

ISL62771HRTZ-T

Data Sheet

Robust Ripple Regulator (R3) Controller, AMD Fusion SVI 2.0 CPU GPU Voltage Regulator IC 2 Output 40-TQFN (5x5)

Manufacturers Renesas Technology Corp

Package/Case 40-WFQFN Exposed Pad

Product Type Voltage Regulators

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ISL62771HRTZ-T or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ISL62771 is fully compliant with AMD Fusion SVI 2.0 and provides a complete solution for microprocessor and graphics processor core power. The ISL62771 controller supports two Voltage Regulators (VRs) with three integrated gate drivers. The Core VR supports 2-, or 1-phase configurations while the Northbridge VR supports 1-phase operation. The two VRs share a serial control bus to communicate with the AMD CPU and achieve lower cost and smaller board area compared with two-chip solutions. The PWM modulator is based on Intersil's Robust Ripple Regulator R3TM Technology. Compared to traditional modulators, the R3 modulator can automatically change switching frequency for faster transient settling time during load transients and improved light-load efficiency. The ISL62771 has several other key features. Both outputs support DCR current sensing with single NTC thermistor for DCR temperature compensation or accurate resistor current sensing. Both outputs utilize remote voltage sense, adjustable switching frequency, OC protection and power-good.

Features

Supports AMD SVI 2.0 serial data bus interface Serial VID clock frequency range 100kHz to 25MHz Dual output controller with integrated drivers Precision voltage regulation 0.5% system accuracy over-temperature 0.5V to 1.55V in 6.25mV steps Enhanced load line accuracy Supports multiple current sensing methods Lossless inductor DCR current sensing Precision resistor current sensing Programmable 1- or 2-phase for the core output Adaptive body diode conduction time reduction Superior noise immunity and transient response Output current and voltage telemetry Differential remote voltage sensing High efficiency across entire load range Programmable VID offset and droop on both outputs Programmable switching frequency for both outputs Excellent dynamic current balance between phases Protection: OCP/WOC, OVP, PGOOD and thermal monitor Small footprint 40 Ld 5x5 TQFN package Pb-free (RoHS compliant)



Related Products



ISL6262ACRZ

Renesas Technology Corp QFN-48



<u>ISL21080CIH315Z-TK</u>

Renesas Technology Corp SOT-23-3



ISL6294IRZ-T

Renesas Technology Corp QFN-8



ISL6506BCBZ

Renesas Technology Corp SOP-8



ISL6377HRZ-T

Renesas Technology Corp QFN-48



ISL62771HRTZ
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QFN40



ISL95808HRZ-T

Renesas Technology Corp DFN-8



ISL6625ACRZ-T

Renesas Technology Corp 8pin-DFN