

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

### 1 DESCRIPTION

The SC8921 is a highly integrated switch-mode boost charger for two cell Li-ion battery applications. It is able to step up 4.5V~5.5V input voltage to up to 16V, and provide battery charge management functions including trickle charge, constant current charge, constant voltage charge, charge termination and charging status indication.

The SC8921 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 2 cell Li-ion battery.

The SC8921 supports 2A 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 SC8921 is available in ESOP8L package.

### 2 FEATURES

- Integrated Synchronous Boost Charger
- Charging Management (Trickle Charge / Constant Current Charge / Constant Voltage Charge / Charge Termination)
- Programmable Constant Charge Current
- Selectable Constant Voltage
- Charge Status Indication
- Charge Safety Timer
- 2A Input Current Limit
- Adaptive Input Current Limit
- Input Under Voltage and Over Voltage Protection
- Battery Short Circuit Protection
- Short circuit protection for VBAT output
- Thermal Shutdown

### 3 APPLICATIONS

- Blue tooth speaker charger
- E-cigarette charger
- E-joy charger
- LI-ion battery charger
- POS machine

### 4 DEVICE INFORMATION

Part Number	Package	Dimension
SC8921SDER	ESOP8L	5 mm x 6 mm x 1.5 mm