# 600k/1.2MHz TFT-LCD Step-Up DC-DC Converter

#### **Features**

- 90% Efficiency
- Adjustable Output from V<sub>IN</sub> to 28V
- 4.6A, 0.1Ω, 30V Power MOSFET
- 2.5V to 5.5V Input Range
- 600kHz/1.2MHz Switching Frequency
- TDFN3X3-10 Package

#### **Applications**

- LCD Displays
- Portable Applications
- Hand-Held Devices

#### **General Description**

The G5120 boost converter incorporate high-performance, current-mode, and frequency selectable pulse width modulation (PWM) circuitry with a built-in N-channel MOSFET to provide a highly efficient regulator.

The G5120's frequency can be selected by user to operate at either 600kHz or 1.2MHz. High switching frequency allows easily filtering and faster loop performance. An external compensation pin provides the user flexibility in determining loop dynamics, allowing the use of small, low ESR ceramic output capacitors. The current-mode architecture provides fast transient response to pulsed loads.

The internal N-channel MOSFET can produce output voltage as high as 28V. User programmed soft-start with an external capacitor determines the input current ramp rate.

The G5120 is available in a 10-pin TDFN3X3 package.

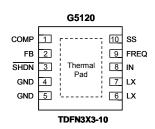
### **Ordering Information**

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G5120RE1U	5120	-40°C to 85°C	TDFN3X3-10

Note :RE: TDFN3X3-10 1: Bonding Code U: Tape & reel

#### **Pin Configuration**

## **Typical Application Circuit**



Note: Recommend connecting the Thermal Pad to the Ground or let it keep floating.

