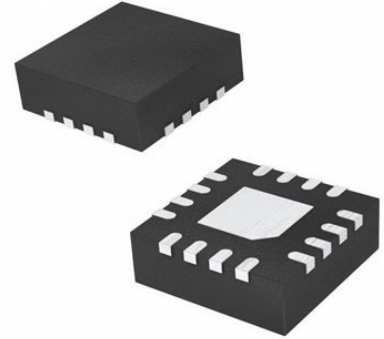


Current Mode PWM Controller 0.25V to 1.52V 90A 40Pin TQFN EP Tube

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	40-VFQFN
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ISL95836IRTZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ISL95836 Pulse Width Modulation (PWM) controller IC provides a complete solution for IMVP-7/VR12™ compliant microprocessor and graphic processor core power supplies. It provides the control and protection for two Voltage Regulators (VRs). The first VR, typical for Vcore, incorporates 2 integrated drivers and can operate in 3-, 2- or 1-phase configurations. The second VR, typical for graphics, incorporates 1 integrated driver and can operate in 2- or 1-phase configurations. 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 Technology™. 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 ISL95836 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 3-, 2- or 1-phase for the 1st Output Using Two Integrated Gate Drivers

Configurable 2- or 1-phase for the 2nd Output Using One Integrated Gate Driver

R3 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  $V_{BOOT}$  Voltage at Start-up

Resistor Programmable  $I_{MAX}$ , Switching Frequency for Both Outputs

Adaptive Body Diode Conduction Time Reduction

## 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



[ISL62771HRZ](#)

Renesas Technology Corp

QFN40



[ISL95808HRZ-T](#)

Renesas Technology Corp

DFN-8