

## 3A, 1.5MHz, 28V Step-down DC/DC

### Features

- 3A Output Current
- Wide 4.5V to 28V Operating Input Range
- Programmable Switching Frequency from 100kHz to 1.5MHz
- Internal Soft-Start
- Cycle-by-Cycle Over Current Protection
- Ceramic Capacitor Stable
- High-Efficiency Pulse Skipping Mode for Light Load
- Available in DIP-8, SOP-8 (FD) and TDFN3X3-8 Package

### Applications

- High Voltage Power Conversion
- Automotive Systems
- Industrial Power Systems
- Distributed Power Systems
- Battery Powered Systems

### Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5755Z31U	G5755	-40°C to +85°C	DIP-8
G5755F11U	G5755	-40°C to +85°C	SOP-8 (FD)
G5755RD1U	5755	-40°C to +85°C	TDFN3X3-8

Note: Z3: DIP-8 F1: SOP-8 (FD) RD: TDFN3X3-8  
 1: Bonding Code  
 U: Tape & Reel

### General Description

The G5755 is a monolithic step-down switch mode regulator with a built in internal power MOSFET. It achieves 3A continuous output current over a wide input supply range with excellent load and line regulation.

The wide 4.5V to 28V input range accommodates a variety of step-down applications, including those in an automotive input environment. A 180µA operational quiescent current allows use in battery-powered applications.

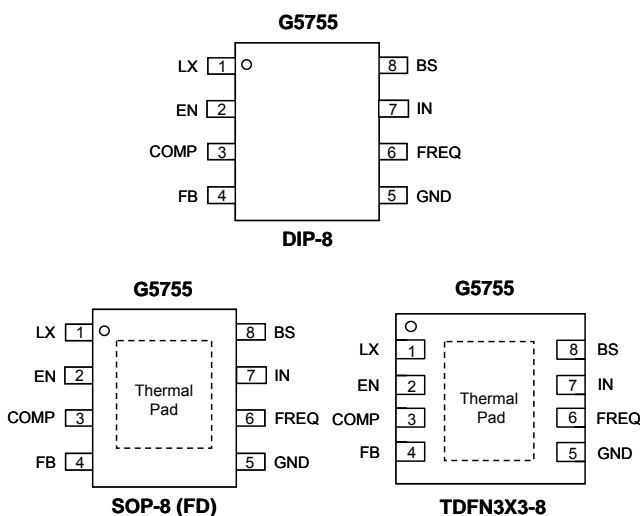
High power conversion efficiency over a wide load range is achieved by scaling down the switching frequency at light load condition to reduce the switching and gate driving losses.

The frequency foldback helps prevent inductor current runaway during startup and thermal shutdown provides reliable, fault tolerant operation.

By switching at 1.5MHz, the G5755 is able to prevent EMI (ELECTROMAGNETIC Interference) noise problems, such as those found in AM radio and ADSL applications.

The G5755 requires a minimum number of readily available standard external components. It is available in a DIP-8, SOP-8 (FD) and TDFN3X3-8 package.

### Pin Configuration



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

### Typical Application Circuit

