

## Expandable WLED Backlight Driver

Specification Rev. 1.0

### FEATURES

- Compatible with AC/DC or DC/DC Power Stage
- Current Drive of LED String Up to 1.5A without heatsink cooling or 2A with specified heatsink for single channel applications <sup>(1)</sup>.
- Support Cascode Topology for Applications higher than 70V
- Expandable for Driving Different Size of Panels
- PWM Dimming
- Programmable Sinking Current
- SLP (Short LED Lamp Protection)
- OLP (Open LED Lamp Protection)
- OTP (Over Temperature Protection)

### APPLICATIONS

- LED Backlight Driver for LCD TV/Monitor

### GENERAL DESCRIPTION

The PF7705 is a single channel LED driver which integrates a 70V, adjustable current sources with maximum 1.5A driving capability. This device provides the flexibility for cascade operation with the high voltage power MOSFET.

Furthermore, the embedded open LED lamp protection, short LED lamp protection, and over temperature protection which provide the users a highly integrated solution as well as to reduce the part counts and required PCB space.

Note (1): The driving current limitation is mainly determined by the power dissipation, special attention should be paid to the thermal design which will be affected by the PCB layout, heatsink size, and thermal environment. Please use the design tool, "[PF7705 thermal calculation tool](#)", as reference.

### TYPICAL APPLICATION

