SC8903 High Efficiency, Synchronous, Bi-Directional Buck-Boost Converter with Four Integrated MOSFET

1 Description

SC8903 is a synchronous 4-switch buck-boost converter with four integrated switches. It is able to effectively output voltage no matter it is higher, lower or equal to the input voltage.

SC8903 supports very wide input and output voltage range. It can support applications from 2.7V to 22V input range and 2.7V to 22V output range. It employs current-mode control and supports input current limit, output current limit, dynamic output voltage adjustment, internal current limit, output short protection and over temperature protections to ensure safety under different abnormal conditions.

The SC8903 is in a 40 pin 6x6 QFN package.

3 Applications

- Wall Adapter
- USB HUB
- USB Power Delivery
- Industrial Power Supplies

2 Features

- Integrated Four Switches
- Wide VIN Range: 2.7 V to 22V, 24V sustainable
- Wide VOUT Range: 2.7 V to 22V, 24V sustainable
- High Efficiency Buck-Boost Conversion
- Dynamic Output Voltage Control
- Adjustable Switching Frequency
- Programmable Input and Output Current Limit
- Input and Output Current Monitor
- Small Current Indication
- Under Voltage Protection, Over Voltage Protection,
 Over Current Protection
- Short Protection
- Thermal Shutdown Protection
- QFN-40 Package

4 Device Information

Part Number	Package	Dimension
SC8903QDHR	40 pin QFN	6.0mm x 6.0mm x 0.75mm