting. (Photo: Business Wire)

Comments Power Integrations' product marketing manager Edward Ong: "Designs using HiperPFS-4 ICs show very high efficiency across the load range with as little as 36 mW of no-load power consumption at 230 VAC. The **HiperPFS-4 family** is ideal for PCs and TVs, and also for battery chargers, power tools, industrial power supplies and LED lighting. The active devices incorporated into HiperPFS-4 ICs are rated to 600 V, which eases compliance with frequently requested 80% de-rating specifications."

The HiperPFS-4 IC combines continuous conduction mode (CCM) PFC control circuitry, the boost diode and a 600 V MOSFET in one device. Including the boost diode reduces heatsink mounting, leading to a simpler design and better

thermal performance. Furthermore, the built-in Qspeed diode also provides greater robustness against AC line surges since parasitic trace inductances are minimized, which in turn reduces voltage spikes seen by the power switch during transients by up to 50 V. The integrated 600 V MOSFET is therefore easily able to meet the 80% de-rating requirement when delivering a 385 VDC constant-voltage bus.

HiperPFS-4 ICs achieve a power factor of greater than 0.95 at above 20% load. The Qspeed boost diode is optimized for continuous conduction mode PFC operation featuring very low reverse recovery losses that approach the performance of silicon carbide devices without the financial penalty.

Availability & Resources

The HiperPFS-4 power factor correction (PFC) controller IC packaged with a QSpeed low Qrr boost diode is available now in volume product quantities. Devices are priced starting at \$1.56 in quantities of 10,000. For more details contact a Power Integrations sales representative or one of the company's authorized worldwide distributors: **Digikey, Farnell, Mouser, and RS Components.**

About Power Integrations

Power Integrations, Inc. is a leading innovator in semiconductor technologies for high-voltage power conversion. The company's products are key building blocks in the clean-power ecosystem, enabling the generation of renewable energy as well as the efficient transmission and consumption of power in applications ranging from milliwatts to megawatts. For more information please visit **www.power.com**.

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