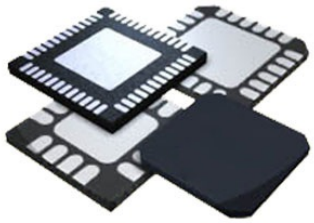
ISL95855HRTZ

Voltage Regulator 48-Pin TQFN EP Tube

Manufacturer:	Renesas Technology Corp
Package/Case:	QFN
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

Compliant with IMVP8™, the ISL95855 provides a complete power solution for Intel microprocessors supporting core, graphics and system agent rails. The controller provides control and protection for three Voltage Regulator (VR) outputs. The VR A output can be configured for 3-, 2- or 1-phase operation. VR B is configurable for 2- or 1-phase operation and VR C supports 1-phase operation. The address options programmable for these three outputs allow for maximum flexibility in support of the IMVP8™ CPU. All three VRs share a common serial control bus to communicate with the CPU and achieve lower cost and smaller board area compared with a two-chip approach. Based on Intersil's Robust Ripple Regulator (R3™) technology, the R3™ modulator has many advantages compared to traditional modulators. These include faster transient settling time, variable switching frequency in response to load transients and improved light-load efficiency due to diode emulation mode with load-dependent low switching frequency. The ISL95855 has several other key features. The controller provides PWM outputs, which support Intel DrMOS power stages (or similar) and discrete power stages using the Intersil ISL95808 high voltage synchronous rectified buck MOSFET driver. The controller complies with IMVP8™ PS4 power requirements and supports power stages and drivers which are compatible. The ISL95855 supports the system input power monitor (PSYS) option. The controller supports either DCR current sensing with a single NTC thermistor for DCR temperature compensation, or more precision through resistor current sensing if desired. All three outputs feature remote voltage sense, programmable IMAX, adjustable switching frequency, OC protection and a single VR_READY power-good indicator.

Key Features

Support Intel serial data bus interface

System input power monitor (PSYS) supported

Three output controller

VR A configurable for 3-, 2-, 1-phase VR design

VR B configurable for 2-, 1-phase VR design

VR C supports 1-phase VR design

0.5% system accuracy over temperature

Low supply current in PS4 state

Supports multiple current sensing methods

Lossless inductor DCR current sensing

Precision resistor current sensing

Differential remote voltage sensing

Programmable SVID address

Programmable VBOOT voltage at start-up

Resistor programmable address selection, IMAX, slew rate, switching frequency and droop

Adaptive body diode conduction time reduction

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

ISL9301IRZ

Renesas Technology Corp

DFN10

ISL95835HRZ

Renesas Technology Corp

QFN

ISL95812HRZ

Renesas Technology Corp

QFN

ISL95870HRUZ-T

Renesas Technology Corp

QFN16

ISL6521IBZ

Renesas Technology Corp

SOP16

ISL62882CHRTZ

Renesas Technology Corp

QFN

ISL95870BIRZ-T

Renesas Technology Corp

QFN20

ISL78214ARZ

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QFN