

## 具有 3 态输出的 8 透明 D 类锁存器

 查询样品: [SN54HC373-DIE](#)

### 特性

- 宽运行电压范围
- 高电流 3 态真输出可驱动高达 15 个低功耗肖特基晶体管晶体管逻辑 (LSTTL) 负载
- 低功耗
- $t_{pd}$  典型值 = 13ns
- 低输入电流
- 针对负载的完全并行访问

### 说明

此 8 位锁存器特有专门设计用于驱动高电容或相对低阻抗负载的 3 态输出。它特别适合于执行缓冲寄存器, I/O 端口, 双向总线驱动器和工作寄存器。

SN54HC373-DIE 的 8 个锁存是透明 D 类型锁存器。在锁存使能 (LE) 输入为高电平时, Q 输出将跟随数据 (D) 输出。当 LE 为低电平时, Q 输出被锁存在 D 输入上设置的电平上。

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

PRODUCT	PACKAGE DESIGNATOR	PACKAGE	ORDERABLE PART NUMBER	PACKAGE QUANTITY
SN54HC373V	TD	Bare die in waffle pack <sup>(2)</sup>	SN54HC373VTDG1	100
			SN54HC373VTDG2	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](http://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.



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.

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.

### BARE DIE INFORMATION

DIE THICKNESS	BACKSIDE FINISH	BACKSIDE POTENTIAL	BOND PAD METALLIZATION COMPOSITION	BOND PAD THICKNESS
10.5 mils.	Silicon with backgrind	Floating	AlCu(2%) TiW	1199 nm



**Table 1. Bond Pad Coordinates in Microns**

DESCRIPTION	PAD NUMBER	X MIN	Y MIN	X MAX	Y MAX
OE	1	143.1	693	243.9	793.8
1Q	2	143.1	303.3	243.9	404.1
1D	3	143.1	162.9	243.9	263.7
2D	4	593.1	162.9	693.9	263.7
2Q	5	1003.5	162.9	1104.3	263.7
3Q	6	1214.1	162.9	1314.9	263.7
3D	7	1692.9	162.9	1793.7	263.7
4D	8	2070.9	162.9	2171.7	263.7
4Q	9	2254.5	307.8	2355.3	408.6
GND	10	2254.5	473.4	2355.3	574.2
GND	11	2254.5	613.8	2355.3	714.6
LE	12	2254.5	831.6	2355.3	932.4
5Q	13	2254.5	1221.3	2355.3	1322.1
5D	14	2254.5	1361.7	2355.3	1462.5
6D	15	1804.5	1361.7	1905.3	1462.5
6Q	16	1394.1	1361.7	1494.9	1462.5
7Q	17	1183.5	1361.7	1284.3	1462.5
7D	18	704.7	1361.7	805.5	1462.5
8D	19	326.7	1361.7	427.5	1462.5
8Q	20	143.1	1216.8	243.9	1317.6
VCC	21	143.1	1051.2	243.9	1152
VCC	22	143.1	910.8	243.9	1011.6

**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
SN54HC373VTDG1	ACTIVE			0	100	RoHS & Green	Call TI	N / A for Pkg Type	25 to 25		<a href="#">Samples</a>
SN54HC373VTDG2	ACTIVE			0	10	RoHS & Green	Call TI	N / A for Pkg Type	25 to 25		<a href="#">Samples</a>

(1) 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.

(2) **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 (Cl) 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.

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

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

(5) 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.

(6) 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 SN54HC373-DIE :**

- Space : [SN54HC373-SP](#)

## NOTE: Qualified Version Definitions:

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

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