

Schmitt-Trigger Inverter / CMOS Logic Level Shifter LSTTL-Compatible Inputs, Inverters
3-5.5V Single TTL Schmitt Input

Manufacturers	ON Semiconductor, LLC
Package/Case	SC-70-5
Product Type	Logic ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for M74VHC1GT14DFT1G or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MC74VHC1GT14 is a single gate CMOS Schmitt-trigger inverter fabricated with silicon gate CMOS technology. It achieves high speed operation similar to equivalent Bipolar Schottky TTL while maintaining CMOS low power dissipation. The internal circuit is composed of three stages, including a buffer output which provides high noise immunity and stable output. The device input is compatible with TTL-type input thresholds and the output has a full 5V CMOS level output swing. The input protection circuitry on this device allows overvoltage tolerance on the input, allowing the device to be used as a logic-level translator from 3.0V CMOS logic to 5.0V CMOS Logic or from 1.8V CMOS logic to 3.0V CMOS Logic while operating at the high-voltage power supply. The MC74VHC1GT14 input structure provides protection when voltages up to 5.5V are applied, regardless of the supply voltage. This allows the MC74VHC1GT14 to be used to interface 5V circuits to 3V circuits. The output structures also provide protection when waveforms.

Features

High Speed: = 5V

Low Power Dissipation: = 25°C

TTL-Compatible Inputs: = 2.0V

CMOS-Compatible Outputs: $VOH > 0.8V_{CC}$; $VOL < 0.1V_{CC}$ @ Load

Power Down Protection Provided on Inputs and Outputs

Balanced Propagation Delays

Pin and Function Compatible with Other Standard Logic Families

Pb-Free Packages are Available

Application

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Related Products



[MM74HC14MX](#)

ON Semiconductor, LLC
SOIC-14



[MM74HC595MTCX](#)

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