FAIRCHILD

SEMICONDUCTOR

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# NC7S14 TinyLogic® HS Inverter with Schmitt Trigger Input

#### **General Description**

The NC7S14 is a single high performance CMOS Inverter with Schmitt Trigger input. The circuit design provides hysteresis between the positive-going and negative going input thresholds thereby improving noise margins.

Advanced Silicon Gate CMOS fabrication assures high speed and low power circuit operation over a broad  $V_{CC}$  range. ESD protection diodes inherently guard both input and output with respect to the  $V_{CC}$  and GND rails.

#### **Features**

- Space saving SOT23 or SC70 5-lead package
- Ultra small MicroPak<sup>™</sup> leadless package
- Schmitt input hysteresis: > 1V typ
- High speed: t<sub>PD</sub> 4.5 ns typ
- E Low quiescent power:  $I_{CC} < 1 \ \mu A$
- Balanced output drive: 2 mA I<sub>OL</sub>, -2 mA I<sub>OH</sub>
- Broad V<sub>CC</sub> operating range: 2V 6V

**Connection Diagrams** 

- Balanced propagation delays
- Specified for 3V operation

#### **Ordering Code:**

Order	Package	Package	Package Description	Supplied As	۱,
Number	Number	Top Mark	Fackage Description	Supplied As	1
NC7S14M5X	MA05B	7S14	5-Lead SOT23, JEDEC MO-178, 1.6mm	3k Units on Tape and Reel	
NC7S14P5X	MAA05A	S14	5-Lead SC70, EIAJ SC-88a, 1.25mm Wide	3k Units on Tape and Reel	
NC7S14L6X	MAC06A	UU	6-Lead MicroPak, 1.0mm Wide	5k Units on Tape and Reel	1

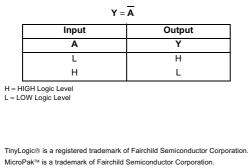
### Logic Symbol

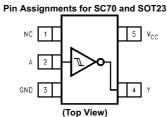


## Pin Descriptions

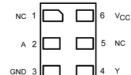
Pin Names	Description	
A	Input	
Y	Output	
NC	No Connect	

#### Function Table





### Pad Assignments for MicroPak



(Top Thru View)

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