

## Voltage Level Translator 2-CH Bidirectional 8-Pin VSSOP T/R

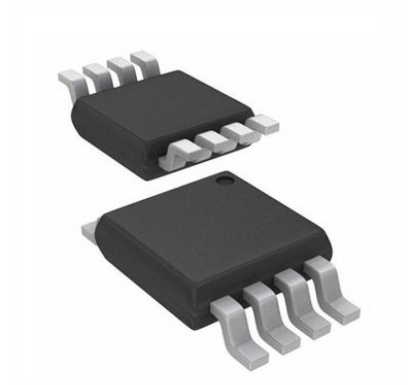
**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** VSSOP8

**Product Type:** Logic ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active



Images are for reference only

[Inquiry](#)

### General Description

This two-bit non-inverting translator is a bidirectional voltage-level translator and can be used to establish digital switching compatibility between mixed-voltage systems. It uses two separate configurable power-supply rails, with the A ports supporting operating voltages from 1.65V to 3.6 V while it tracks the VCCA supply, and the B ports supporting operating voltages from 2.3 V to 5.5 V while it tracks the VCCB supply. This allows the support of both lower and higher logic signal levels while providing bidirectional translation capabilities between any of the 1.8-V, 2.5-V, 3.3-V, and 5-V voltage nodes.

When the output-enable (OE) input is low, all I/Os are placed in the high-impedance state, which significantly reduces the power-supply quiescent current consumption.

To ensure the high-impedance state during power up or power down, OE should be tied to GND through a pull-down resistor; the minimum value of the resistor is determined by the current-sourcing capability of the driver.

## Key Features

No Direction-Control Signal Needed

Maximum Data Rates

24 Mbps (Push Pull)

2 Mbps (Open Drain)

Available in the Texas Instruments NanoStar<sup>®</sup> Package

1.65 V to 3.6 V on A Port and 2.3 V to 5.5 V on B Port ( $V_{CCA} \leq V_{CCB}$ )

VCC Isolation Feature: If Either VCC Input Is at GND, Both Ports Are in the High-Impedance State

No Power-Supply Sequencing Required: Either VCCA or VCCB Can Be Ramped First

Ioff Supports Partial-Power-Down Mode Operation

Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II

ESD Protection Exceeds JESD 22

A Port:

2500-V Human-Body Model (A114-B)

250-V Machine Model (A115-A)

1500-V Charged-Device Model (C101)

B Port:

8-kV Human-Body Model (A114-B)

250-V Machine Model (A115-A)

1500-V Charged-Device Model (C101)

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When the output-enable (OE) input is low, all I/Os are placed in the high-impedance state, which significantly reduces the power-supply quiescent current consumption.

To ensure the high-impedance state during power up or power down, OE should be tied to GND through a pulldown resistor; the minimum value of the resistor is determined by the current-sourcing capability of the driver.

## Recommended For You

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### TXB0102YZPR

Texas Instruments, Inc

DSBGA-8

### TXB0102DCUR

Texas Instruments, Inc

VSSOP8

### TXS0104EDR

Texas Instruments, Inc

SOP14

### TXB0108PWR

Texas Instruments, Inc

TSSOP20

### TXS0104EPWR

Texas Instruments, Inc

TSSOP14

### TXS0102QDCURQ1

Texas Instruments, Inc

VSSOP8

**TXS0104EQPWRQ1**

Texas Instruments, Inc  
TSSOP14

**TXB0104QRGYRQ1**

Texas Instruments, Inc  
VQFN14

**TXB0104QRUTRQ1**

Texas Instruments, Inc  
UQFN12

**TXS0102DCTT**

Texas Instruments, Inc  
SSOP8

**TXS0102YZPR**

Texas Instruments, Inc  
DSBGA-8

**TXB0104QPWRQ1**

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TSSOP14

**TXS0104ED**

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SOP14

**TXB0101DRLR**

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SOT563

**TXB0101DBVR**

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SOT23