
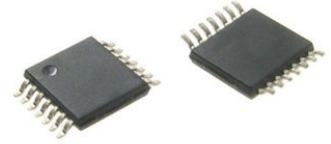


## Automotive Four-Channel Fixed Multidirectional Level Shifter

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	TSSOP14
<b>Product Type:</b>	Logic ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

TXU0304-Q1 is a 4-bit, dual-supply noninverting fixed direction voltage level translation device. Ax pins are referenced to VCCA logic level, OE pin can be referenced to either VCCA or VCCB logic levels, and Bx pins are referenced to VCCB logic levels. The A port is able to accept input voltages ranging from 1.1 V to 5.5 V, while the B port can also accept input voltages from 1.1 V to 5.5 V. Fixed direction data transmission can occur from A to B or B to A when OE is set to high in reference to either supply. When OE is set to low, all output pins are in the high-impedance state. See *Device Functional Modes* for a summary of the operation of the control logic.

## Key Features

AEC-Q100 qualified for automotive applications

Available in wettable flank QFN (WBQA) package

Fully configurable dual-rail design allows each port to operate from 1.1 V to 5.5 V

Up to 200 Mbps support for 3.3 V to 5.0 V

Schmitt-trigger inputs allows for slow and noisy inputs

Inputs with integrated static pull-down resistors prevent channels from floating

High drive strength (up to 12 mA at 5 V)

Low power consumption

3  $\mu$ A maximum (25°C)

6  $\mu$ A maximum (-40°C to 125°C)

V<sub>CC</sub> isolation and V<sub>CC</sub> disconnect (I<sub>off-float</sub>) feature

If either V<sub>CC</sub> input is <100 mV or disconnected, all outputs are disabled and become high-impedance

I<sub>off</sub> supports partial-power-down mode operation

Control logic (OE) with V<sub>CC(MIN)</sub> circuitry allows for control from either A or B port

Pinout compatible with TXB family level shifters

Available in other variants that support common applications: TXU0104-Q1, TXU0204-Q1

Operating temperature from -40°C to +125°C

Latch-up performance exceeds 100 mA per JESD 78, class II

ESD protection exceeds JESD 22

2500-V human-body model

1500-V charged-device model

## 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

**TXS0102DCUT**

Texas Instruments, Inc  
VSSOP8

**TXS0102YZPR**

Texas Instruments, Inc  
DSBGA-8

**TXB0104QPWRQ1**

Texas Instruments, Inc  
TSSOP14

**TXS0104ED**

Texas Instruments, Inc  
SOP14

**TXB0101DRLR**

Texas Instruments, Inc  
SOT563