

ISL95833BIRTZ

Data Sheet

Manufacturers

Renesas Technology Corp

Package/Case

Product Type

Power Management ICs

RoHS

Images are for reference only

Please submit RFQ for ISL95833BIRTZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The ISL95833B Pulse Width Modulation (PWM) controller IC provides a complete solution for IMVP-7/VR12TM compliant microprocessor and graphic processor core power supplies. It provides the control and protection for two Voltage Regulators (VRs). The first VR, typically for VCORE, incorporates 1 integrated driver and can operate in 2- or 1-phase configurations. The second VR, typically for graphics, is a single phase regulator incorporating an integrated driver. The two VRs share a serial control bus to communicate with the CPU and achieve lower cost and smaller board area compared with the two-chip approach.Both VRs utilize Intersil's Robust Ripple Regulator R3 TechnologyTM. The R3 modulator has numerous advantages compared to traditional modulators, including faster transient response, variable switching frequency during load transients, and improved light load efficiency due to its ability to automatically change switching frequency. The ISL95833B has several other key features. Both outputs support either DCR current sensing with a single NTC thermistor for DCR temperature compensation, or more precise resistor current sensing if desired. Both outputs come with remote voltage sense, programmable VBOOT voltage, IMAX, and switching frequency, adjustable overcurrent protection and separate Power-Good signals.

Features

Serial data bus

Dual outputs:

Configurable 2- or 1-phase for the 1st output using one integrated gate driver

1-phase for the 2nd output using an integrated gate driver

R3TM Modulator

Excellent transient response

High light load efficiency

0.5% system accuracy over-temperature

Supports multiple current sensing methods

Lossless inductor DCR current sensing

Precision resistor current sensing

Differential remote voltage sensing

Programmable VBOOT voltage at start-up

Resistor programmable IMAX and switching frequency ($400 \text{kHz} \sim 600 \text{kHz}$) for both outputs

Adaptive body diode conduction time reduction

Related Products



ISL6262ACRZ
Renesas Technology Corp
OFN-48



ISL21080CIH315Z-TK
Renesas Technology Corp
SOT-23-3



Renesas Technology Corp QFN-48

ISL6377HRZ-T



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