
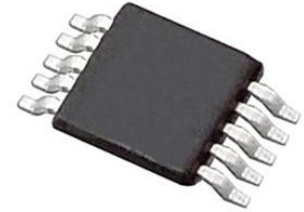


Single Transmitter/Receiver RS-485 10-Pin VSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	MSOP10
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The SN65HVD147x family of full-duplex transceivers feature the highest ESD protection in the RS-485 portfolio, supporting ± 16 -kV IEC61000-4-2 contact discharge and $> \pm 30$ -kV HBM ESD protection. These RS-485 transceivers have robust 3.3-V drivers and receivers and are offered in a standard SOIC package as well as in a small-footprint MSOP package. The large receiver hysteresis of the SN65HVD147x devices provides immunity to conducted differential noise and the wide operating temperature enables reliability in harsh operating environments.

These devices each combine a differential driver and a differential receiver, which operate from a single 3.3-V power supply. Each driver and receiver has separate input and output pins for full-duplex bus communication designs. These devices all feature a wide common-mode voltage range which makes the devices suitable for multi-point applications over long cable runs.

The SN65HVD1471, SN65HVD1474, and SN65HVD1477 devices are fully enabled with no external enabling pins.

The SN65HVD1470, SN65HVD1473, and SN65HVD1476 devices have active-high driver enables and active-low receiver enables. A low, less than 5- μ A standby current can be achieved by disabling both the driver and receiver.

These devices are characterized from -40°C to 125°C .

Key Features

1/8 Unit-Load Options Available
Up to 256 Nodes on the Bus

Bus I/O Protection
> ±30 kV HBM protection

> ±16 kV IEC61000-4-2 Contact Discharge

> ±4 kV IEC61000-4-4 Fast Transient Burst

Extended Industrial Temperature Range: -40°C to 125°C

Large Receiver Hysteresis (70 mV) for Noise Rejection

Low Power Consumption
< 1.1 mA Quiescent Current During Operation

Low Standby Supply Current: 10 nA Typical, < 5 µA (maximum)

Glitch-Free Power-Up and Power-Down Protection for Hot-Plugging Applications

5-V Tolerant Logic Inputs Compatible With 3.3-V or 5-V Controllers

Signaling Rate Options Optimized for: 400 kbps (1470, 1471), 20 Mbps (1473, 1474), 50 Mbps (1476, 1477)

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Recommended For You

SN65LV1224BDBR

Texas Instruments, Inc
SSOP28

SN75173N

Texas Instruments, Inc
DIP

SN65LBC179D

Texas Instruments, Inc
SOP8

SN75176AD

Texas Instruments, Inc
SOP-8

SN65LVDS3486D

Texas Instruments, Inc
SOP-16

SN65HVD33MDREP

Texas Instruments, Inc
SOP-14

SN65LVDS3487D

Texas Instruments, Inc
SOP16

SN65LBC175AD

Texas Instruments, Inc
SOP-16

SN65LVDS31PW

Texas Instruments, Inc
TSSOP-16

SN75176AP

Texas Instruments, Inc
DIP8

SN65LVDS33D

Texas Instruments, Inc
SOP-16

SN65LVDS32D

Texas Instruments, Inc
SOP-16

SN65LVDS31D

Texas Instruments, Inc

SOP

SN75175D

Texas Instruments, Inc

SOP

SN75175N

Texas Instruments, Inc

DIP