

## Product Overview

### FAN73402: LED Backlight Driving Boost Switch

For complete documentation, see the data sheet.

The FAN73402 is a single-channel boost controller that integrates an N-channel power MOSFET for PWM dimming using ON Semiconductor's proprietary planar Double-diffused MOSFET (DMOS) technology. The IC operates as a constant-current source for driving high-current LEDs. It uses Current Mode control with programmable slope compensation to prevent subharmonic oscillation. The IC provides protections including: open-LED protection, over-voltage protection, and direct-short protection for high system reliability. The IC internally generates a FAULT signal with delay if an abnormal LED string condition occurs. PWM dimming and analog dimming functions can be implemented independently. Internal soft-start prevents inrush current flowing into output capacitor at startup.

### Features

- Single-Channel Boost LED Switch
- Internal Power MOSFET for PWM Dimming:  $R_{DS(ON)}=1.0\Omega$  at  $V_{GS}=10V$ ,  $BVDSS=200V$
- Current Mode PWM Control
- Internal Programmable Slope Compensation
- Wide Supply Voltage Range: 10V to 35V
- LED Current Regulation:  $\pm 1\%$
- Programmable Switching Frequency
- Analog and PWM Dimming
- Wide Dimming Ratio: On Time= $10\mu s$  to DC
- Cycle-by-Cycle Current Limiting

For more features, see the data sheet

### Applications

- LED TV

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 11/27/2020