



Data Sheet

CNTRLR SPS MOD SMART PWR 32PQFN

Manufacturers Renesas Technology Corp

Package/Case 32-PowerWFQFN

Product Type Interface ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for ISL99227FRZ-T or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ISL99227 and ISL99227B are Smart Power Stage (SPS) compatible with Intersil's ISL68xxx/69xxx Digital Multiphase (DMP) controllers and phase doubler (ISL6617A), respectively. The ISL99227 and ISL99227B have integrated high accuracy current and temperature monitors that can be fed back to the controller and doubler to complete a multiphase DC/DC system. They simplify design and increase performance by eliminating the DCR sensing network and associated thermal compensation. Light-load efficiency is supported via a dedicated LFET control pin. An industry leading thermally enhanced 5x5 PQFN package allows minimal overall PCB real estate. The ISL99227 and ISL99227B feature a 3.3V compatible, 5.0V compatible tri-state PWM input that, working together with Intersil's multiphase PWM controllers, provide a robust solution in the event of abnormal operating conditions. The ISL99227 and ISL99227B also improve system performance and reliability with integrated fault protection of UVLO, over-temperature, and overcurrent. An open-drain fault reporting pin simplifies the handshake between SPS and Intersil controllers and can be used to disable the controller during start-up and fault conditions.

Features

Input range: +4.5V to +18V

Supports 60A DC current

ISL99227 with 3.3V compatible tri-state PWM input

ISL99227B with 5.0V compatible tri-state PWM input

Downslope current sensing

±3% accuracy current monitor (IMON) with REFIN input

8mV/°C temperature monitor with OT flag

Dedicated low-side FET control input

Comprehensive fault protection for high system reliability
High-side FET short and overcurrent protection

Over-temperature protection

V_{CC} and V_{IN} Undervoltage Lockout (UVLO)

Open-drain fault reporting output

Up to 2MHz switching frequency

Pb-free (RoHS compliant), 32 Ld 5x5 PQFN



Related Products



ISL83491IBZ

Renesas Technology Corp SOIC-14



ISL83078EIBZA

Renesas Technology Corp SOIC-8



ISL81487EIBZ

Renesas Technology Corp SOP-8



ISL3170EIUZ

Renesas Technology Corp MSOP-10



ISL83072EIBZA

Renesas Technology Corp SOIC-8



IS82C55AZ

Renesas Technology Corp PLCC-44



ISL83387EIVZ

Renesas Technology Corp TSSOP-24



ISL8483EIBZ

Renesas Technology Corp SOP8