1MHz, All-Ceramic, 2A PWM Buck DC/DC Converter

Features

- **Ceramic Input and Output Capacitors**
- **Efficiency Up to 94%**
- **Guaranteed 2A Output Current**
- **Operate from 2.5V to 6V Supply**
- **Adjustable Output from 0.8V to V_{IN}**
- **Internal Soft-Start**
- **Short-Circuit and Thermal-Overload Protection**
- **RoHS Compliant**

Applications

- **ASIC/DSP/µP/FPGA Core and I/O Voltages**
- **Set-Top Boxes**
- **Cellular Base Stations**
- **Networking and Telecommunications**

General Description

The G5692 high-efficiency, DC/DC buck converter delivers up to 2A of output current. The device operates from an input voltage of 2.5V to 6V and provides an output voltage from 0.8V to V_{IN}, making the G5692 ideal for on-board post-regulation applications.

The G5692 operate at a fixed frequency of 1MHz with an efficiency of up to 94%. The high operating frequency minimizes the size of external components. Internal soft-start control circuitry reduces inrush current. Short-circuit and thermal-overload protections improve design reliability.

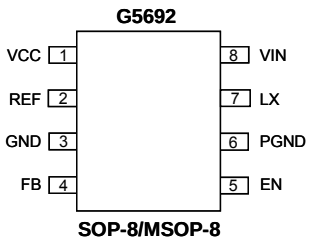
The G5692 are available in a space-saving 8-pin SOP and MSOP package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5692P11U	G5692	-40°C to +85°C	SOP-8
G5692P81U	G5692	-40°C to +85°C	MSOP-8

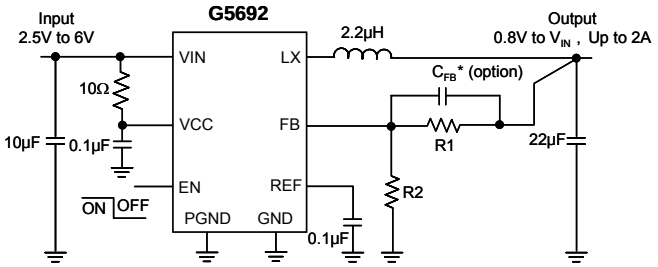
Note: P1:SOP-8 P8: MSOP-8
1: Bonding Code
U: Tape & Reel

Pin Configuration



SOP-8/MSOP-8

Typical Application Circuit



$$V_{OUT} = 0.8V \times (1+\frac{R1}{R2})$$