High Voltage Multi-Topology LED Driver

Features

- **High Voltage : VIN up to 36V, VOUT up to 36V**
- **2.5A Switch Current**
- **Buck, Boost or Buck-Boost Operation**
- **Current Mode PWM with 500KHz Switching Frequency**
- **Easy dimming : Analog, PWM or PWM Converting to Analog with One External Capacitor**
- **Soft Start to Avoid Inrush Current**
- **Programmable Over Voltage Protection to Limit Output Voltage**
- **VIN Under Voltage Lockout and Thermal Shutdown**
- **12-Lead TDFN and MSOP-10 (FD) Package**

General Description

The G2602 is a current mode DC/DC converter with an internal 2.5A, 40V switch specifically designed to drive LEDs. The G2602 operates as a LED driver in buck, boost and buck-boost mode. The LED current is externally programmable with a 120mV sense resistor. With a 500KHz operating frequency, the external inductor and input/output capacitors can all be small. Dimming can be either analog, PWM, or PWM converting to analog with an external capacitor.

The G2602 is available in TDFN-12L 3x3 and MSOP-10 (FD) package.

Applications

- **GPS, Portable DVD Backlight**
- **Desk Light and Room Lighting**
- **Industrial Display Backlight**

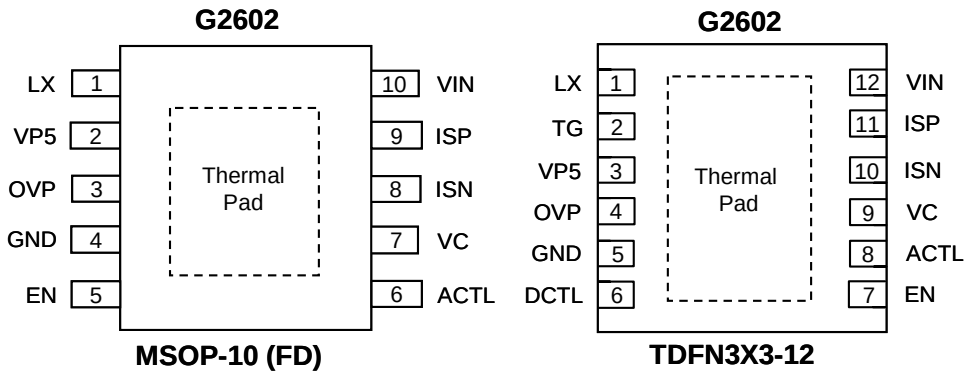
Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G2602RQ1U	2602	-30°C to +105°C	TDFN3X3-12
G2602F61U	G2602	-30°C to +105°C	MSOP-10 (FD)

Note: RQ:TDFN3X3-12 F6:MSOP-10 (FD)
1: Bonding Code
U: Tape & Reel

Pin Configuration

Top View



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