

# SIP658

# SIP TECHNOLOGY CO., LTD.

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## HIGH DEFINITION LED DRIVER CONTROLLER

### General Description

The SIP658 is a high efficiency LED driver control IC. It uses lesser components and drive LED with constant current. The SIP658 is an open loop, current mode. It can be programmed to operate in either a constant frequency or constant off-time mode. It includes an 8-450V linear regulator which allows it to work in wide input voltage range without external low voltage power supply. The SIP658 includes 0~100% PWM dimming and 0~250mV linear dimming to adjust LED luminance.

The SIP658 is suitable for buck LED drivers. The system has good stability response because of open loop current mode control, thus the controller achieves good output current regulation without any compensation.

The SIP658 has short circuit protection when buck converter output short. That will latch the system and GATE stop to switch.

### Features

- Buck System Efficiency : >90%
- Open Loop Peak Current Controller
- Internal 8~450V Linear Regulator
- Constant Current LED Driver
- LED String From One to Hundreds of Diodes
- Support Linear and PWM Dimming Interface
- Requires Few External Components
- Output Short Circuit Protection
- 8 Lead SOIC Packages
- RoHS Compliant and 100% Lead Free and Green - Halogen Free with Commercial Standard
- Constant off Time Function When Duty Cycle Over 50%

### Applications

- DC/DC LED driver applications
- RGB Backlighting LED Driver
- General Purpose Constant Current Source
- Signage and Decorative LED Lighting
- Chargers
- Non-Isolation LED Bulb