



## High Efficiency, Synchronous Boost Charger for Two/Three-cell Li-ion Battery with Cell Balance Function

### 1 DESCRIPTION

The SC8922A is a highly integrated switch-mode boost charger for 2/3 cells 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. Besides that, the IC can also provide cell balance function, so to reduce the cell voltage mismatch and increase the battery life time.

The SC8922A supports up to 3A charge current, and the user can program the current freely through external resistor for different applications.

The SC8922A 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, battery cell temperature monitor and over temperature protection to ensure safety under different abnormal conditions.

The SC8922A is available in 4x4 QFN-24 package.

### 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
SC8922AQDLR	QFN-24	4 mm x 4 mm x 0.75 mm

### 2 FEATURES

- Integrated Synchronous Boost Charger
- Cell Balance Function
- Charging Management (Trickle Charge / Constant Current Charge / Constant Voltage Charge / Charge Termination)
- Programmable Constant Charge Current
- Programmable Constant Voltage
- Charge Status Indication
- Charge Safety Timer
- NTC for Battery Protection
- 2A / 3A Input Current Limit Option
- Adaptive Input Current Limit
- Input Under Voltage and Over Voltage Protection
- Battery Short Circuit Protection
- Thermal Shutdown