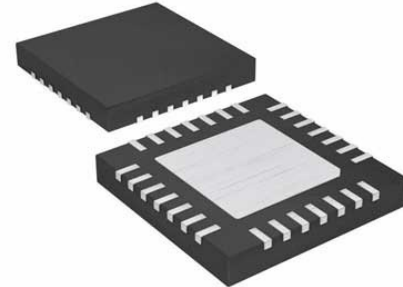


Narrow VDC Regulator and Charger 28Pin TQFN EP

Manufacturers	Renesas Technology Corp
Package/Case	QFN-28
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL9519HRTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ISL9519 is a highly integrated narrow VDC system voltage regulator and battery charger controller. Operating parameters are programmable over the System Management Bus (SMBus). The ISL9519 is designed for applications where the system power source is either the battery pack or the output of the regulator/charger. This makes the max voltage to the system equal to the max battery voltage instead of the max adapter voltage. The ISL9519 also includes a patented system to control trickle charging deeply discharged batteries while maintaining system voltage at a user defined minimum. High efficiency is achieved with a DC/DC synchronous-rectifier buck converter, equipped with diode emulation and variable switching frequency for enhanced light load efficiency and AC-adapter boosting prevention. The ISL9519 can charge one, two or three series connected Lithium-ion cells, at up to 8A charge current. Default settings for 1-, 2- or 3-cell operation at power-up are selected by an external pin. Integrated MOSFET drivers and bootstrap diode result in fewer components and smaller implementation area. Low offset current-sense amplifiers provide high accuracy. The ISL9519 provides an open drain digital output that indicates the presence of the AC-adapter. The ISL9519 also provides an analog output that indicates the adapter current.

Features

±0.5% System Voltage Accuracy (-10 °C to +100 °C)

±3% Accurate Input Current Limit (-10 °C to +100 °C)

±3% Accurate Battery Charge Current Limit

Variable Switching Frequency at Light Load Conditions for Higher Efficiency

Fixed Frequency Operation at Higher Loads

Fixed Frequency Mode can be Forced by an External Pin

Trickle Charge System for Deeply Discharged Batteries

Automatic Trickle Charge Current (256mA)

Holds Minimum Voltage to System

SMBus 2-Wire Serial Interface

Default System Voltage Values for 1-Cell, 2-Cell or 3-Cell Operation Selected by an External Pin

Adapter In-rush FET Control

Adapter Isolation FET Control

Battery Short Circuit Protection

Fast System-Load Transient Response

Monitor Outputs

Adapter Current (2.5% Accuracy)

AC-adapter Present Indicator

11-Bit Max System Voltage Setting

7-Bit Min System Voltage Setting

6-Bit Charge Current Setting

Over 8A Battery Charger Current

6-Bit Adapter Current Setting

Over 8A Adapter Current

+4.5V to +22V Adapter Voltage Range

Pb-Free (RoHS Compliant)

Related Products



[ISL6262ACRZ](#)

Renesas Technology Corp
QFN-48



[ISL21080CIH315Z-TK](#)

Renesas Technology Corp
SOT-23-3



[ISL6377HRZ-T](#)

Renesas Technology Corp
QFN-48



[ISL62771HRTZ](#)

Renesas Technology Corp
QFN40



[ISL6294IRZ-T](#)

Renesas Technology Corp
QFN-8



[ISL6506BCBZ](#)

Renesas Technology Corp
SOP-8



[ISL62771HRTZ-T](#)

Renesas Technology Corp
40-WFQFN Exposed Pad



[ISL95808HRZ-T](#)

Renesas Technology Corp
DFN-8