

## Wide Input Range Synchronous Buck DCDC Voltage Mode PWM Controller

### Features

- 10V to 28V Wide Input Voltage Range
- 0.8V Internal Reference
- Fixed 400kHz Switching Frequency
- Internal Soft Start function
- High DC Gain
- Voltage Mode PWM Controller
- Fast Transient Response
- 0 to 80% Duty Cycle
- Over Current Protection
- Under Voltage Protection
- Over Temperature Protection
- Compact Package TSOT-23-8
- RoHS Compliant and Halogen Free

### Applications

- Set-Top Box Power Supplies
- PC Subsystem Power Supplies
- Cable Modems, DSL Modems
- DSP and Core Communication Processor Power Supplies
- Memory Power Supplies
- Personal Computer Peripherals
- Industrial Power Supplies
- Low Voltage Distributed Power Supplies

### General Description

The G5212 is a wide input range and fixed-frequency PWM controller with integrated MOSFET drivers for single power rail synchronous single-phase buck converter. G5212 utilizes voltage-mode control with internal compensation and an internal 0.8V reference voltage to implement the converter design. The switching frequency is fixed at 400kHz to reduce the external passive component size and make the board compact. The G5212 provides under voltage protection, current limit, over current protection and over temperature protection. For the over current protection function, the low-side MOSFET  $R_{DS(ON)}$  is used to sense the inductor current.

### Ordering Information

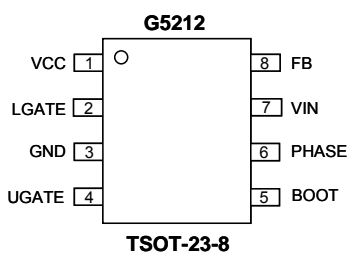
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5212Y51U	5212x	-40°C to +85°C	TSOT-23-8

Note: Y5: TSOT-23-8

1: Bonding Code

U: Tape & Reel

### Pin Configuration



### Typical Application Circuit

