

High Accuracy Programmable Buck Converter with Protection

Features

- Wide output range programmable buck converter with High accuracy output and protection
- Input Voltage Range: 2.5~5.5V
- Two selectable output voltage range is set by One-Time-Programmable memory
 - High Voltage Mode: 0.6~1.39375V
 - Low Voltage Mode: 0.35~1.14375V
 - Voltage step: 6.25mV
- High Accuracy: TBD
- Switching Frequency: TBD
- Quiescent current in PFM mode: TBD
- Efficiency: TBD
- Smart Protections
 - Input Over-Voltage Protection
 - Over-Current Protection
 - Input Under-Voltage Lockout
 - Die Thermal Shutdown
- Up to 3.4MHz HS I²C Interface
- 15-Bump, 2.01mm x 1.21mm WLCSP Package

Applications

- Laptop, Smartphones, Tablet PC, and Portable Devices
- SSD, LPDDR, Processor

Description

The SM5820 is a high current buck converter that integrates an I2C interface controller and protection schemes. The device features programmable voltage output switching buck topology for various applications.

This high efficiency switched buck converter with a very high accuracy VOUT prevents the system error, which results in stable operation system. The device integrates an I2C interface controller for programmable output voltage, which covers the wide output range.

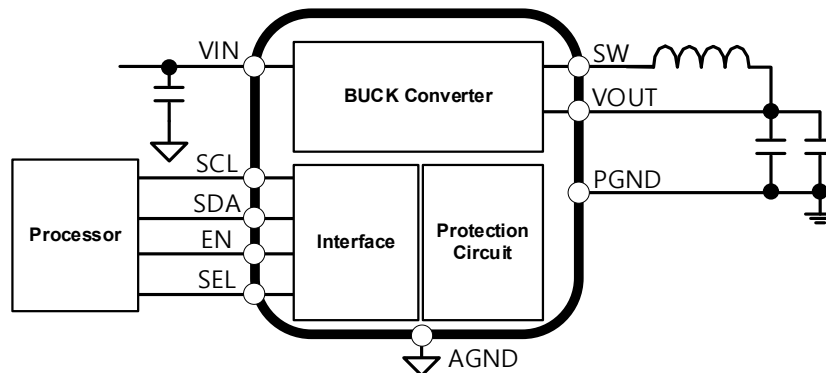
The device integrated powerful protection schemes such as over-voltage, over-current, under-voltage lockout and over-temperature to secure a system stability.

The SM5820 is available in 2.01 mm x 1.21 mm, 15-bumps WLCSP package.

Device Information

Part	Package	Size
SM5820	15-Bump WLCSP 0.4 mm Pitch	2.01mm x 1.21mm

Simplified Block Diagram



SM5820

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