IC simplifies design and reduces overall system cost

International Rectifier expanded its family of SmartRectifier ICs with the introduction of the IR1169 high speed synchronous rectifier (SR) controller for flyback, forward and half-bridge converters used in AC-DC adapter, PC, server and Telecom SMPS applications.

The IR1169 features a SYNC function that turns off the SR MOSFET to prevent reverse current flow under continuous conduction mode (CCM) operation, thereby improving functionality and reliability. Unlike existing solutions, the advanced new device uses direct sensing with capacitor coupling to help simplify design and reduce overall system cost.

Featuring IR’s proprietary 200V high-voltage IC technology, the IR1169 supports burst mode operation to deliver efficiency benefits even at light loads. Ruggedness and noise immunity are accomplished using an advanced blanking scheme and double-pulse suppression that allows reliable operation in fixed and variable frequency applications.

Other key features include maximum 500 kHz switching frequency, anti-bounce logic and UVLO protection, 4A peak turn-off gate drive current, micropower start-up and low quiescent current, 10.7V gate drive clamp, 50ns turn-off propagation delay and a wide Vcc operating range from 11V to 20V.

Specifications

Part Number	Package	Form	Topology	VD	V_{OUT}	I_{O+}/I_{O-}	Tu Pr
IR1169SPBF	SO-8	Tube	Flyback, Forward, Half/Full Bridge	200V	10.7V	+1A/-4A	70

Design tools

Datasheets and application notes are available on the International Rectifier website at www.irf.com [1]. The IRAC1169-TO220 daughter card featuring the IR1169 is also available.

Availability and Pricing

Available in an 8-pin SOIC package, pricing for the IR1169SPbF begins at US $0.73 each in quantities of 10,000-units. Production quantities are available immediately. The devices are lead free and RoHS compliant. Prices are subject to change.

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Links:
[1] http://www.irf.com/