

**Integrated Power Solution for TFT-LCD****Features**

- 2.5V to 5.5V Input Supply Range
- 1.2MHz Current-Mode Step-Up Converter
- Built-In 18V, 0.15Ω n-Channel MOSFET
- Charge Pumps for V_{GON} and V_{GOFF}
- Thermal Overload Protection
- TQFN5X5-20 Package

Applications

- LCD Monitor Panels
- Notebook Computer Displays
- LCD TVs

General Description

The G5512 includes a step-up converter, a positive charge pump, and a negative charge pump. Also included is a logic-controlled high-voltage switch with built-in delay.

The step-up DC/DC converter provides the regulated power supply for the panel source driver IC. The converter is a high performance current-mode regulator with operating frequency at 1.2MHz. It also provides fast transient response and high efficiency.

The charge pumps in G5512 regulate TFT gate-on and gate-off power supplies for LCD panel.

G5512 is available in TQFN5X5-20 package.

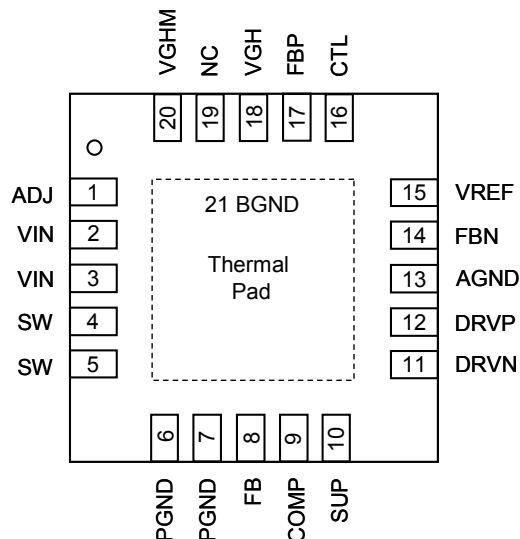
Ordering Information

| ORDER NUMBER | MARKING | TEMP. RANGE | PACKAGE (Green) |
|--------------|---------|---------------|-----------------|
| G5512RS1U | 5512 | -40°C to 85°C | TQFN5X5-20 |

Note: RS: TQFN5X5-20

1: Bonding Code

U: Tape & Reel

Pin Configuration**G5512 TQFN5X5-20**

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