

## Bus Switch 2-Element CMOS 2-IN 8-Pin TSSOP T/R

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>	<input type="text" value="SN74CBT3306CPWR Image"/>  Images are for reference only  <a href="#">Inquiry</a>
<b>Package/Case:</b>	TSSOP8	
<b>Product Type:</b>	Switches	
<b>RoHS:</b>	RoHS Compliant/Lead free 	
<b>Lifecycle:</b>	Active	

### General Description

The SN74CBT3306C is a high-speed TTL-compatible FET bus switch with low ON-state resistance ( $r_{on}$ ), allowing for minimal propagation delay. Active Undershoot-Protection Circuitry on the A and B ports of the SN74CBT3306C provides protection for undershoot up to  $-2$  V by sensing an undershoot event and ensuring that the switch remains in the proper OFF state.

The SN74CBT3306C is organized as two 1-bit bus switches with separate output-enable ( $1OE$ ,  $2OE$ ) inputs. It can be used as two 1-bit bus switches or as one 2-bit bus switch. When  $OE$  is low, the associated 1-bit bus switch is ON, and the A port is connected to the B port, allowing bidirectional data flow between ports. When  $OE$  is high, the associated 1-bit bus switch is OFF, and the high-impedance state exists between the A and B ports.

This device is fully specified for partial-power-down applications using  $I_{off}$ . The  $I_{off}$  feature ensures that damaging current will not 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 VCC through a pullup resistor; the minimum value of the resistor is determined by the current-sinking capability of the driver.

## Key Features

Undershoot Protection for Off-Isolation on A and B Ports Up to  $-2\text{ V}$

Bidirectional Data Flow, With Near-Zero Propagation Delay

Low ON-State Resistance ( $r_{on}$ ) Characteristics ( $r_{on} = 3\text{ Typical}$ )

Low Input/Output Capacitance Minimizes Loading and Signal Distortion ( $C_{io(OFF)} = 5\text{ pF Typical}$ )

Data and Control Inputs Provide Undershoot Clamps Diodes

Low Power Consumption ( $I_{CC} = 3\text{ }\mu\text{A Max}$ )

VCC Operating Range From  $4\text{ V}$  to  $5.5\text{ V}$

Data I/Os Support 0 to 5-V Signaling Levels ( $0.8\text{-V}$ ,  $1.2\text{-V}$ ,  $1.5\text{-V}$ ,  $1.8\text{-V}$ ,  $2.5\text{-V}$ ,  $3.3\text{-V}$ ,  $5\text{-V}$ )

Control Inputs Can Be Driven by TTL or 5-V/3.3-V CMOS Outputs

Ioff Supports Partial-Power-Down Mode Operation

Latch-Up Performance Exceeds  $100\text{ mA}$  Per JESD 78, Class II

ESD Performance Tested Per JESD 22

2000-V Human-Body Model (A114-B, Class II)

1000-V Charged-Device Model (C101)

Supports Both Digital and Analog Applications: USB Interface, Bus Isolation, Low-Distortion Signal Gating

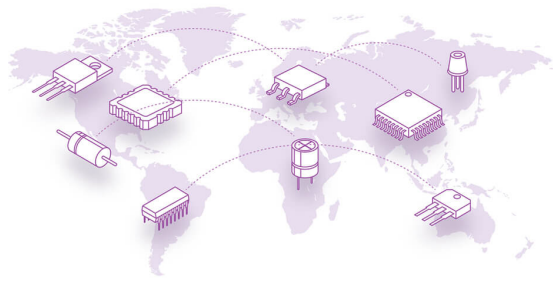
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This device is fully specified for partial-power-down applications using Ioff. The Ioff feature ensures that damaging current will not backflow through the device when it is powered down.

To ensure the high-impedance state during power up or power down,  $OE\backslash$  should be tied to VCC through a pullup resistor; the minimum value of the resistor is determined by the current-sinking capability of the driver.



## Recommended For You

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### **SN74HC4066N**

Texas Instruments, Inc

DIP14

### **SN74CBTD3384DW**

Texas Instruments, Inc

SOIC

### **SN74CBT3306PWR**

Texas Instruments, Inc

TSSOP8

### **SN74CBT3244PWR**

Texas Instruments, Inc

TSSOP20

### **SN74CBT3253CD**

Texas Instruments, Inc

SOIC-16

### **SN74CB3T3306DCUR**

Texas Instruments, Inc

VSSOP-8

### **SN74LVC2G53DCUR**

Texas Instruments, Inc

VSSOP8

### **SN74LVC2G53DCTR**

Texas Instruments, Inc

TSSOP8

### **SN74CB3T3245PW**

Texas Instruments, Inc

TSSOP20

### **SN74CB3Q16211DGVR**

Texas Instruments, Inc

TSSOP

### **SN74CBTLV3251PWR**

Texas Instruments, Inc

TSSOP-16

### **SN74HC4851QPWRQ1**

Texas Instruments, Inc

TSSOP16

### **SN3257QPWRQ1**

Texas Instruments, Inc

TSSOP16

### **SN74LVC2G66QDCURQ1**

Texas Instruments, Inc

VSSOP8

### **SN74CB3T16212DGGR**

Texas Instruments, Inc

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