Voltage Level Translator 1-CH Unidirectional Automotive 5-Pin SC-70 T/R
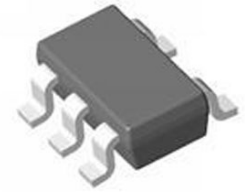
Manufacturer:	Texas Instruments, Inc
Package/Case:	SC70-5
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The AEC-Q100 qualified 2N7001T-Q1 device is a single-bit buffered voltage signal converter that uses two separate configurable power-supply rails to up or down translate a unidirectional signal. The device is operational with both V_{CCA} and V_{CCB} supplies down to 1.65 V and up to 3.60 V. V_{CCA} defines the input threshold voltage on the A input. V_{CCB} defines the output drive voltage on the B output.

This device is fully specified for partial-power-down applications using the I_{off} current. The I_{off} protection circuitry ensures that no excessive current is drawn from or to an input, output, or combined I/O that is biased to a specific voltage while the device is powered down.

The V_{CC} isolation feature ensures that if either V_{CCA} or V_{CCB} is less than 100 mV, the output port (B) enters a high-impedance state.

Key Features

Up and down translation across 1.65 V to 3.6 V

AEC-Q100 automotive qualified

Operating temperature grade 1: –40°C to +125°C

Maximum quiescent current (I

CCA

CCB

Up to 100 Mbps support across the full supply range

V

CC

If either V

CC

I

off

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

ESD protection exceeds JEDEC JS-001

2000-V human body model

1000-V charged-device model

Recommended For You

SN75182N	DM9602N	SN74HC32N
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP	DIP16	DIP14

SN74LS42N	SN74F32N	SN74LS02N
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP16	DIP	DIP14

SN74LS122NSR	SN74HC112N	SN7402N
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP5.2	DIP16	DIP

SN74HC42N

Texas Instruments, Inc

DIP16

SN74F02N

Texas Instruments, Inc

DIP14

SN74LS122N

Texas Instruments, Inc

DIP

SN74LS642N

Texas Instruments, Inc

DIP20

SN74LS132N

Texas Instruments, Inc

DIP

SN74ALS32N

Texas Instruments, Inc

DIP14

SN74HC42N

Texas Instruments, Inc

SN74F02N

Texas Instruments, Inc

SN74LS122N

Texas Instruments, Inc