

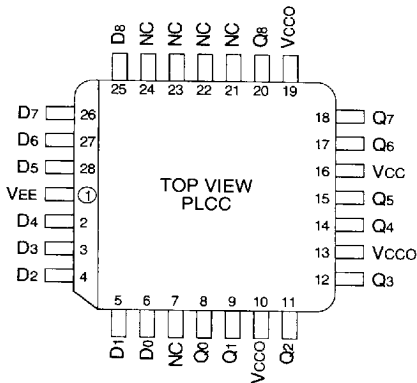
FEATURES

- 500ps max. propagation delay
- Extended 100E VEE range of -4.2V to -5.5V
- Fully compatible with industry standard 10KH, 100K I/O levels
- Internal 75KΩ Input pulldown resistors
- ESD protection of 2000V
- Fully compatible with Motorola MC10E/100E122

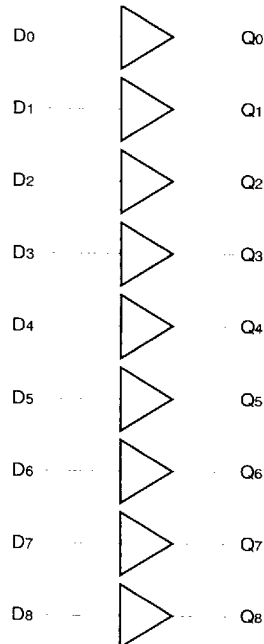
DESCRIPTION

The SY10/100E122 are 9-bit buffers designed for use in new, high-performance ECL systems. The E122 provides nine non-inverting buffers.

PIN CONFIGURATION



BLOCK DIAGRAM



PIN NAMES

Pin	Function
D0-D8	Data Inputs
Q0-Q8	Data Outputs
Vcc0	Vcc to Output

DC ELECTRICAL CHARACTERISTICS

$V_{EE} = V_{EE} (\text{Min.})$ to $V_{EE} (\text{Max.})$; $V_{CC} = V_{CCO} = \text{GND}$

Symbol	Parameter	$T_A = 0^\circ\text{C}$			$T_A = +25^\circ\text{C}$			$T_A = +85^\circ\text{C}$			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
I_{IH}	Input HIGH Current	—	—	200	—	—	200	—	—	200	μA	—
I_{EE}	Power Supply Current	—	—	—	—	—	—	—	—	—	mA	—
	10E	—	41	49	—	41	49	—	41	49		
	100E	—	41	49	—	41	49	—	47	57		

AC ELECTRICAL CHARACTERISTICS

$V_{EE} = V_{EE} (\text{Min.})$ to $V_{EE} (\text{Max.})$; $V_{CC} = V_{CCO} = \text{GND}$

Symbol	Parameter	$T_A = 0^\circ\text{C}$			$T_A = +25^\circ\text{C}$			$T_A = +85^\circ\text{C}$			Unit	Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
t_{PLH} t_{PHL}	Propagation Delay to Output D to Q	150	350	500	150	350	500	150	350	500	ps	—
t_{skew}	Within-Device Skew, D to Q	—	75	—	—	75	—	—	75	—	ps	1
t_r t_f	Rise/Fall Time 20% to 80%	300	425	800	300	425	800	300	425	800	ps	—

NOTE:

1. Within-device skew is defined as identical transitions on similar paths through a device.

PRODUCT ORDERING CODE

Ordering Code	Package Type	Operating Range
SY10E122JC	J28-1	Commercial
SY10E122JCTR	J28-1	Commercial
SY100E122JC	J28-1	Commercial
SY100E122JCTR	J28-1	Commercial