

Burst Triple Mode PWM Flyback Controller

General Description

The R7731 is a high performance, low cost, low start-up current, current mode PWM controller with burst triple mode to support green mode power saving operation. The R7731 integrates functions of Soft-Start, Under Voltage Lockout (UVLO), Leading Edge Blanking (LEB), Over Temperature Protection (OTP), internal slope compensation. It provides the users a superior AC/DC power application of higher efficiency, low external component counts and lower cost solution.

To protect the external power MOSFET from being damaged by supply over voltage, the R7731 output driver is clamped at 12V. Furthermore, R7731 features fruitful protections like OLP (Over Load Protection), OVP (Over Voltage Protection) to eliminate the external protection circuits and provide reliable operation. R7731 is available in SOT-23-6 and DIP-8 packages.

Features

- Very Low Start-Up Current (<30μA)
- 10/14V UVLO
- Soft-Start Function
- Current Mode Control
- Jittering Switching Frequency
- Internal Leading Edge Blanking
- Built-in Slope Compensation
- Burst Triple Mode PWM for Green-Mode
- Cycle-by-Cycle Current Limiting
- Feedback Open Protection
- Output Over Voltage Protection
- Over Temperature Protection
- Over Load Protection
- Soft Driving for Reducing EMI
- High Noise Immunity
- Opto Coupler Short Protection
- RoHS Compliant and Halogen Free

Applications

- Adaptor and Battery Charger
- ATX Standby Power
- Set Top Boxes (STB)
- DVD and CD(R)
- TV/Monitor Standby Power
- PC Peripherals

Typical Application Circuit

