

# ADVANCE INFORMATION

All information in this data sheet is preliminary and subject to change.

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## 5-Tap Silicon Delay Line

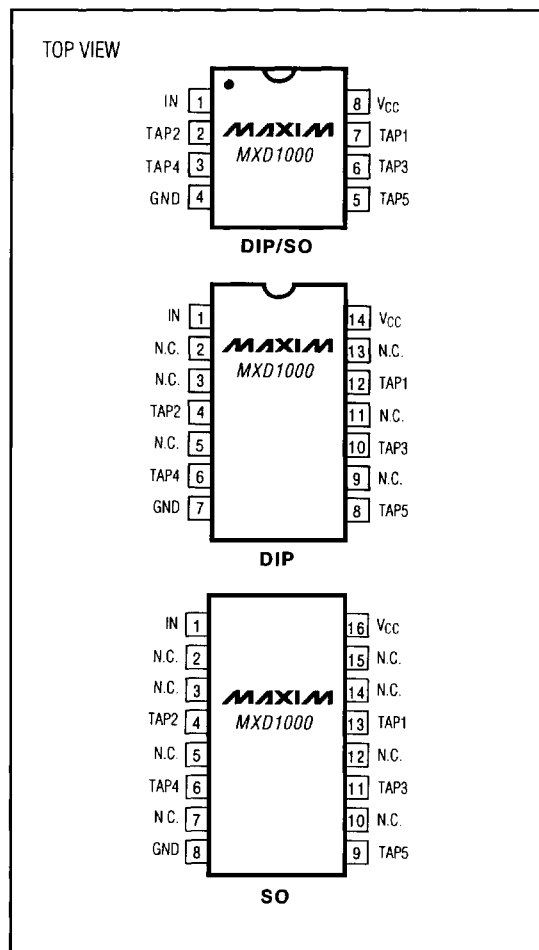
MXD1000

### General Description

The MXD1000 silicon delay line has five equally spaced taps providing 5ns to 500ns delays with a nominal accuracy of  $\pm 5\%$  or  $\pm 2\text{ns}$ , whichever is greater. The part reproduces the input logic level at the output after a fixed delay (see *Delay Table*). The MXD1000 is designed to reproduce leading and trailing edges with equal precision. Each tap is capable of driving up to ten 74LS loads.

Maxim can customize standard delays to meet special needs.

### Pin Configurations



### Features

- ◆ Delay Tolerances  $\pm 2\text{ns}$
- ◆ Stability and Precision Over Temperature and Supply Voltage
- ◆ Leading and Trailing Edge Accuracy
- ◆ Custom Delays Available
- ◆ TTL/CMOS Compatible

### Ordering Information

PART**	TEMP. RANGE	PIN-PACKAGE
MXD1000-__CPA	0°C to +70°C	8 Plastic DIP
MXD1000-__CPD	0°C to +70°C	14 Plastic DIP
MXD1000-__CSA	0°C to +70°C	8 SO
MXD1000-__CWE	0°C to +70°C	16 Wide SO
MXD1000-__C/D	0°C to +70°C	Dice*
MXD1000-__EPA	-40°C to +85°C	8 Plastic DIP
MXD1000-__EPD	-40°C to +85°C	14 Plastic DIP
MXD1000-__ESA	-40°C to +85°C	8 SO
MXD1000-__EWE	-40°C to +85°C	16 Wide SO

\* Contact factory for dice specifications.

\*\*To complete the part number, simply consult the *Delay Table*, select the part-number extension corresponding to the desired delay times, and fill-in the blank in the *Ordering Information*.

### Delay Table (t<sub>PHL</sub>, t<sub>PLH</sub>)

PART NO. EXTENSION	TAP1 DELAY TIME (ns)	TAP2 DELAY TIME (ns)	TAP3 DELAY TIME (ns)	TAP4 DELAY TIME (ns)	TAP5 DELAY TIME (ns)
25	5	10	15	20	25
30	6	12	18	24	30
35	7	14	21	28	35
40	8	16	24	32	40
45	9	18	27	36	45
50	10	20	30	40	50
60	12	24	36	48	60
75	15	30	45	60	75
100	20	40	60	80	100
125	25	50	75	100	125
150	30	60	90	120	150
175	35	70	105	140	175
200	40	80	120	160	200
250	50	100	150	200	250
350	70	140	210	280	350
500	100	200	300	400	500

Custom delays available.

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