

ISL6363CRTZ

Data Sheet

DC DC Cntrlr Single-OUT Multiphase PWM Regulator 5V to 12V Input 48Pin TQFN EP

Manufacturers Renesas Technology Corp

Package/Case QFN-48

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ISL6363CRTZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Fully compliant with VR12TM specifications, the ISL6363 provides a complete solution for microprocessor core and graphics power supplies. It provides two Voltage Regulators (VRs) with three integrated gate drivers. The first output (VR1) can be configured as a 4, 3, 2 or 1-phase VR while the second output (VR2) is a 1-phase VR. The two VRs share a serial control bus to communicate with the CPU and achieve lower cost and smaller board area compared with a two-chip approach. Based on Intersils Robust Ripple Regulator R3 TechnologyTM, the PWM modulator, compared to traditional modulators, has faster transient settling time, variable switching frequency during load transients and has improved light load efficiency with its ability to automatically change switching frequency. The ISL6363 has several other key features. Both outputs support DCR current sensing with a single NTC thermistor for DCR temperature compensation or accurate resistor current sensing. Both outputs come with remote voltage sensing, programmable VBOOT voltage, serial bus address, IMAX, TMAX, adjustable switching frequency, OC protection and separate power-good indicators. To reduce output capacitors, the ISL6363 also has an additional compensation function for PS1/2 mode and high frequency load transient compensation.

Features

Serial Data Bus (SVID)

Dual Outputs:

Configurable 4, 3, 2 or 1-phase for the 1st Output with 2 Integrated Gate Drivers

1-phase for the 2nd Output with Integrated Gate Driver

Precision Core Voltage Regulation

0.5% System Accuracy Over-Temperature

Enhanced Load Line Accuracy

PS2 Compensation and High Frequency Load Transient Compensation

Differential Remote Voltage Sensing

Lossless Inductor DCR Current Sensing

Programmable $V_{\mbox{\footnotesize BOOT}}$ Voltage at Start-up

Resistor Programmable Address, IMAX, TMAX for Both Outputs

Adaptive Body Diode Conduction Time Reduction



Related Products



ISL6262ACRZ
Renesas Technology Corp
QFN-48



Renesas Technology Corp QFN-8

ISL6294IRZ-T



ISL21080CIH315Z-TK
Renesas Technology Corp
SOT-23-3



ISL6377HRZ-T

Renesas Technology Corp QFN-48



ISL62771HRTZ

Renesas Technology Corp QFN40



ISL6506BCBZ

Renesas Technology Corp SOP-8



ISL62771HRTZ-T

Renesas Technology Corp 40-WFQFN Exposed Pad



ISL95808HRZ-T

Renesas Technology Corp DFN-8