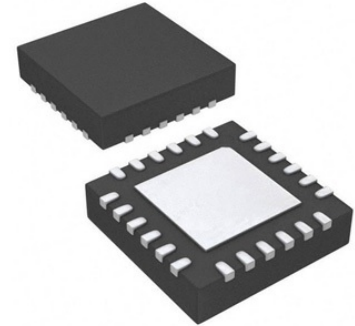


Buck-Boost Narrow VDC Battery Charger with SMBus Interface and USB OTG

Manufacturers	Renesas Technology Corp
Package/Case	32pin-TQFN
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL9238HRTZ-T or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ISL9238 is a buck-boost Narrow Output Voltage DC (NVDC) charger. The ISL9238 provides the NVDC charging, system bus regulation and protection features for tablet, Ultrabook, notebook, power bank, and any USB-C interface platform. The advanced Renesas R3™ Technology provides high light-load efficiency and fast transient response.

In Charging mode, the ISL9238 takes 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 a NVDC topology charger, it also regulates the system output to a narrow DC range for stable system bus voltage. The system power can be provided from the adapter, battery, or a combination of both. The ISL9238 can operate with only a battery, only an adapter, or both connected. For Intel IMVP8 compliant systems the ISL9238 includes System Power monitor (PSYS) functionality, which provides an analog signal representing total platform power. The PSYS output connects to a wide range of IMVP8 core regulators to provide an IMVP8 compliant power domain function.

The ISL9238 supports reverse buck, boost, or buck-boost operation to input port from 2- to 4-cell batteries.

The ISL9238 has serial communication using SMBus/I2C that allows programming of many critical parameters to deliver a customized solution.

Features

Buck-boost NVDC charger for 1-, 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 end of charging)

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 I²C 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