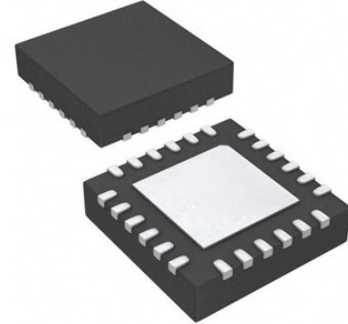


High Efficiency Buck-Boost Regulator, Adj, 3x3 TQFN

Manufacturers	Renesas Technology Corp
Package/Case	TQFN-12
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL9120IRTAZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

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 3.5µA 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%

41µA 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
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



[ISL62771HRTZ](#)

Renesas Technology Corp
QFN40



[ISL95808HRZ-T](#)

Renesas Technology Corp
DFN-8