


DC/DC Cntrlr Single-OUT Step Down 300kHz/500kHz/600kHz/1000kHz 20-Pin QFN EP T/R

Manufacturer:	Renesas Technology Corp	<input type="text" value="ISL95870BIRZ-T Image"/>
Package/Case:	QFN20	Images are for reference only
Product Type:	Power Management ICs	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The ISL95870, ISL95870A, ISL95870B ICs are Single-Phase Synchronous-Buck PWM regulators featuring Intersil's proprietary R4 Technology™. The wide 3.3V to 25V input voltage range is ideal for systems that run on battery or AC-adaptor power sources. The ISL95870A and ISL95870B are low-cost solutions for applications requiring dynamically selected slew-rate controlled output voltages. The soft-start and dynamic setpoint slew-rates are capacitor programmed. Voltage identification logic-inputs select four (ISL95870A, ISL95870B) resistor-programmed setpoint reference voltages that directly set the output voltage of the converter between 0.5V and 1.5V, and up to 5V with a feedback voltage divider. Compared with R3 modulator, the R4 modulator has equivalent light-load efficiency, faster transient performance, accurately regulated frequency control and all internal compensation. These updates, together with integrated MOSFET drivers and schottky bootstrap diode, allow for a high-performance regulator that is highly compact and needs few external components. The differential remote sensing for output voltage and selectable switching frequency are another two new functions. For maximum efficiency, the converter automatically enters diode-emulation mode (DEM) during light-load conditions such as system standby.

Key Features

Input Voltage Range: 3.3V to 25V

Output Voltage Range: 0.5V to 5V

Precision Regulation

Proprietary R4™ Frequency Control Loop

Optimal Transient Response

Intersil's R4™ Modulator Technology

Output Remote Sense

Extremely Flexible Output Voltage Programmability

2-Bit VID Selects Four Independent Setpoint Voltages for ISL95870B

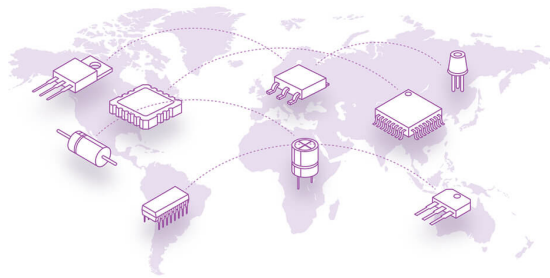
2-Bit VID Selects Four Dependent or Three Independent Setpoint Voltages for ISL95870A

Simple Resistor Programming of Setpoint Voltages

Selectable 300kHz, 500kHz, 600kHz or 1MHz PWM Frequency in Continuous Conduction

Automatic Diode Emulation Mode for Highest Efficiency

Power-Good Monitor for Soft-Start and Fault Detection



Recommended For You

ISL83202IBZ

Renesas Technology Corp

SOP16

ISL9492ERZ

Renesas Technology Corp

QFN

ISL6520ACBZ-T

Renesas Technology Corp

SOP8

ISL62883CHRTZ

Renesas Technology Corp

QFN

ISL95836HRTZ-T

Renesas Technology Corp

QFN40

ISL95837HRZ-T

Renesas Technology Corp

QFN40

ISL95837HRZ

Renesas Technology Corp

QFN40

ISL9301HRZ

Renesas Technology Corp

DFN10

ISL95835HRZ

Renesas Technology Corp

QFN

ISL95812HRZ

Renesas Technology Corp

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Renesas Technology Corp

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