

PG3598 PG3597 80V Half Bridge GaN Driver with Integrated Bootstrap Diode

Features

- Independent high-side and low-side CMOS compatible input logic
- Fast propagation delays (16ns typically)
- Fast rise and fall time
- 0.3Ω/0.6Ω pull-down/pull-up resistance
- Separate outputs for adjustable turn-on and turn-off strength
- Small propagation delay matching (1.5ns typical)
- VDD and Boot Supply undervoltage lockout
- Low power consumption
- RoHS compliant and Green

Applications

- Half-bridge and full-bridge converters
- High input voltage converters
- Forward with active clamp converters
- Synchronous buck converters

Description

The PG3598/3597 devices are designed to drive both the high-side and low-side GaN FETs in a synchronous buck, boost, or half-bridge converters.

The device integrates an internal boot strap supply and UVLO function.

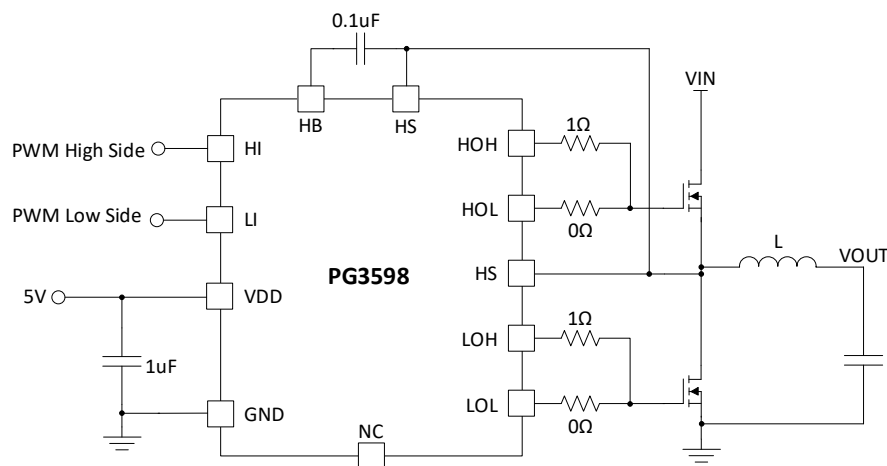
The device has independent inputs for the high-side and low-side outputs for maximum control flexibility. The input is CMOS compatible logic.

With separate outputs, the turn-on and turn-off strength can be adjusted independently. In addition, the strong sink capability of the device maintains the gate in a low state, preventing unintended turn-on during switching.

PG3598 is available in 12-pin WCSP package, and PG3597 is available in 14-pin QFN package.

PART NUMBER	PACKAGE	BODY SIZE
PG3598	WLCSP-12	1.6x1.6mm
PG3597	QFN-14	2.5x2.5mm

Typical Application Circuit



Application Circuit

