

## DESCRIPTION

MT8803R3 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 from 85Vac to 264Vac.

MT8803R3 incorporates high-voltage power switcher and current sense resistor, excellent constant voltage can be achieved without external compensation capacitor. Besides, MT8803R3 integrates CS resistor, low BOM cost is achieved.

MT8803R3 is designed with multi-mode control technology. The chip gets power through both VCC and JFET and can effectively reduce system power consumption.

MT8803R3 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

- Few peripheral components, low BOM cost
- Ultra-low standby power dissipation: <math><20\text{mW}@120\text{Vac}\&\&230\text{Vac}</math>
- Integrated with high-voltage power MOSFET and current sense resistor
- 3.3V direct output
- Integrates high voltage startup and power supply circuit
- Excellent dynamic response
- Frequency jittering technology to reduce 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 SOT23-3 package

## APPLICATIONS

- Auxiliary power
- Other applications

## TYPICAL APPLICATION CIRCUIT

