

# 74HCT00D

Data Sheet

<u>RFO</u>

Quad 2-input NAND gate

Manufacturers	NXP Semiconductor	
Package/Case	SO-14	2 oviaga
Product Type	Logic ICs	
RoHS		
Lifecycle		Images are for reference only

Please submit RFQ for 74HCT00D or Email to us: sales@ovaga.com We will contact you in 12 hours.

## **General Description**

74HCT00D is a digital logic gate chip that belongs to the 74HCT series of integrated circuits (ICs). It is a quad 2-input NAND gate, meaning it has four individual NAND gates, each with two input pins and one output pin.

## Features

Quad 2-input NAND gate: It has four independent NAND gates, each with two inputs and one output.

High-speed operation: It is designed to operate at high speeds, typically with a propagation delay of 9 ns at 5V.

Wide operating voltage range: It can operate over a wide voltage range, typically from 2V to 6V.

CMOS technology: It uses CMOS (Complementary Metal-Oxide-Semiconductor) technology, which provides low power consumption and high noise immunity.

Compatible with TTL and CMOS logic levels: It is compatible with both TTL (Transistor-Transistor Logic) and CMOS logic levels, making it suitable for interfacing with different types of digital logic circuits.

Schmitt-trigger input: It has Schmitt-trigger input characteristics, which provide hysteresis and improve noise immunity.

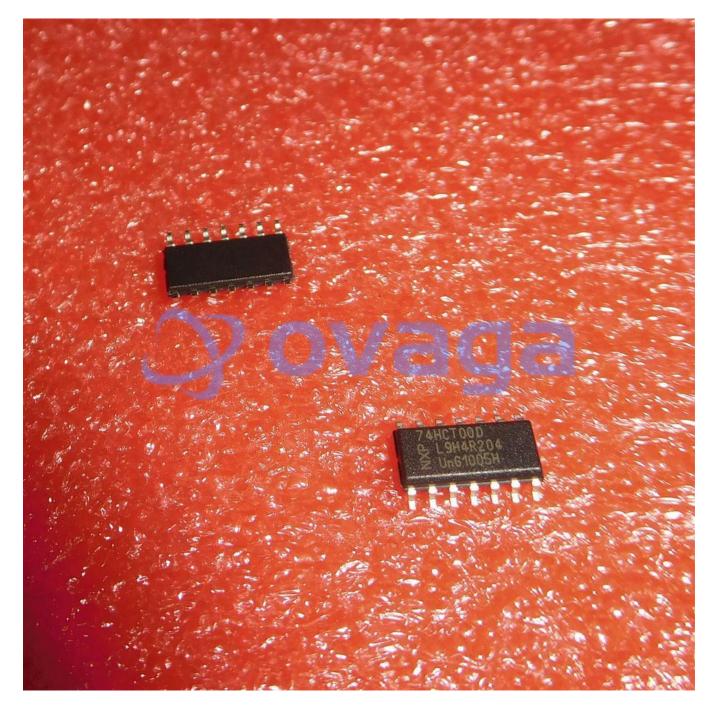
# Application

Digital logic circuit design: It can be used in various digital logic circuits, such as combinational logic circuits, arithmetic circuits, and memory circuits.

Signal conditioning: It can be used for signal conditioning, such as debouncing switches, level shifting, and pulse shaping.

Clock and timing circuits: It can be used in clock and timing circuits for generating clock signals, pulse generation, and frequency division.

Interface circuits: It can be used in interface circuits to convert signals between different logic levels, such as from TTL to CMOS or vice versa.



### **Related Products**



NXP Semiconductor 16-SOIC

<u>74HC4050D</u>



16-SOIC 74HC132D

NXP Semiconductor SOP-14





<u>74HC574D</u>

NXP Semiconductor 20-SOIC

#### <u>74HC165D</u>

NXP Semiconductor SOP-16



#### <u>74HC259D</u>

NXP Semiconductor SOP-16



# <u>74HCT02D</u>

NXP Semiconductor SOP-14



#### <u>74HC14D</u>

NXP Semiconductor

SOP-14



## <u>74HC04D</u>

NXP Semiconductor SOP-14