

SC8721B High Efficiency, Synchronous, Buck-Boost Converter with Four Integrated MOSFET

1 Descriptions

SC8721B 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.

SC8721B supports very wide input and output voltage range. It can support applications from 2.7V to 22V input range and 0.7V to 22V output range. Through its I2C interface, user can program the output voltage and output current limit and switching frequency. VINREG voltage can be adjusted by external resistor.

SC8721B employs current-mode control and supports output current limit and dynamic output voltage adjustment for different application conditions.

The IC is in a 21 pin 4x4 QFN package.

3 Applications

- USB Power Delivery
- Wall Adapter
- Type C Hub
- Industry Power Supplies

2 Features

- High Efficiency Buck-Boost Conversion
- Integrated Switches, 10 mΩ for Q1/4, 20 mΩ for Q2/3
- Wide VIN Range: 2.7 V to 22 V, 25V sustainable
- Wide VOUT Range: 0.7 V to 22 V, 25V sustainable
- Dynamic Output Voltage Control
- Adjustable Switching Frequency
- Output Voltage Cable Drop Compensation
- I2C Programmable Output Voltage
- I2C Programmable Output Current Limit
- Output Current Monitor
- Under Voltage Protection, Over Voltage Protection
- QFN-21 4 x 4 Package

4 Device Information

Part Number	Package	Dimension
SC8721BQFER	21 pin QFN	4.0mm x 4.0mm x 0.75mm