TCA9544APWR

I2C Multiplexer 1-Element 4-IN 20-Pin TSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	TSSOP20
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

TCA9544APWR Image

Images are for reference only

Inquiry

General Description

The TCA9544A is a 4-channel, bidirectional translating I2C Muliplexer. The master SCL/SDAsignal pair is directed to one of the four channels of slave devices, SC0/SD0-SC3/SD3. Fourinterrupt inputs (INT3–INT0), one for each of thedownstream pairs, are provided. One interrupt output (INT) acts as an AND ofthe four interrupt inputs.

A power-on reset function returns the registers to their default state and initializesthe I2C state machine, with all channels deselected.

The pass gates of the switches are constructed such that the VCC pin can be used to limitthe maximum high voltage which will be passed by the TCA9544A. This allows the use of different busvoltages on each pair, so that 1.8-V, 2.5-V, or 3.3-V parts can communicate with 5-V parts withoutany additional protection. External pull-up resistors pull the bus up to the desired voltage levelfor each channel. All I/O pins are 5.5 V tolerant.

Key Features

1-of-4 Bidirectional Translating Switches

I2C Bus and SMBus Compatible

Four Active-Low Interrupt Inputs

Active-Low Interrupt Output

Three Address Pins, Allowing up to Eight TCA9544A Devices on theI2C Bus

Channel Selection Via I2C Bus

Power-Up With All Switch Channels Deselected

Low RON Switches

Allows Voltage-Level Translation Between 1.8-V, 2.5-V, 3.3-V, and 5-VBuses

No Glitch on Power-Up

Supports Hot Insertion

Low Standby Current

Operating Power Supply Voltage Range of 1.65Vto5.5V

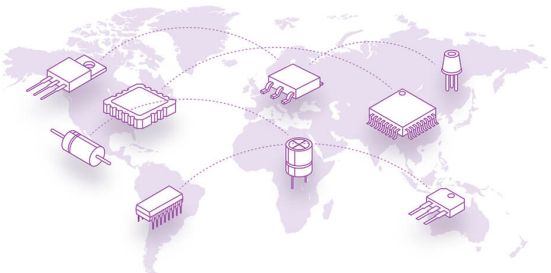
5.5-V Tolerant Inputs

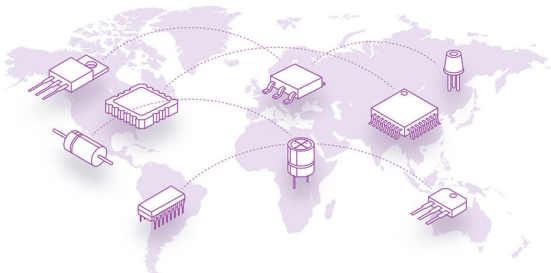
0 to 400-kHz Clock Frequency

Latch-Up Performance Exceeds 100 mA Per JESD 78

ESD Protection Exceeds JESD 22
4000-V Human-Body Model (A114-A)

1500-V Charged-Device Model (C101)





AVAQ

AVAQ

Recommended For You

TCA9548ARGERQ1

Texas Instruments, Inc

VQFN24

TCA9543ADR

Texas Instruments, Inc

SOP-14

SN74HC4066N

Texas Instruments, Inc

DIP14

SN74CBTD3384DW

Texas Instruments, Inc

SOIC

SN74CBT3306PWR

Texas Instruments, Inc

TSSOP8

CD74HC4066E

Texas Instruments, Inc

DIP

CCB3T16210QDGGRQ1

Texas Instruments, Inc

TSSOP48

SN74CBT3244PWR

Texas Instruments, Inc

TSSOP20

HD3SS460IRHRR

Texas Instruments, Inc

WQFN28

CD4052BE

Texas Instruments, Inc

DIP16

SN74CBT3253CD

Texas Instruments, Inc

SOIC-16

SN74CB3T3306DCUR

Texas Instruments, Inc

VSSOP-8

TS3USBA225RUTR

Texas Instruments, Inc

QFN

HD3SS460IRNHR

Texas Instruments, Inc

WQFN30

SN74LVC2G53DCUR

Texas Instruments, Inc

VSSOP8