



Data Sheet

Conn; Term Blk; Fuse Plug; Black; for cartridge fuse inserts; 45.4mm L; 9.9mm W

Manufacturers Renesas Technology Corp

Package/Case QFN32

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for ISL9237HRZ or Email to us: sales@ovaga.com.We will contact you in 12 hours.



Images are for reference only

**RFO** 

## **General Description**

The ISL9237 is a buck-boost Narrow Output Voltage DC (NVDC) charger utilizing Intersil's advanced R3<sup>TM</sup> Technology to provide high light-load efficiency, fast transient response and seamless DCM/CCM transitions for a variety of mobile and industrial applications. In Charge mode, the ISL9237 takes input power from a wide range of DC power sources (conventional AC/DC charger adapters, USB PD ports, travel adapters, etc.) and safely charges battery packs with up to 3 cells in a series configuration. ISL9237 supports On-the-Go (OTG) function for 2- and 3-cell battery applications. When OTG function is enabled, the ISL9237 operates in the reverse Buck mode to provide 5V at the USB port. 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 ISL9237 can operate with only a battery, only an adapter or both connected. For Intel IMVP8 compliant systems, the ISL9237 includes PSYS functionality, which provides an analog signal representing total platform power. The PSYS output will connect to a wide range of Intersil IMVP8 core regulators to provide an IMVP8 compliant power domain function. The ISL9237 has serial communication via SMBus/I2C that allows programming of many critical parameters to deliver a customized solution. These programming parameters include, but are not limited to: Adapter current limit, charger current limit, system voltage setting and trickle charging current limit.

## **Features**

Buck-boost NVDC charger for 1-, 2- or 3-cell Li-ion batteries

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

System output voltage 2.4V to 13.824V

System power monitor PSYS output, IMVP-8 compliant

Up to 1MHz switching frequency

LDO output for charger VDD

Adapter current monitor (AMON)

Battery discharging current monitor (BMON)

PROCHOT# open-drain output, IMVP-8 compliant

Allows trickle charging of depleted battery

Optional ASGATE FET control

Ideal diode control in Turbo mode

Supports OTG function for 2- and 3-cell batteries

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

Two-level adapter current limit available

Pb-free (RoHS compliant)

Package 4x4 32 Ld QFN

## **Related Products**



ISL6262ACRZ
Renesas Technology Corp
QFN-48



ISL21080CIH315Z-TK
Renesas Technology Corp
SOT-23-3



ISL6294IRZ-T
Renesas Technology Corp
QFN-8



ISL6506BCBZ
Renesas Technology Corp
SOP-8



ISL6377HRZ-T

Renesas Technology Corp QFN-48



ISL62771HRTZ-T

Renesas Technology Corp 40-WFQFN Exposed Pad



ISL62771HRTZ
Renesas Technology Corp
QFN40



ISL95808HRZ-T

Renesas Technology Corp DFN-8