



Data Sheet

AccuSwitchTM Off-Line Digital PWM Converter with 800V Bipolar Power Transistor

Manufacturers

Renesas Technology Corp

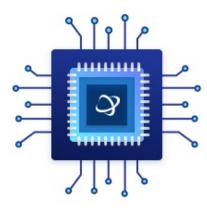
Package/Case

Product Type

Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for iW1816-20-SO7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Optimized for 5W output power applications

Integrated with a highly accurate control circuit, the iW1816 operates in a quasi-resonant mode allowing it to easily meet global energy efficiency standards, with less than 30mW of no-load power consumption.

The iW1816 includes an adaptive soft-start circuit which intelligently controls start-up over a range of output voltages from 5V to 12V and higher, and into capacitive loads up to 6000uF, making it ideal for applications such as smart meters, home appliances, and networking equipment. The iW1816 also incorporates Dialog's PrimAccurateTM primary-side digital control algorithms that enable a fully isolated solution without the need for an optocoupler, reducing cost and solution size while greatly improving reliability. Additional functionality includes full protection from over temperature, over voltage and over current conditions as well as EZ-EMI® design techniques to allow for a solution that easily meets global EMI specifications.

Application: Low-Power AC/DC Power Supply with Soft Start-Up Circuit for Networking, Industrial and Home Applications

Features

Meets proposed mandatory federal efficiency standards for external power supplies

AccuSwitchTM - Integrated 800V power bipolar junction transistor (BJT)

Adaptively controlled soft start-up - Fast yet smooth start-up into large capacitive loads

Optimized for 5W output power range capable

Easily meets Energy Star® AC-DC power supply efficiency specs (Rev. 2.0) Less than 30mW no-load power consumption

PrimAccurateTM - Primary-side control, no optocoupler needed

Quasi-resonant control for optimal efficiency

EZ-EMITM design to easily meet global EMI specifications

64kHz PWM switching frequency

Fully protected from fault conditions:

Over-temperature protection

Output overvoltage and overcurrent

Sense-resistor short circuit protection

Related Products



<u>iW3602-01</u>

Renesas Technology Corp SO-8



<u>iW3620-00</u>

Renesas Technology Corp SOP-8



<u>iW1760-01</u>

Renesas Technology Corp SOP8



Motor Control

Networking Devices

Application

Home Automation and Appliances



<u>iW1677-00</u>

Renesas Technology Corp SOT-23-6



<u>iW1760B-00</u>

Renesas Technology Corp SOP-8



<u>iW1691-03</u>

Renesas Technology Corp SOP-8 <u>iW3623-00</u>



Renesas Technology Corp SOP-14



<u>iW657P</u>

Renesas Technology Corp