

## Offline Current Mode PWM Controller with Programmable OTP/OVP

### FEATURES

- DCM and CCM Operation
- $\pm 1\%$  CV Regulation
- Meet 6<sup>th</sup> Energy Star Requirement
- 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 Protections with Auto Recovery:
  - VDD Under Voltage Lockout (UVLO)
  - VDD Over Voltage Protection (OVP)
  - CS Over Voltage Protection (CS OVP)
  - On-Chip Thermal Shutdown (OTP)
  - Programmable External Thermal Shutdown (OTP)
  - Cycle-by-Cycle Current Limiting
  - Over Load Protection (OLP)
  - Leading Edge Blanking (LEB)
  - CS Pin Float Protection
- Available with SOT23-6L Package

### GENERAL DESCRIPTION

KP201A is a high performance current mode PWM controller applied for offline flyback converter applications.

In KP201A, PWM switching frequency with shuffling is fixed to 65 KHz and is trimmed to tight range. The IC has built-in green and burst mode control for light and no load condition, which meet 6<sup>th</sup> energy star requirement and achieve less than 75mW standby power.

KP201A integrates functions and protections of Under Voltage Lockout (UVLO), VDD Over Voltage Protection (VDD OVP), CS Over Voltage Protection (CS OVP), Cycle-by-cycle Current Limiting (OCP), Short circuit protection (SCP), Over Load Protection (OLP), On-Chip Thermal Shutdown (OTP), Programmable External Thermal Shutdown (OTP), Soft Start, VDD clamping and CS Pin Float Protection, etc.

### APPLICATIONS

- Charger and Adapter
- Motor Driver Power Supply

### TYPICAL APPLICATION CIRCUIT

