

SERIES DL6400 PROGRAMMABLE DIGITAL DELAY LINES

- TTL Compatible • Digitally Programmable in 16 Delay Steps (4 Bit)
- 10 TTL Fan-out Capability • 32 Pins DIP

Specifications:

- Logic 1 Input Voltage : 2v Min; 5.5v Max
- Logic 1 Input Current : 100 μ A @2.4v, 2mA @5.5v
- Logic 0 Input Voltage : 0.8v Max
- Logic 0 Input Current : -4mA Max
- Logic 1 Output Voltage : 2.4v Min
- Logic 0 Output Voltage : 0.4v Max
- Operating Temperature : 0°C to 70°C
- Temperature Coefficient : 300PPM/°C

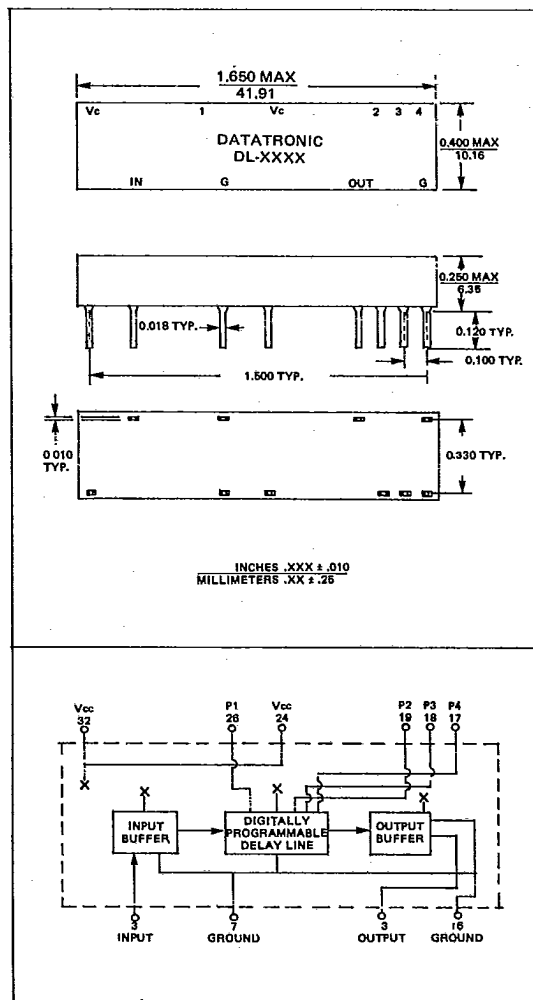
Test Conditions:

- Input Pulse-Width : $\geq 50\%$ of Delay
- Input Pulse Rise Time : 3NS
- Vcc Supply Voltage : 5.0VDC
- Vcc Supply Current : 60mA Typ.

Truth Table

ADDRESS BIT NO.				Delay Output
P4	P3	P2	P1	
L	L	L	L	1D
L	L	L	H	1D+T
L	L	H	L	1D+2T
L	L	H	H	1D+3T
L	H	L	L	1D+4T
L	H	L	H	1D+5T
L	H	H	L	1D+6T
L	H	H	H	1D+7T
H	L	L	L	1D+8T
H	L	L	H	1D+9T
H	L	H	L	1D+10T
H	L	H	H	1D+11T
H	H	L	L	1D+12T
H	H	L	H	1D+13T
H	H	H	L	1D+14T
H	H	H	H	1D+15T

1D = Inherent Delay (Min Delay Time)

T = Multiplier of Incremental Delay
(Delay change per step)

Part Number	Min Delay Time (NS)	Max Delay Time (NS)	Max Dev from Programming Delay	Delay Change per step (NS)
DL6401	15 $\pm$ 1	30	$\pm$ 1NS	1 $\pm$.5
DL6402	30 $\pm$ 2	45	$\pm$ 2NS	1 $\pm$.5
DL6403	45 $\pm$ 2	60	$\pm$ 2.5NS	1 $\pm$.5
DL6404	60 $\pm$ 2	75	$\pm$ 2.5NS	1 $\pm$.5
DL6405	75 $\pm$ 3	90	$\pm$ 3.0NS	1 $\pm$.5
DL6406	90 $\pm$ 3	105	$\pm$ 3.5NS	1 $\pm$.5
DL6407	105 $\pm$ 3	120	$\pm$ 3.5NS	1 $\pm$.5
DL6408	120 $\pm$ 4	135	$\pm$ 4.0NS	1 $\pm$.5
DL6409	135 $\pm$ 4	150	$\pm$ 4.5NS	1 $\pm$.5
DL6410	150 $\pm$ 5	165	$\pm$ 5.0NS	1 $\pm$.5
DL6411	12 $\pm$ 1	45	$\pm$ 1NS	2 $\pm$.8
DL6412	15 $\pm$ 1	60	$\pm$ 2NS	3 $\pm$ 1
DL6413	15 $\pm$ 1	75	$\pm$ 2NS	4 $\pm$ 1
DL6414	15 $\pm$ 1	90	$\pm$ 2NS	5 $\pm$ 1
DL6415	15 $\pm$ 1	105	$\pm$ 2.5NS	6 $\pm$ 1
DL6416	15 $\pm$ 1	120	$\pm$ 3.0NS	7 $\pm$ 1
DL6417	15 $\pm$ 1	135	$\pm$ 3.5NS	8 $\pm$ 1
DL6418	15 $\pm$ 1	150	$\pm$ 4.0NS	9 $\pm$ 1
DL6419	15 $\pm$ 1	165	$\pm$ 4.0NS	10 $\pm$ 1
DL6420	15 $\pm$ 1	240	$\pm$ 5.0NS	15 $\pm$ 1
DL6421	15 $\pm$ 1	255	$\pm$ 5.0NS	16 $\pm$ 2
DL6422	15 $\pm$ 1	315	$\pm$ 6.0NS	20 $\pm$ 2
DL6423	15 $\pm$ 1	390	$\pm$ 8.0NS	25 $\pm$ 2
DL6424	15 $\pm$ 1	465	$\pm$ 10NS	30 $\pm$ 2.5
DL6425	15 $\pm$ 1	540	$\pm$ 12NS	35 $\pm$ 2.5
DL6426	15 $\pm$ 1	615	$\pm$ 14NS	40 $\pm$ 3
DL6427	15 $\pm$ 1	690	$\pm$ 16NS	45 $\pm$ 3
DL6428	15 $\pm$ 1	765	$\pm$ 20NS	50 $\pm$ 3