

# ISL95853HRZ

Data Sheet

Switching Controllers Multi-phase Core Controller for IMVP8, 32LD 4x4 QFN

Manufacturers	Renesas Technology Corp	A REAL PROPERTY AND A REAL
Package/Case	QFN	States affect and
Product Type	Integrated Circuits (ICs)	VILL S
RoHS		
Lifecycle		Images are for reference only
Please submit REO fo	r ISL95853HRZ or <u>Email to us: sales@ovaga.com</u> W	Ve will contact you in 12 hours.

## **General Description**

The ISL95853, fully compliant with Intel IMVP8<sup>™</sup> specifications, provides a complete solution for microprocessor core power supply. It also provides a Voltage Regulator (VR) with two integrated and one external gate drivers. The VR can be configured as 3-, 2- or 1-phase, providing maximum flexibility. The VR uses the serial control bus (SVID) to communicate with the CPU and achieves lower cost and smaller board area. Based on Intersil's Robust Ripple Regulator (R3<sup>™</sup>) technology, 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 ISL95853 has several other key features. The output supports DCR current sensing with single NTC thermistor for DCR temperature compensation or accurate resistor current sensing. The output comes with remote voltage sense, programmable VBOOT voltage, programmable ICCMAX, programmable voltage transition slew rate, adjustable switching frequency, overcurrent protection and power-good output.

## Features

#### Serial data bus

Output configurable 3-, 2- or 1-phase using two integrated gate drivers

Precision core voltage regulation

- 0.5% system accuracy over temperature
- Enhanced load line accuracy
- 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  $I_{\mbox{\scriptsize CCMAX}}$  and voltage transition slew rate

Adaptive body diode conduction time reduction

System input power monitor

#### **Related Products**



<u>ISL95855HRTZ-T</u> Renesas Technology Corp 48pin-TQFN



ISL99380FRZ-TR5935











ISL32601EFUZ Renesas Technology Corp











Renesas Technology Corp 48-QFN

### ISL69127IRAZ-T

Renesas Technology Corp **QFN 48** 

#### **ISL62771IRTZ-T**

Renesas Technology Corp TQFN-40

#### <u>ISL95855IRTZ-T</u>

Renesas Technology Corp

#### **ISL68137IRAZ**