



General Description

The SE3608 is a high efficiency current-mode boost converter with a fixed operation frequency. The SE3608 integrates a very low Rds-on NMOSFET to reduce power loss and achieve higher efficiency. The maximum efficiency is up to 93%. SE3608 can output 2A current when Vin is higher than 3.3V and output is 5V. The high 1.2MHz operation frequency minimizes L and C value. The internal compensation network reduces external component counts. Small foot print SOT23-6 package provides the best solution for PCB layout area.

SE3608 is designed with 12V process. This allows SE3608 to be used in applications where higher voltage is needed, such as charging two Lithium batteries in series. The other possible application where the higher voltage is needed is Qualcomm Quick Charge 2.0 compatible portable chargers. SE3608 can support 9V Vout for this application.

Features

- Wide Input Range: 2.5-6V Input
- Up to 1.5A Output Current
- Maximum 8V Output Voltage
- 1.2MHz Switching Frequency
- Low RDS(ON): 70mΩ
- Up to 90% Efficiency
- Under-Voltage Lockout Protection
- Over-Temperature Protection
- Internal Soft Start
- 1uA Shutdown Current
- Accurate Reference: 0.6V V_{REF}
- Compact package: SOT23-6

Applications

- Chargers
- LCD Displays
- Digital Cameras
- Handheld Devices
- Portable Products

Typical Application

