

## 5A Synchronous Step-Down DC/DC

### Features

- 5A Output Current\*
- 75mΩ Internal Power MOSFET Switch
- Stable with Low ESR Output Ceramic Capacitors or POSCAPs
- Less Than 1μA Shutdown Current
- 1MHz Switching Frequency
- Power Good Opened Drain Output
- Thermal Shutdown
- Cycle-by-Cycle Over Current Protection
- Output Adjustable from 0.6V to  $V_{IN}$
- Available in TDFN3X3-10 Package

\*The output voltage should be less than 1.8V. If the  $V_{out}$  setting is larger than 1.8V, the output current will be less than 5A because of thermal protection.

### Applications

- NB
- Distributed Power Systems
- Pre-Regulator for Linear Regulators

### General Description

The G5675 is a monolithic step-down switch mode regulator with a built in internal power MOSFET. It achieves a continuous output current at 1MHz switching frequency with excellent load and line regulation. Current mode operation provides fast transient response and eases of loop stabilization. Power good function delivers power supply ready signal to the load.

Fault condition protection includes cycle-by-cycle current limiting, output short circuit protection and thermal shutdown. In shutdown mode the regulator ground current is controlled less than 1μA. An Internal soft-start minimizes the inrush supply current at initial startup.

The G5675 requires a minimum number of readily available standard external components. It is available in TDFN3X3-10 package.

### Ordering Information

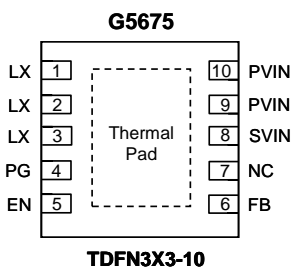
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5675RE1U	5675	-40°C to +85°C	TDFN3X3-10

Note: RE: TDFN3X3-10

1 : Bonding Code

U : Tape & Reel

### Pin Configuration



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

### Typical Application Circuit

