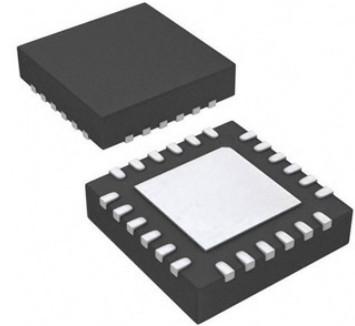


Buck-Boost Narrow VDC Battery Charger with SMBus Interface and USB OTG

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	32pin-TQFN
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL9238BHRTZ-T or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ISL9238B is a buck-boost Narrow Output Voltage DC (NVDC) charger. The ISL9238B provides NVDC charging, system bus regulation, and protection features for tablets, Ultrabooks, notebooks, power banks, and any USB-C interface platform. The advanced Renesas R3™ technology provides high light-load efficiency and fast transient response.

In Charging mode, the ISL9238B accepts input power from a wide range of DC power sources (such as conventional AC/DC charger adapters, USB PD ports, and travel adapters) and safely charges battery packs with up to 4-series cell Li-ion batteries.

As an NVDC topology charger, the ISL9238B also regulates the system output to a narrow DC range for stable system bus voltage. System power can be provided from the adapter, battery, or a combination of both. The ISL9238B can operate with only a battery, only an adapter, or with both connected. For Intel IMVP8 compliant systems the ISL9238B includes System Power monitor (PSYS) functionality, which provides an analog signal representing total platform power. The PSYS output connects to a wide range of Renesas IMVP8 core regulators to provide an IMVP8 compliant power domain function.

The ISL9238B supports reverse buck, boost, or buck-boost operation to the input port from 2- to 4-cell batteries.

The ISL9238B provides SMBus/I2C serial communication that allows programming of many critical parameters to deliver a customized solution.

## Features

Buck-boost NVDC charger for 2-, 3-, or 4-cell Li-ion batteries

Input voltage range: 3.2V to 23.4V (no dead zone)

System output voltage: 2.4V to 18.304V

Autonomous charging option (automatic completion of charging)

Pass-Through mode in forward direction

System power monitor PSYS output, IMVP compliant

Up to 1MHz switching frequency

Adapter current and battery current monitor (AMON/BMON)

PROCHOT# open-drain output, IMVP compliant

Allows trickle charging of a depleted battery

Ideal diode control in Turbo mode

Reverse buck, boost, and buck-boost operation from battery

Two-level adapter current limit available

Battery Ship mode option

SMBus and auto-increment I<sup>2</sup>C compatible

4mm x 4mm 32 Ld TQFN package

## Related Products



### [ISL6262ACRZ](#)

Renesas Technology Corp  
QFN-48



### [ISL6294IRZ-T](#)

Renesas Technology Corp  
QFN-8



### [ISL21080CIH315Z-TK](#)

Renesas Technology Corp  
SOT-23-3



### [ISL6506BCBZ](#)

Renesas Technology Corp  
SOP-8



### [ISL6377HRZ-T](#)

Renesas Technology Corp  
QFN-48



### [ISL62771HRTZ-T](#)

Renesas Technology Corp  
40-WFQFN Exposed Pad



[ISL62771HRZ](#)

Renesas Technology Corp

QFN40



[ISL95808HRZ-T](#)

Renesas Technology Corp

DFN-8