

# 1.5MHz, 1A High Efficiency Buck Converter

#### **Features**

■ Input voltage: 2.5V ~5.5V■ High efficiency (95%)

■ No Schottky Diode Required

■ 1A Output Current at 5V Input 3.3V Output

■ 1.5MHz Switching Frequency

■ Built-in ON/OFF Function

■ Low Dropout Operation: 100% Duty Cycle

**■** Thermal Protection

■ Tiny 6-Lead TDFN2X2 Package

■ RoHS Compliant

### **Applications**

- Mobile Phones
- Wireless and DSL modems
- Power Supply for Portable Devices

#### **General Description**

The G5691 provides complete control for a DC/DC converter optimized for high-performance microprocessor applications. It is operated on current mode architecture for excellent line and load transient response. 1.5MHz operation frequency is allowing the use of small surface mount inductor and capacitor. The internal synchronous switch increases efficiency and eliminates the need for an external Schottky diode. The G5691 is a family of low-noise synchronous step-down DC/DC converters that is ideally suited for systems powered from a 1-cell Li-ion battery or from a 3-cell to 4-cell NiCd, NiMH, or alkaline battery. It can also be used to USB-Based power system.

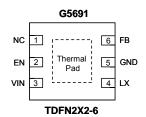
### **Ordering Information**

ORDER NUMBER	MARKING	OUTPUT VOLTAGE (V)	TEMP. RANGE	PACKAGE (Green)
G5691RB1U	5691	Adjustable	-40°C~ +85°C	TDFN2X2-6
G5691-12RB1U	5691A	1.2	-40°C~ +85°C	TDFN2X2-6
G5691-33RB1U	5691E	3.3	-40°C~ +85°C	TDFN2X2-6

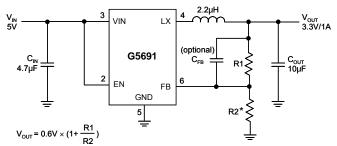
Note: RB: TDFN2X2-6 1: Bonding Code U: Tape & Reel

#### **Pin Configuration**

## **Typical Application Circuit**



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



\*R2= 150K for stability consideration.