



Data Sheet

LOW-POWER OFF-LINE DIGITAL GREEN

Manufacturers	Renesas Technology Corp
Package/Case	SOT-23-6
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for iW1677-00 or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

General Description

< 20mW standby power

The iW1677 is a high performance AC/DC controller designed to drive a low-cost BJT power switch in peak current mode PWM flyback power supplies up to 5W. Ideal for power adapters for smartphones, the iW1677 integrates Dialog's PrimAccurateTM digital primary-side control, eliminating the need for the secondary-side optocoupler, reducing component count and solution cost.

The iW1677 integrates an active start-up circuit that allows for fast turn-on without impacting operating current consumption. The device easily meets the US DoE's external power supply standard and the EU's Code of Conduct, version 5, tier 2 standard, with no-load power consumption less than 20mW. Additional features include Dialog's proprietary EZ-EMITM technology, quasi-resonant control for optimal efficiency at heavy loads, cable and connector voltage drop compensation options, full protection from fault conditions and tiny packaging.

Application: Compact Low Power AC/DC Power Adapters

Features

Application

Meets proposed mandatory federal efficiency standards for external power supplies

Intrinsically low noise solution - No audible noise over entire operating range

Easily meets Energy Star[®] AC/DC power supply efficiency specs (Rev. 2.0) Less than 20mW no-load power consumption

Low 1.7µA start-up current

Active start-up circuit to reduce turn-on time

- 72kHz PWM switching frequency
- Voltage offset compensation for voltage loss in cables and connectors (4 options)
- PrimAccurate[™] Primary-side control, no optocoupler needed
- Quasi-resonant control for optimal efficiency
- EZ-EMITM design to easily meet global EMI specifications
- Fast dynamic load regulation
- Fully protected from fault conditions Over-temperature protection
- Output overvoltage and overcurrent
- Input undervoltage protection
- Sense-resistor short circuit protection

Power Adapters for Portable Electronics

Consumer Electronics Power Supplies

Linear AC/DC Power Supply Replacement





Related Products



<u>iW3602-01</u>

Renesas Technology Corp SO-8



<u>iW1816-20-SO7</u>

Renesas Technology Corp



<u>iW3620-00</u>

Renesas Technology Corp SOP-8

<u>iW1760B-00</u>

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Renesas Technology Corp SOP-8

<u>iW1760-01</u>

Renesas Technology Corp SOP8



<u>iW1691-03</u>

Renesas Technology Corp SOP-8



<u>iW3623-00</u>

Renesas Technology Corp SOP-14



<u>iW657P</u>

Renesas Technology Corp