GENERAL DESCRIPTION

IN2134 is a high Performance current mode PWM switch. Standby power is lower than 75mW at universal AC input and meet CEC6 standard. In order to reduce standby power and increase the efficiency, a multi-mode control strategy is integrated in IN2134. Three different modes are applied in the strategy and the optimization is achieved according to different loads. When load is heavy, the system works in traditional PWM (Pulse Width Modulation) mode. When the output power demands decrease, the IC enters into PFM (Pulse Frequency Modulation) mode that the frequency becomes lower with the load lighter. The proprietary pulse frequency changing block integrated in IN2134 makes the frequency changes smoothly without audio noise generated. The decreased frequency can reduce the switching power consumption effectively. When the current set-point falls below a given value, the IC automatically enters into PSM (Pulse Skipping Modulation) mode that some pulse cycles are skipped to further reduce the switching power consumption. In all modes above, the IC integrates frequency jittering function for the oscillator to reduce conduction EMI emission of a power supply.

IN2134 integrates functions and protections of Under Voltage Lockout (UVLO), VCC over Voltage Protection (VCC OVP), Cycle-by-cycle Current Limiting (OCP), Over Load Protection (OLP), On-Chip Thermal Shutdown (OTP), Soft Start, VCC Clamping and CS Pin Float Protection, etc.

FEATURES

- Integrated MOSFET
- Less than 75mW Standby Power
- Fixed 65KHz Switching Frequency
- Green Mode and Burst Mode Control
- Very Low Startup and Operation Current
- Built-in Frequency Shuffling to Reduce EMI
- Built-in Current Mode Control with
- Internal Slope Compensation
- Built-in UVLO/OVP/OTP/OLP Protections with Auto Recovery
- SOP-8L Green package
- Available in SOP-8L Package

APPLICATIONS

- Power Adapter
- General Switch Mode
- Set-Top Box Power
- Power Supply
- Digital Cameras and Camcorder Adapter
- Auxiliary Power Supply for PC and Server
- Open-frame SMPS