

DESCRIPTION

The MT8803T0 is an ultra-low standby power dissipation, non-isolated, BUCK, constant voltage driver, which is suitable for non-isolated power applications with the input range of 85Vac~264Vac.

MT8803T0 incorporates high-voltage power switcher and integrator, excellent constant voltage can be achieved without external compensation capacitor, saving system cost and the BOM size greatly.

MT8803T0 is designed with VCC sample and feedback optimization, which can accelerate the dynamic response greatly. Due to the multi-mode control technique, PWM and PFM can be toggled seamlessly. In addition, the chip gets power from VCC pin and internal JFET, the system power dissipation is further reduced.

MT8803T0 provides various protection features to enhance the system reliability, such as cycle-by cycle current limiting (OCP), Over Temperature protection (OTP), over load protection (OLP), short circuit protection (SCP), etc.

FEATURES

- Ultra-low standby power dissipation: <math><30\text{mW}</math> @ 120Vac&230Vac
- Integrated with high-voltage power MOSFET
- Selectable output voltage: 3.3V or 5V
- Integrates high voltage startup and power supply circuit
- Excellent dynamic response
- Designed with amplitude reduction modulation technology to reduce audio noise
- Proprietary Frequency jittering for reduced EMI
- Output voltage accuracy: $\pm 5\%$
- Soft start-up
- Various protection features
 - Cycle-by cycle current limiting (OCP)
 - Over Temperature protection (OTP)
 - Over load protection (OLP)
 - Short circuit protection (SCP)
- Available in SOT23-5 Package

APPLICATIONS

- Auxiliary power
- Other applications

Typical Application Circuit

