TXB0102YZPR

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

Manufacturer:	Texas Instruments, Inc
Package/Case:	DSBGA-8
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

TXB0102YZPR Image

Images are for reference only

Inquiry

General Description

The TXB0102 device is a 2-bit noninverting translator that uses two separate configurablepower-supply rails. The A port is designed to track VCCA.VCCA accepts any supply voltage from 1.2 V to 3.6 V. The B port is designedto track VCCB. VCCB accepts any supply voltage from1.65 V to 5.5 V. This allows for universal low-voltage bidirectional translation between any of the1.2-V, 1.5-V, 1.8-V, 2.5-V, 3.3-V, and 5-V voltage nodes. VCCA must notexceed VCCB.
When the output-enable (OE) input is low, all outputs are placed in the high-impedancestate.
This device is fully specified for partial-power-down applications usingIoff. The Ioff circuitry disables the outputs whenthe device is powered down. This inhibits current backflow into the device which prevents damage tothe device.
OE must be tied to GND through a pulldown resistor to assure the high-impedance stateduring power up or power down; the minimum value of the resistor is determined by thecurrent-sourcing capability of the driver.
NanoFree technology is a major breakthrough in IC packaging concepts, using the die asthe package.

Key Features

Available in the Texas Instruments NanoFree? Packages

1.2 V to 3.6 V on A Port and 1.65 V to 5.5 V OnB Port (VCCA≤ VCCB)

VCC Isolation Feature – If Either VCCInput Is at GND, All Outputs Are in the High-Impedance State

OE Input Circuit Referenced to VCCA

Low Power Consumption, 4-μA Max ICC

Ioff Supports Partial-Power-Down Mode Operation

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

ESD Protection Exceeds JESD 22
APort
2500-V Human-Body Model (A114-B)

200-V Machine Model (A115-A)

1500-V Charged-Device Model (C101)

B Port
15-kV Human-Body Model (A114-B)

200-V Machine Model (A115-A)

1500-V Charged-Device Model (C101)

Description

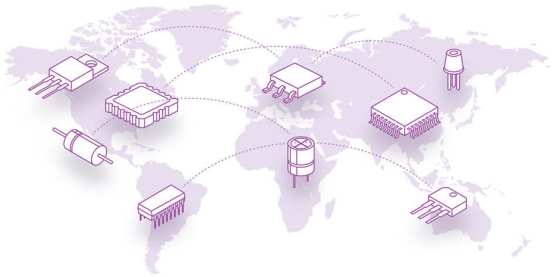
The TXB0102 device is a 2-bit noninverting translator that uses two separate configurablepower-supply rails. The A port is designed to track VCCA.VCCA accepts any supply voltage from 1.2 V to 3.6 V. The B port is designedto track VCCB. VCCB accepts any supply voltage from1.65 V to 5.5 V. This allows for universal low-voltage bidirectional translation between any of the1.2-V, 1.5-V, 1.8-V, 2.5-V, 3.3-V, and 5-V voltage nodes. VCCA must notexceed VCCB.

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

This device is fully specified for partial-power-down applications usingIoff. The Ioff circuitry disables the outputs whenthe device is powered down. This inhibits current backflow into the device which prevents damage tothe device.

OE must be tied to GND through a pulldown resistor to assure the high-impedance stateduring power up or power down; the minimum value of the resistor is determined by thecurrent-sourcing capability of the driver.

NanoFree? technology is a major breakthrough in IC packaging concepts, using the die asthe package.



AVAQ

Recommended For You

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

TXB0101DBVR

Texas Instruments, Inc

SOT23