

## High Efficiency, Synchronous Buck Charger for 1-2 cell Li-ion Battery

### 1 DESCRIPTION

The SC8930 is a highly integrated switch-mode buck charger for 1-2 cell Li-ion battery applications. It supports 4-13.5V input, up to 3A charging current and provides battery charge management functions including trickle charge, constant current charge, constant voltage charge, charge termination and charging status indication.

The SC8930 supports flexible charge current option, and the user can program the current freely through external resistor for different applications. With the charger management function, the IC can be used to charge 1-2 cell Li-ion battery. SC8930 charges batteries with high efficiency, 5V to 3.5V@2A 95.5%, 9V to 7V@2A 97.1%.

The SC8930 supports input current limit, input under voltage and over voltage protections, internal cycle by cycle current limit, battery short circuit protection, and output over voltage protection. It also offers charging safety timer and over temperature protection to ensure safety under different abnormal conditions.

The SC8930 is available in QFN-3\*3(FC) package.

### 3 APPLICATIONS

Blue tooth speaker charger  
Portable Media Players  
Notebook, Tablet  
POS machine

### 2 FEATURES

- Integrated Synchronous Buck Charger
- Charging Management (Trickle Charge / Constant Current Charge / Constant Voltage Charge / Charge Termination/Auto recharge)
- Programmable Constant Charge Current
- Selectable Target Voltage:
  - 4.2V/4.3V/4.35V/4.4V for 1s
  - 8.4V/8.6V/8.7V/8.8V for 2s
- Adjustable safety timer
- 600KHz switching frequency
- Charge Status Indication
- Adjustable Input Current Limit
- Wide input voltage (4V~13.5V)
- NTC for Battery Protection (support JEITA standards)
- Input Under Voltage and Over Voltage Protection
- Battery Over Voltage Protection
- Battery Over Current Protection
- Battery Short Circuit Protection
- Thermal Regulation and Shutdown
- QFN3\*3 footprint

### 4 DEVICE INFORMATION

Part Number	Package	Dimension
SC8930QFKR	QFN-3*3	3mm X 3mm X0.55mm