Product Overview

FAN6754A: Green-Mode PWM Controller for Flyback Converter, 65KHz

For complete documentation, see the data sheet.

The highly integrated FAN6754A PWM controller provides several features to enhance the performance of flyback converters. To minimize standby power consumption, a proprietary green-mode function provides off-time modulation to continuously decrease the switching frequency under light-load conditions. Under zero-load and very light-load conditions, FAN6754A saves PWM pulses by entering deep burst mode. This burst mode function enables the power supply to meet international power conservation requirements. FAN6754A integrates a frequency-hopping function internally to reduce EMI emission of a power supply with minimum line filters. Built-in synchronized slope compensation is accomplished by proprietary HV monitor to adjust VLimit for constant output power limit over universal AC input range. The gate output is clamped at 13V to protect the external MOSFET from over-voltage damage. Other protection functions include AC input brownout protection with hysteresis, SENSE pin short-circuit protection, and VDD over-voltage protection. Over temperature protection, an external NTC thermistor can be applied to sense the external switcher's temperature. When VDD OVP or OTP are activated, an internal latch circuit is used to latch-off the controller. The latch mode is reset when the VDD supply is removed. FAN6754A is available in an 8-pin SOP package.

Features

- High-Voltage Startup
- AC Input Brownout Protection with Hysteresis
- Monitor HV to Adjust VLimit
- Low Operating Current: 1.5mA
- Linearly Decreasing PWM Frequency to 22KHz
- Frequency Hopping to Reduce EMI Emission
- Fixed PWM Frequency: 65KHz
- Peak-Current-Mode Control
- Cycle-by-Cycle Current Limiting
- Leading-Edge Blanking (LEB)
  For more features, see the data sheet

Applications

- Notebook PC
- LCD Monitor
- LCD TV

For more information please contact your local sales support at www.onsemi.com.

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