

Standalone 3 to 8 Cell Li-Ion Battery Pack Monitor

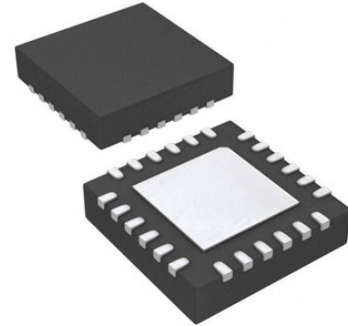
Manufacturers [Renesas Technology Corp](#)

Package/Case 48pin-TQFN

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ISL94202IRTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ISL94202 is a battery pack monitor IC that supports from three to eight series connected cells. It provides complete battery monitoring and pack control. The ISL94202 provides automatic shutdown and recovery from out-of-bounds conditions and automatically controls pack cell balancing.

The ISL94202 is highly configurable as a stand-alone unit, but can be used with an optional external Microcontroller (MCU), which communicates to the ISL94202 through an I2C interface.

The ISL94202 supersedes the ISL94203 for all future designs, as the ISL94202 operates in both parallel and series power FET configurations.

Features

Eight cell voltage monitors support Li-ion CoO₂, Li-ion Mn₂O₄, Li-ion FePO₄, and other chemistries

Stand-alone pack control - no MCU needed

Multiple voltage protection options (each programmable to 4.8V; 12-bit digital value) and selectable overcurrent protection levels

Programmable detection/recovery times for overvoltage, undervoltage, overcurrent, and short-circuit conditions

Configuration/calibration registers maintained in EEPROM

Open Wire battery connection detection

Integrated charge/discharge FET drive circuitry with built-in charge pump supports high-side N-channel FETs

Cell balancing uses external FETs with internal state machine or an optional external MCU

Enters low power states after periods of inactivity

Charge or discharge current detection resumes normal scan rates

Related Products



[ISL6262ACRZ](#)

Renesas Technology Corp
QFN-48



[ISL6294IRZ-T](#)

Renesas Technology Corp
QFN-8



[ISL21080CIH315Z-TK](#)

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SOT-23-3



[ISL6506BCBZ](#)

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[ISL6377HRZ-T](#)

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40-WFQFN Exposed Pad



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[ISL95808HRZ-T](#)

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DFN-8