

# ISL32275EFVZ

Data Sheet

QUAD, ±16.5kV ESD Protected, 3.0V to 5.5V, RS-485/RS-422 Receivers

Manufacturers	Renesas Technology Corp	pressed
Package/Case	16pin-SOICN 16pin-TSSOP	
Product Type	Interface ICs	mann
RoHS		
Lifecycle		Images are for reference only

Please submit RFQ for ISL32275EFVZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

## **General Description**

These Renesas devices are  $\pm 16.5$ kV IEC61000-4-2 ESD protected, 3.0V to 5.5V powered, quad receivers for balanced communication using the RS-485 and RS-422 standards. Each receiver has low input currents ( $\pm 200\mu$ A), so it presents a 1/4 unit load to the RS-485 bus and allows up to 128 receivers on the bus.

The ISL32173E and ISL32177E are high data rate receivers that operate at data rates up to 80Mbps. Their 8ns maximum propagation delay skew (tolerance) ensures excellent part-to-part matching. The ISL32273E, ISL32275E, and ISL32277E are reduced supply current versions that operate at data rates up to 20Mbps.

The receiver outputs are tri-statable and incorporate a hot plug feature to keep them disabled during power-up and power-down. Versions are available with a common EN/EN (ISL32173E pinout) or a versatile individual channel enable (see Table 1).

A 26% smaller footprint is available with the ISL32177E and ISL32277E QFN packages and these two devices also feature a logic supply pin (VL). The VL supply sets the switching points of the enable inputs and the receiver outputs' VOH, to levels compatible with a lower supply voltage in mixed voltage systems. Individual channel and group enable pins increase the flexibility of the ISL32177E and ISL32277E.

## Features

IEC61000 ESD protection (RS-485 inputs): 16.5kV

Class 3 ESD on all other pins: 8kV HBM

Wide supply range: 3.0V to 5.5V

Wide common-mode range: -7V to +12V

Low part-to-part propagation delay tolerance (ISL3217xE): 8ns (max)

Specified for +125°C operation

Fail-safe open Rx inputs

1/4 unit load allows 128 devices on the bus

Available in industry standard pinouts (ISL32173E) and a 4x4 QFN (ISL32x77E) with added features

Logic supply pin (VL) eases operation in mixed supply systems (ISL32x77E)

High data rates: up to 80Mbps or 20Mbps

Low shutdown supply current: 60µA

Tri-statable Rx outputs

5V tolerant logic inputs when>

#### **Related Products**



**ISL83491IBZ** Renesas Technology Corp SOIC-14



Renesas Technology Corp

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<u>ISL99227FRZ-T</u> 32-PowerWFQFN

Renesas Technology Corp SOIC-8

ISL83072EIBZA







#### ISL3170EIUZ

Renesas Technology Corp MSOP-10

#### ISL83078EIBZA

Renesas Technology Corp SOIC-8

#### **ISL81487EIBZ**

Renesas Technology Corp SOP-8



### IS82C55AZ

Renesas Technology Corp

PLCC-44



Renesas Technology Corp TSSOP-24

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