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## SN54AC00-DIE

ZHCSAV3A - APRIL 2013 - REVISED NOVEMBER 2013

# 抗辐射,四路2输入正与非门

查询样片: SN54AC00-DIE

## 特性

- 2V 至 6V V<sub>CC</sub> 运行
- 允许接受输入电压 6V
- 电压为 5V 时, t<sub>pd</sub> 最大值为 7ns

## 说明/订购信息

此 SN54AC00-DIE 器件包含 4 个独立 2 输入与非门。每个门在正逻辑中执行布尔函数:  $Y = \overline{A \cdot B}$  or  $Y = \overline{A + B}$ 

### ORDERING INFORMATION<sup>(1)</sup>

PRODUCT	PACKAGE DESIGNATOR	PACKAGE	ORDERABLE PART NUMBER	PACKAGE QUANTITY		
	TD	Doro dia in woffle $\operatorname{post}^{(2)}$	SN54AC00VTD1	100		
SN54AC00		Bare die in waffle pack <sup>(2)</sup>	SN54AC00VTD2	10		

(1) For the most current package and ordering information, see the Package Option Addendum at the end of this document, or see the TI web site at www.ti.com.

(2) Processing is per the Texas Instruments space production baseline and is in compliance with the Texas Instruments Quality Control System in effect at the time of manufacture. Electrical screening consists of DC parametric and functional testing at room temperature only. Unless otherwise specified by Texas Instruments AC performance and performance over temperature is not warranted. Visual Inspection is performed in accordance with MIL-STD-883 Test Method 2010 Condition B at 75X minimum.



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

## SN54AC00-DIE

**DIE THICKNESS** 

10.5 mils.



BOND PAD

THICKNESS

830 nm

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**BACKSIDE FINISH** 

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This integrated circuit can be damaged by ESD. Texas Instruments recommends that all integrated circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedures can cause damage.

BOND PAD

**METALLIZATION COMPOSITION** 

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

# Floating Silicon with backgrind AlCuTiW - 39.0 -Ν 13 4 12 Ħ 2118.0 4 10 9 1 39.0 -1268.0

### **BARE DIE INFORMATION**

BACKSIDE

POTENTIAL

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Table 1. Bond Pad Coordinates in Microns								
DESCRIPTION	PAD NUMBER	X MIN	Y MIN	X MAX	Y MAX			
1A	1	96.25	510.5	201.25	615.5			
1B	2	95	94	200	199			
1Y	3	508	94	613	199			
2A	4	1149	94	1254	199			
2B	5	1562	94	1667	199			
2Y	6	1841.5	145.5	1946.5	250.5			
GND	7	1841.5	445.5	1946.5	550.5			
3Y	8	1841	783	1946	888			
ЗA	9	1750.5	991	1855.5	1096			
3B	10	1176.5	991	1281.5	1096			
4Y	11	921	991	1026	1096			
4A	12	736	991	841	1096			
4B	13	95	991	200	1096			
VCC	14	102.5	692	207.5	797			

## 修订历史记录

CI	Changes from Original (April 2013) to Revision A Pag								
•	Changed bare die diagram	. 2							
•	Changed Bond Pad Coordinates	. 3							

•	•
Changed Bond Pac	coordinates
 8	



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### PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead finish/ Ball material (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
SN54AC00VTD1	ACTIVE			0	100	RoHS & Green	Call TI	N / A for Pkg Type	25 to 25		Samples
SN54AC00VTD2	ACTIVE			0	10	RoHS & Green	Call TI	N / A for Pkg Type	25 to 25		Samples

<sup>(1)</sup> The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

**LIFEBUY:** TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

**PREVIEW:** Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

<sup>(2)</sup> RoHS: TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".

**RoHS Exempt:** TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.

Green: TI defines "Green" to mean the content of Chlorine (CI) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

<sup>(3)</sup> MSL, Peak Temp. - The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

<sup>(4)</sup> There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

<sup>(5)</sup> Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

<sup>(6)</sup> Lead finish/Ball material - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

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#### OTHER QUALIFIED VERSIONS OF SN54AC00-DIE :

• Space : SN54AC00-SP

NOTE: Qualified Version Definitions:

• Space - Radiation tolerant, ceramic packaging and qualified for use in Space-based application

### 重要声明和免责声明

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