

ISL9120IINZ-T7A

Data Sheet

Bus Exchange Switch 1 Element 5 CH 24 Pin TSSOP Tube

Manufacturers Renesas Technology Corp

Package/Case 9-UFBGA, WLCSP

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ISL9120IINZ-T7A or Email to us: sales@ovaga.com We will contact you in 12 hours.



General Description

The ISL9120 is a highly integrated buck-boost switching regulator that accepts input voltages either above or below the regulated output voltage. This regulator automatically transitions between buck and boost modes without significant output disturbance. The ISL9120 also has automatic bypass functionality. When the input voltage is generally within 1% to 2% of the output voltage, there will be a direct bypass connection between the VIN and VOUT pins. In addition to the automatic bypass functionality, the ISL9120 also has forced bypass functionality with the use of the BYP pin. This device is capable of delivering up to 800mA of output current = 3.3V) and provides excellent efficiency due to its adaptive current limit Pulse Frequency Modulation (PFM) control architecture. The ISL9120 is designed for stand-alone applications and supports a 3.3V fixed output voltage or variable output voltages with an external resistor divider. The forced bypass power saving mode can be chosen if voltage regulation is not required. The device consumes less than 3.5μ A of current over the operating temperature range in forced bypass mode. The ISL9120 requires only a single inductor and very few external components. Power supply solution size is minimized by a 1.41mmx1.41mm WLCSP.

Features

Accepts input voltages above or below regulated output voltage

Automatic bypass mode functionality

Automatic and seamless transitions between buck and boost modes

Input voltage range: 1.8V to 5.5V

Selectable forced bypass power-saving mode

Adaptive multilevel current limit scheme to optimize efficiency at low and high currents

Output current: up to 800mA>

High efficiency: up to 98%

41 µA quiescent current maximizes light-load efficiency

Fully protected for over-temperature and undervoltage

Small packages

ISL9120 - 1.41mm x 1.41mm WLCSP

ISL9120IR - 3mm x 3mm 12 Ld TQFN

Related Products



ISL6262ACRZ
Renesas Technology Corp



ISL21080CIH315Z-TK

Renesas Technology Corp SOT-23-3



ISL6377HRZ-T

QFN-48

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