

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
- Thermal Shutdown
- Cycle-by-Cycle Over Current Protection
- Output Adjustable from 0.6V to V_{IN}
- Available in SOP-8 (FD) Package

Applications

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

General Description

The G5676 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.

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 $1\mu A$. An Internal soft-start minimizes the inrush supply current at initial startup.

The G5676 requires a minimum number of readily available standard external components. It is available in SOP-8 (FD) package.

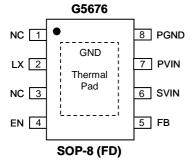
Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G5676F11U	G5676	-40°C to +85°C	SOP-8 (FD)

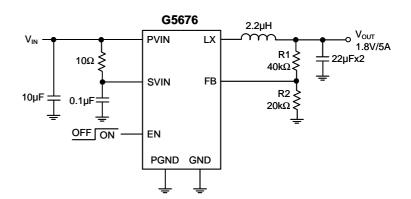
Note: F1: SOP-8 (FD) 1 : Bonding Code U : Tape & Reel

Pin Configuration

Typical Application Circuit



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



^{*}The output voltage should be less then 1.8V. If the Vout setting is larger then 1.8V, the output current will be less then 5A because of thermal protection.