

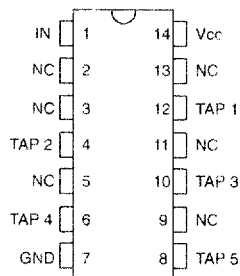
## FEATURES

- All-silicon time delay
- 5 taps equally spaced
- Delays are stable and precise
- Both leading and trailing edge accuracy
- Delay tolerance  $\pm 5\%$  or  $\pm 2$  ns, whichever is greater
- Low-power CMOS
- TTL/CMOS-compatible
- Vapor phase, IR and wave solderable
- Custom delays available
- Fast turn prototypes
- Extended temperature range available (DS1000-IND)

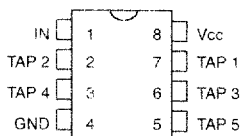
## DESCRIPTION

The DS1000 series delay lines have five equally spaced taps providing delays from 4 ns to 500 ns. These devices are offered in a standard 14-pin DIP that is pin-compatible with hybrid delay lines. Alternatively, 8-pin DIPs and surface mount packages are available to save PC board area. Low cost and superior reliability over hybrid technology is achieved by the combination of a 100% silicon delay line and industry standard DIP and SOIC packaging. In order to maintain complete pin compatibility, DIP packages are available with hybrid lead configurations. The DS1000 series delay lines pro-

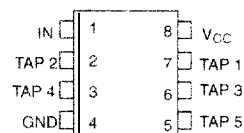
## PIN ASSIGNMENT



DS1000 14-PIN DIP (300 MIL)  
See Mech. Drawings  
Section



DS1000M 8-PIN DIP (300 MIL)  
See Mech. Drawings  
Section



DS1000Z 8-PIN SOIC  
(150 MIL)  
See Mech. Drawings  
Section

## PIN DESCRIPTION

TAP 1-TAP 5	- TAP Output Number
V <sub>CC</sub>	- +5 Volts
GND	- Ground
NC	- No Connection
IN	- Input

vide a nominal accuracy of  $\pm 5\%$  or  $\pm 2$  ns, whichever is greater. The DS1000 5-Tap Silicon Delay Line reproduces the input logic state at the output after a fixed delay as specified by the extension of the part number after the dash. The DS1000 is designed to reproduce both leading and trailing edges with equal precision. Each tap is capable of driving up to ten 74LS loads.

Dallas Semiconductor can customize standard products to meet special needs. For special requests and rapid delivery, call (972) 371-4348.