

## Battery Monitoring Li-Ion/Li-CoO<sub>2</sub>/Li-FePO<sub>4</sub>/Li-Mn<sub>2</sub>O<sub>4</sub> Automotive 64-Pin TQFP Tray



Images are for reference only

**Manufacturer:** [Renesas Technology Corp](#)

**Package/Case:** QFP64

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

[Inquiry](#)

### General Description

The ISL94212 Li-ion battery manager IC supervises up to 12 series connected cells. The part provides accurate monitoring, cell balancing and extensive system diagnostics functions. Three cell balancing modes are provided: Manual Balancing mode, Timed Balancing mode and Auto Balance mode. The Auto Balance mode terminates balancing functions when a charge transfer value has been met. The ISL94212 communicates to a host microcontroller via an SPI interface and to other ISL94212 devices using a robust, proprietary, two-wire Daisy Chain system. The ISL94212 is offered in a 64 Ld TQFP package and is specified for an operational temperature range of -40°C to +85°C.

### Key Features

Up to 12-cell voltage monitors, support Li-Ion CoO<sub>2</sub>, Li-ion Mn<sub>2</sub>O<sub>4</sub>, and Li-ion FePO<sub>4</sub> chemistries

Cell voltage measurement accuracy ±10mV

13-bit cell voltage measurement

Pack voltage measurement accuracy ±180mV

14-bit pack voltage and temperature measurements

Cell voltage scan rate of 19.5µs per cell (234µs to scan 12 cells)

Internal temperature monitoring

Up to four external temperature inputs

Robust daisy chain communications system

Integrated system diagnostics for all key internal functions

Hardwired and communications based fault notification

Integrated watchdog shuts down device if communication is lost

7µA shutdown currentSS

2Mbps SPI

## Recommended For You

---

### **ISL83202IBZ**

Renesas Technology Corp  
SOP16

### **ISL9492ERZ**

Renesas Technology Corp  
QFN

### **ISL6520ACBZ-T**

Renesas Technology Corp  
SOP8

### **ISL62883CHRTZ**

Renesas Technology Corp  
QFN

### **ISL95836HRTZ-T**

Renesas Technology Corp  
QFN40

### **ISL95837HRZ-T**

Renesas Technology Corp  
QFN40

### **ISL95837HRZ**

Renesas Technology Corp  
QFN40

### **ISL9301HRZ**

Renesas Technology Corp  
DFN10

### **ISL95835HRZ**

Renesas Technology Corp  
QFN

### **ISL95812HRZ**

Renesas Technology Corp  
QFN

### **ISL95870HRUZ-T**

Renesas Technology Corp  
QFN16

### **ISL6521IBZ**

Renesas Technology Corp  
SOP16

### **ISL62882CHRTZ**

Renesas Technology Corp  
QFN

### **ISL95870BIRZ-T**

Renesas Technology Corp  
QFN20

### **ISL78214ARZ**

Renesas Technology Corp  
QFN