

74VHCT245AM

Data Sheet

Bus XCVR Single 8-CH 3-ST 20-Pin SOIC Tube

Manufacturers	ON Semiconductor, LLC	
Package/Case	SOIC-20	
Product Type	Logic ICs	
RoHS	Rohs	
Lifecycle		Images are for reference only

Please submit RFQ for 74VHCT245AM or Email to us: sales@ovaga.com We will contact you in 12 hours.



General Description

The MC74VHCT245A is an advanced high speed CMOS octal bus transceiver fabricated with silicon gate CMOS technology. It achieves high speed operation similar to equivalent Bipolar Schottky TTL while maintaining CMOS low power dissipation. It is intended for two-way asynchronous communication between data buses. The direction of data transmission is determined by the level of the DIR input. The output enable pin (OE) can be used to disable the device, so that the buses are effectively isolated. All inputs are equipped with protection circuits against static discharge. The VHCT inputs are compatible with TTL levels. This device can be used as a level converter for interfacing 3.3V to 5.0V, because it has full 5V CMOS level output swings. The VHCT245A input and output (when disabled) structures provide protection when voltages between 0V and 5.5V are applied, regardless of the supply voltage. These input and output structures help prevent device destruction caused by supply voltage - input/output voltage mismatch, battery backup, hot insertion, etc.

Features

High Speed: = 5V

Low Power Dissipation: = 25 C

High Noise Immunity: = 28% VCC

Power Down Protection Provided on Inputs and Outputs

Balanced Propagation Delays

Designed for 2V to 5.5V Operating Range

Low Noise>

Pin and Function Compatible with Other Standard Logic Families

Latchup Performance Exceeds 300mA

ESD Performance: HBM > 2000V; Machine Model > 200V

Chip Complexity: 304 FETs or 76 Equivalent GatesApplication Notes

Do not force a signal on an I/O pin when it is an active output, damage may occur.

All floating (high impedance) input or I/O pins must be fixed bymeans of pull up or pull down resistors or bus terminator ICs.

A parasitic diode is formed between the bus and VCC terminals. Therefore, the VHC245 cannot be used to interface 5V to 3V systems directly.

Pb-Free Packages are Available*



Related Products

Application

ONSEMI



MM74HC14MX

ON Semiconductor, LLC SOIC-14



<u>74ACT00SC</u> ON Semiconductor, LLC

SOIC-14



<u>74VHC74MTC</u> ON Semiconductor, LLC

TSSOP-14



<u>74LVTH244MTC</u> ON Semiconductor, LLC TSSOP-20









74LCX125BQX ON Semiconductor, LLC

TSSOP-14

DQFN-14

TSSOP-20

ON Semiconductor, LLC

74LCX541MTCX

MM74HC595MTCX

ON Semiconductor, LLC TSSOP-16

MC74VHCT50ADTR2G

ON Semiconductor, LLC