

## NLVVHC1GT125DF1G

Data Sheet

Buffer, Non-Inverting, CMOS Level Shifter, LSTTL Inputs, 3.5ns, SOT-353

Manufacturers ON Semiconductor, LLC

Package/Case SC-88A

Product Type Logic ICs

RoHS Rohs

Lifecycle Images are for reference only

Please submit RFQ for NLVVHC1GT125DF1G or <a href="mailto:ssales@ovaga.com"><u>Emailto:ssales@ovaga.com</u></a> We will contact you in 12 hours.



## **General Description**

The MC74VHC1GT125 is a single gate noninverting buffer fabricated with silicon gate CMOS technology. It achieves high speed operation similar to equivalent Bipolar Schottky TTL while maintaining CMOS low power dissipation. The MC74VHC1GT125 requires the 3-state control input (OE(bar)) to be set High to place the output into the high impedance state. 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 MC74VHC1GT125 input structure provides protection when voltages up to 5.5V are applied, regardless of the supply voltage. This allows the MC74VHC1GT125 to be used to interface 5V circuits to 3V circuits. The output structures also provide protection when etc.

**Features** Application

High Speed: = 5V ONSEMI

Low Power Dissipation: = 25°C

TTL-Compatible Inputs: = 2.0 V

CMOS-Compatible Outputs: VOH > 0.8 VCC ; VOL < 0.1 VCC @Load

Power Down Protection Provided on Inputs and Outputs

Balanced Propagation Delays

Pin and Function Compatible with Other Standard Logic Families

Chip>

Pb-Free Packages are Available

## **Related Products**



NLSV2T244MUTAG

ON Semiconductor, LLC UDFN8



NL27WZU04DFT2G

ON Semiconductor, LLC SC-70-6



NL17SZ126DFT2G

ON Semiconductor, LLC SC-70-5



NL27WZ00USG

ON Semiconductor, LLC

VFSOP-8



**NLSV1T34DFT2G** 

ON Semiconductor, LLC SC-88A



NL17SZ32DFT2G

ON Semiconductor, LLC

SC-70



NL17SZ00DFT2G

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SC-70



NL37WZ17USG

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US8-8