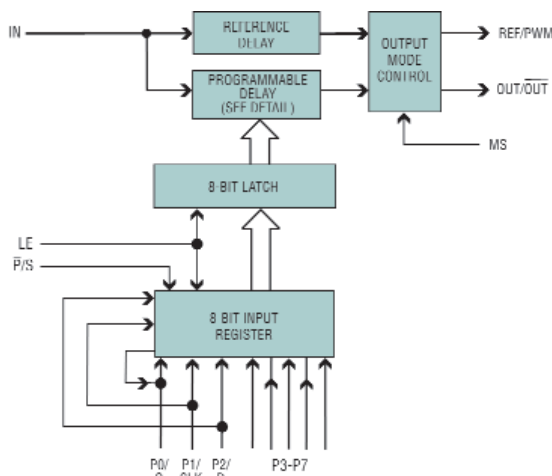


PROGRAMMABLE DELAY LINE HAS 4x IMPROVEMENT IN INTEGRAL LINEARITY

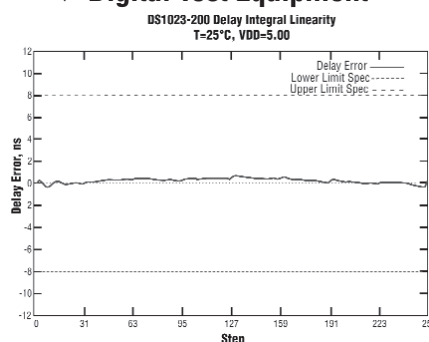
DS1023 8-Bit Silicon Delay Line Supports Serial or Parallel Programming

The DS1023 programmable delay line, a DS1020/21 upgrade, allows for processor control of signal timing delays via either a 3-wire serial or 8-bit parallel port. The DS1023 is the first programmable delay line to allow signal delays greater than a full clock cycle. In addition, the DS1023 has a one-shot, pulse-width modulator, inverted output, and oscillator modes of operation. The DS1023 can be hard-wired to a specific delay in a timing-critical application or changed dynamically, under processor control. The DS1023 is available in 16-pin DIP or 16-pin SOIC packages.



Applications:

- ◆ Telecom
- ◆ Digital Video Projection
- ◆ Digital Test Equipment



- ◆ Step Sizes of 0.25ns, 0.5ns, or 2ns
- ◆ On-Chip Reference Delay
- ◆ Configurable as a Delay Line, Pulse-Width Modulator or Free-Running Oscillator
- ◆ Can Delay Clocks by a Full Period or More
- ◆ Guaranteed Monotonicity

- ◆ Parallel or Serial Programming
- ◆ Single 5V Supply
- ◆ 16-Pin Dip or SOIC Package
- ◆ Cascadable
- ◆ Highly Linear

PART NUMBER	PACKAGE	STEP SIZE (ns)	MAXIMUM DELAY
DS1023-025	300-mil, 16-Pin DIP	0.25	63.75
DS1023-050	300-mil, 16-Pin DIP	0.5	127.5
DS1023-100	300-mil, 16-Pin DIP	1.0	255
DS1023-200	300-mil, 16-Pin DIP	2.0	510
DS1023-500	300-mil, 16-Pin DIP	5.0	1275

PART NUMBER	PACKAGE	STEP SIZE (ns)	MAXIMUM DELAY
DS1023S-025	300-mil, 16-Pin SOIC	0.25	63.75
DS1023S-050	300-mil, 16-Pin SOIC	0.5	127.5
DS1023S-100	300-mil, 16-Pin SOIC	1.0	255
DS1023S-200	300-mil, 16-Pin SOIC	2.0	510
DS1023S-500	300-mil, 16-Pin SOIC	5.0	1275

CALL TOLL-FREE 1-800-998-8800 for a Brochure or Free Sample
6:00 a.m. – 6:00 p.m. Pacific Time



www.maxim-ic.com

2000 EDITION!
FREE FULL-LINE DATA CATALOG
ON CD-ROM



NEW! Get Price, Delivery, and Place Orders
Online at www.maxim-ic.com

Dallas Semiconductor, 4401 South Beltwood Parkway, Dallas, Texas 75244-3292 Phone: 972-371-4448 FAX: 972-371-4470

MAXIM is a registered trademark of Maxim Integrated Products, Inc. © 2001 Maxim Integrated Products.