

Voltage Level Translator 8-CH Bidirectional Automotive 20-Pin TSSOP T/R



Images are for reference only

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: TSSOP20

Product Type: Logic ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

This device is an 8-bit non-inverting level translator that uses two separate configurable power-supply rails. The A port tracks the VCCA pin supply voltage. The VCCA pin accepts any supply voltage between 1.4 V and 3.6 V. The B port tracks the VCCB pin supply voltage. The VCCB pin accepts any supply voltage between 1.65 V and 5.5 V. Two input supply pins allows for low Voltage bidirectional translation between any of the 1.5 V, 1.8 V, 2.5 V, 3.3 V, and 5 V voltage nodes.

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

To ensure the Hi-Z state during power-up or power-down periods, tie OE 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

AEC-Q100 Qualified for Automotive Applications
Device Temperature Grade 1: -40°C to 125°C

Device HBM ESD Classification Level 2

Device CDM ESD Classification Level C6

No direction-control signal needed

Maximum data rates
110 Mbps (push pull)

1.2 Mbps (open drain)

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

No power-supply sequencing required – either V_{CCA} or V_{CCB} can be ramped first

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

ESD protection exceeds JESD 22 (A Port)
2000-V human body model (A114-B)

1000-V charged-device model (C101)

IEC 61000-4-2 ESD (B port)
±8 kV contact discharge

±6 kV Air-gap discharge

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

TXB0104QRUIRQ1

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