

LED Backlight Controller

Features

- 7V~27V input voltage range
- High Power Current Mode DC/DC boost Controller
- Drives up to 4 strings in parallel
- External Analog/True PWM Dimming
- +/-2% Voltage Reference
- Programmable Switching Frequency
- Programmable Slope Compensation
- Programmable Current Limit
- +0.2A/-0.4A Gate Driver
- Input Under Voltage Protection
- Output Short Circuit Protection
- Hiccup Mode Protection for Output Over Voltage Protection and LED Light Bar Short/Open Protection
- Thermal Shutdown
- Available in TQFN4X4-24/TQFN4X4-28/SOP-28 Package

General Description

The G5996/G5996A is current mode DC/DC controller that drives up to four strings connected in parallel configuration with multiple LEDs in each string connected in series. External current sense resistor and slope compensation resistor make it flexible for various applications. A PWM dimming input controls a duty ratio from 0% to 100% with frequency up to few kilohertz.

The G5996/G5996A includes hiccup protection from both short and open circuits, with automatic recovery after the fault condition is cleared.

The G5996 is available in a TQFN4X4-24 package.

The G5996A is available in a TQFN4X4-28 and SOP-28 package.

Applications

- TV

Ordering Information

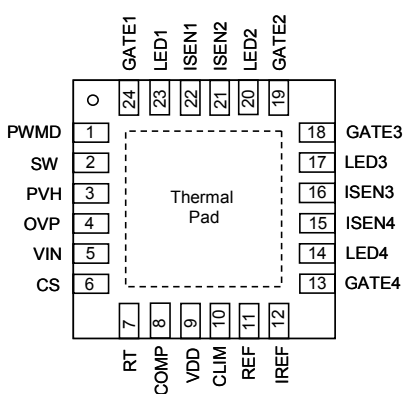
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5996R51U	5996	-20°C to +85°C	TQFN4x4-24
G5996ARV1U	5996A	-20°C to +85°C	TQFN4x4-28
G5996AP61U	G5996A	-20°C to +85°C	SOP-28

Note: R5 : TQFN4X4-24 RV: TQFN4X4-28 P6: SOP-28

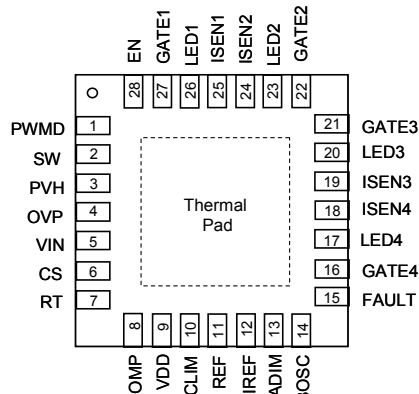
1 : Bonding Code

U : Tape & Reel

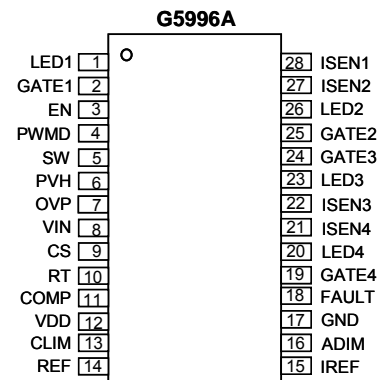
Pin Configuration



G5996 TQFN4X4-24



G5996A TQFN4X4-28



SOP-28

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