

Single Channel WLED Driver with PWM Dimming Control

Preliminary Specification Rev. P1

FEATURES

- Wide Input Range: 9V to 40V
- Current Mode Control
- 300mV Feedback Reference
- Short LED Protection
- Diode/Inductor Short Protection
- Over Current Protection
- Over Temperature Protection
- Output Over Voltage Protection
- PWM Dimming Input
- Enable Input
- Internal Compensation
- 300mA/500mA Output Driving Capability

APPLICATIONS

- LED Backlight

GENERAL DESCRIPTION

The PF7709 is a wide-input voltage range, single-channel, boost WLED controller which can be operated from 9V to 40V. By using PF7709, the low total BOM cost WLED driver can be achieved. PF7709 integrated the current mode PWM controller with a 300mA/500mA output MOSFET driver and a Dimming Power MOSFET with only 1Ω Rds(on). In addition, all the required protections for WLED backlight such as short LED protection, boost diode/inductor short protection, over temperature protection and output over voltage protection are implemented in a SOP-8 package to minimize the PCB size as well as the component counts. PF7709 is operated in 170KHz.

TYPICAL APPLICATION

