

## ISL95338HRTZ

Data Sheet

Bidirectional Buck-Boost Voltage Regulator

Manufacturers Renesas Technology Corp

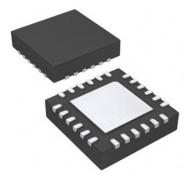
Package/Case 32pin-TQFN

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for ISL95338HRTZ or Email to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

## **General Description**

The ISL95338 is a bidirectional, buck-boost voltage regulator that provides buck-boost voltage regulation and protection features. The Renesas advanced R3<sup>TM</sup> Technology provides high light-load efficiency, fast transient response, and seamless DCM/CCM transitions.

The ISL95338 takes input power from a wide range of DC power sources (such as conventional AC/DC ADPs, USB PD ports, and travel ADPs) and safely converts it to a regulated voltage up to 20V. The ISL95338 can also convert a wide range DC power source connected at its output (system side) to a regulated voltage to its input (ADP side). This bidirectional buck-boost regulation feature makes its application very flexible.

The ISL95338 includes various system operation functions such as Forward mode enable, Reverse mode enable, programmable soft-start time, and adjustable VOUT in both the forward direction and reverse direction. The protection functionalities include OCP, OVP, UVP, and OTP.

The ISL95338 has serial communication through SMBus/I2C that allows programming of many critical parameters to deliver a customized solution. These programming parameters include, but are not limited to: output current limit, input current limit, and output voltage setting.

## **Features**

Bidirectional buck, boost, and buck-boost operation

Input voltage range: 3.8V to 24V (no dead zone)

Output voltage: up to 20V

Up to 1MHz switching frequency

Programmable soft-start time

LDO output for VDD and VDDP

System status alert function

Bidirectional internal discharge function

Active switching for negative voltage transitions

Bypass mode in both directions

Forward mode enable, Reverse mode enable

OCP, OVP, UVP, and OTP protection

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

Pb-free (RoHS compliant)

32 Ld 4x4 TQFN Package

## **Related Products**



ISL6262ACRZ
Renesas Technology Corp
QFN-48



ISL21080CIH315Z-TK
Renesas Technology Corp
SOT-23-3



ISL6377HRZ-T
Renesas Technology Corp
QFN-48



ISL6294IRZ-T Renesas Technology Corp QFN-8



ISL6506BCBZ

Renesas Technology Corp

SOP-8



Renesas Technology Corp 40-WFQFN Exposed Pad

ISL62771HRTZ-T



ISL62771HRTZ

Renesas Technology Corp

QFN40



Renesas Technology Corp DFN-8

ISL95808HRZ-T