G5967

Boost WLED Driver for Backlights

Features

- **5V to 24 V Input Supply Voltage**
- **Boost Converter**
  - **Automatically Adjusting Output Voltage**
  - **Integrated 2.0A 50V NFET**
  - **Over Current Protection**
  - **Over Voltage Protection**
  - **Over 90% High Efficiency**
- **Six Channel Current Sink**
  - **Maximum 30mA Current Sink**
  - **3% Current Matching and Accuracy**
  - **100:1 PWM Brightness Dimming Range**
- **Open/Short LED protection**
- **Thermal Shutdown**
- **Small 20-pin 4mmX4mm TQFN package**

Applications

- **Notebook Displays LED Backlighting**
- **LCD Monitor LED Backlighting**

General Description

The G5967 is a 6-channel boost WLED driver for backlight applications. It features a high-performance boost converter, six channel current sink with 3% current matching and accuracy, and PWM brightness dimming control.

The boost converter automatically provides the regulated output voltage for the WLED backlight without the need to calculate the output for different LED types. It also integrates a 50V NFET that provides high output power.

The 6-channel current sink is ideal for constant current driving, and, well matched less than 3% (typical). To set the maximum driving current, the ISET pin is used to determine reference current. Each channel of the current sink is set to 58 times of this reference current. A PWM pin can be used for PWM dimming.

The G5967 provides many protection schemes to avoid any abnormal operation. Over current protection is designed to protect internal NFET. It also provides over voltage and over temperature protection. The G5967 can detect open or short LED and offer protections.

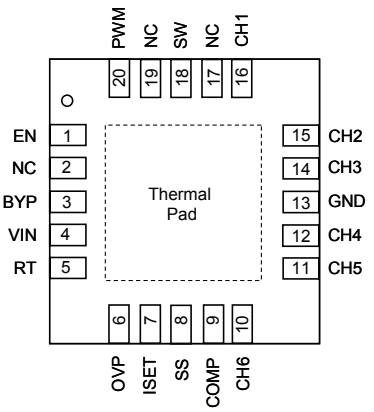
The G5967 is available in a 20-pin 4X4mm TQFN package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5967R91U	5967	-40°C to 85°C	TQFN4X4-20

Note: R9: TQFN4X4-20
1: Bonding Code
U: Tape & Reel

Pin Configuration



G5967 TQFN4X4-20

Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.

Typical Application Circuit

