

General Description

The TCS9208G is a highly integrated boost converter designed for applications requiring high voltage and high efficiency solution. The TCS9208G integrates a 20V power switch, it can output up to 18V from input of a Li+ battery or two cell alkaline batteries in series.

The TCS9208G operates with a switching frequency at 800KHz. This allows the use of small external components. TCS9208G has typical 4A switch current limit. It has 1.5mS built-in soft start time to minimize the inrush current. The TCS9208G also implements output short circuit protection, output over-voltage protection and thermal shutdown.

The TCS9208G is available in a small SOT23-6 package.

Features

2.3V to 5.5V Input Voltage
Up to 18V Output Voltage
Integrated 60mΩ Power MOSFET
800KHz Fixed Switching Frequency
Internal 4A Switch Current Limit
Power Save Operation Mode at Light Load
Internal 1.5mS Soft Start Time

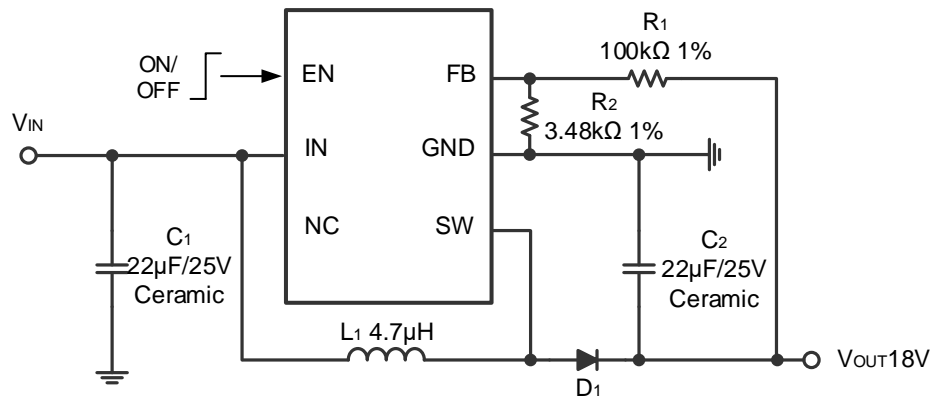
Up to 85% Efficiency @ 3.6V Input 12V Output
Output Short Circuit Protection
Output Over-Voltage Protection
Thermal Shutdown Protection
Output Adjustable from 0.6V
-40°C to +85°C Temperature Range
Available in SOT23-6 Package

Applications

Wearable Devices
Sensor Power Supply

Battery-Powered Equipment
Portable Medical Equipment

Typical Application Circuit



Typical Application Circuit