

## SmartJitter™ PWM Flyback Controller

### General Description

The RT7736 series is a high performance enhanced PWM flyback controller with proprietary SmartJitter™ technology. The innovative SmartJitter™ technology not only reduces EMI emissions of SMPS when the system enters burst switching green mode, but also eliminates output jittering ripple.

The RT7736 is a current mode PWM controller including built-in slope compensation, internal Leading Edge Blanking (LEB) and cycle-by-cycle current limit. It provides excellent green power performance, especially under light load and no load conditions. It allows for simpler design and reduces external component count.

This controller integrates comprehensive safety protection functions for robust designs including input Under-Voltage Lockout (UVLO), Over-Voltage Protection (OVP), Over-Load Protection (OLP), Secondary Rectifier Short Protection (SRSP), CS pin open protection and cycle-by-cycle current limit.

The RT7736 is a cost-effective and compact solution for NB adaptor applications. It is available in the SOT-23-6 package.

### Features

- Proprietary SmartJitter™ Technology
  - Reducing EMI Emissions of SMPS
  - Output Jittering Ripple Elimination
- No Load Input Power Under 100mW (RT7736G/R/L/E)
- Accurate Over Load Protection
- UVLO 9V/14.5V
- PRO Pin for External Arbitrary OVP/OTP
- IC ON/OFF Control (RT7736G/R/L)
- BNO Pin for Brown-In/Out (RT7736B/F)
- Soft Driving for EMI Noise Reduction
- Driver Capability : 300mA/-300mA
- High Noise Immunity
- RoHS Compliant and Halogen Free

### Applications

- Switching AC-DC Adaptor
- DVD Open Frame Power Supply
- Set-Top Box (STB)
- ATX Standby Power
- TV/Monitor Standby Power
- PC Peripherals
- NB Adaptor

### Simplified Application Circuit

