


Voltage Level Translator 6-CH Bidirectional Automotive 16-Pin TSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	TSSOP16
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

This 6-bit noninverting translator uses two separate configurable power-supply rails. The A port is designed to track V_{CCA} . V_{CCA} accepts any supply voltage from 1.2 V to 3.6 V. The B port is designed to track V_{CCB} . V_{CCB} accepts any supply voltage from 1.65 V to 5.5 V. This allows for universal low-voltage bidirectional translation between any of the 1.2-V, 1.5-V, 1.8-V, 2.5-V, 3.3-V, and 5-V voltage nodes. V_{CCA} should not exceed V_{CCB} .

When the output-enable (OE) input is low, all outputs are placed in the high-impedance state.

The TXB0106-Q1 device is designed so that the OE input circuit is supplied by V_{CCA} .

This device is fully specified for partial-power-down applications using I_{off} . The I_{off} circuitry disables the outputs, preventing damaging current backflow through the device when it is powered down.

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.

Key Features

Qualified for Automotive Applications

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

V_{CC} Isolation Feature – If Either V_{CC} Input Is at GND, All Outputs Are in the High-Impedance State

OE Input Circuit Referenced to V_{CCA}

I_{off} Supports Partial-Power-Down Mode Operation

ESD Protection Exceeds AEC-Q100

A Port
2000-V Human-Body Model

1500-V Charged-Device Model

B Port
 ± 10 -kV Human-Body Model

1500-V Charged-Device Model

Recommended For You

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