



9-BIT BUFFER

SY10E122
SY100E122

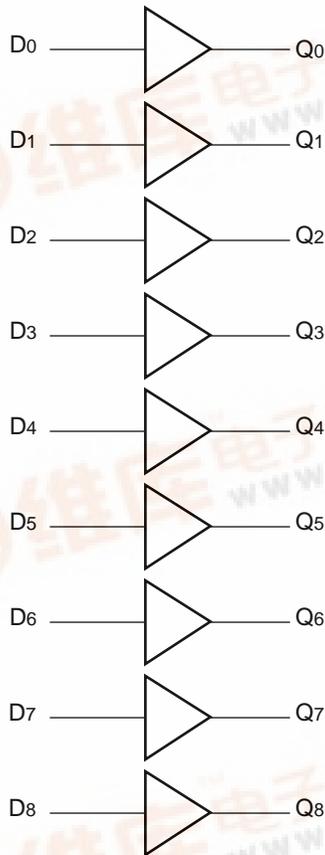
FEATURES

- 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
- Fully compatible with Motorola MC10E/100E122
- Available in 28-pin PLCC package

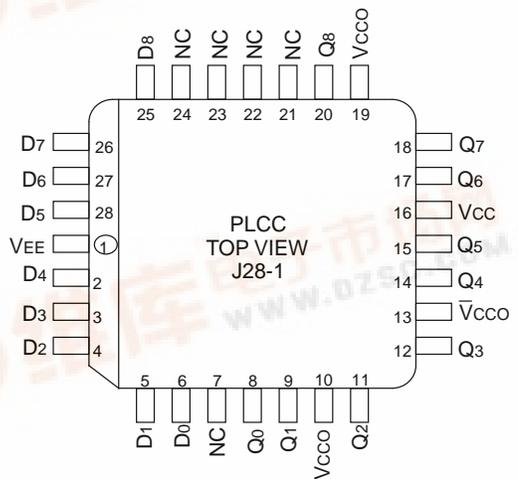
DESCRIPTION

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

BLOCK DIAGRAM



PIN CONFIGURATION



PIN NAMES

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

DC ELECTRICAL CHARACTERISTICS

VEE = VEE (Min.) to VEE (Max.); VCC = VCCO = GND

Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
I _{IH}	Input HIGH Current	—	—	200	—	—	200	—	—	200	—	—	200	μA
I _{EE}	Power Supply Current	—	—	—	—	—	—	—	—	—	—	—	—	mA
	10E	—	41	49	—	41	49	—	41	49	—	41	49	
	100E	—	41	49	—	41	49	—	41	49	—	47	57	

AC ELECTRICAL CHARACTERISTICS

VEE = VEE (Min.) to VEE (Max.); VCC = VCCO = GND

Symbol	Parameter	TA = -40°C			TA = 0°C			TA = +25°C			TA = +85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
t _{PLH} t _{PHL}	Propagation Delay to D to Q	150	350	500	150	350	500	150	350	500	150	350	500	ps
t _{skew}	Within-Device Skew D to Q ⁽¹⁾	—	75	—	—	75	—	—	75	—	—	75	—	ps
t _r t _f	Rise/Fall Time 20% to 80%	300	425	800	300	425	800	300	425	800	300	425	800	ps

NOTE:

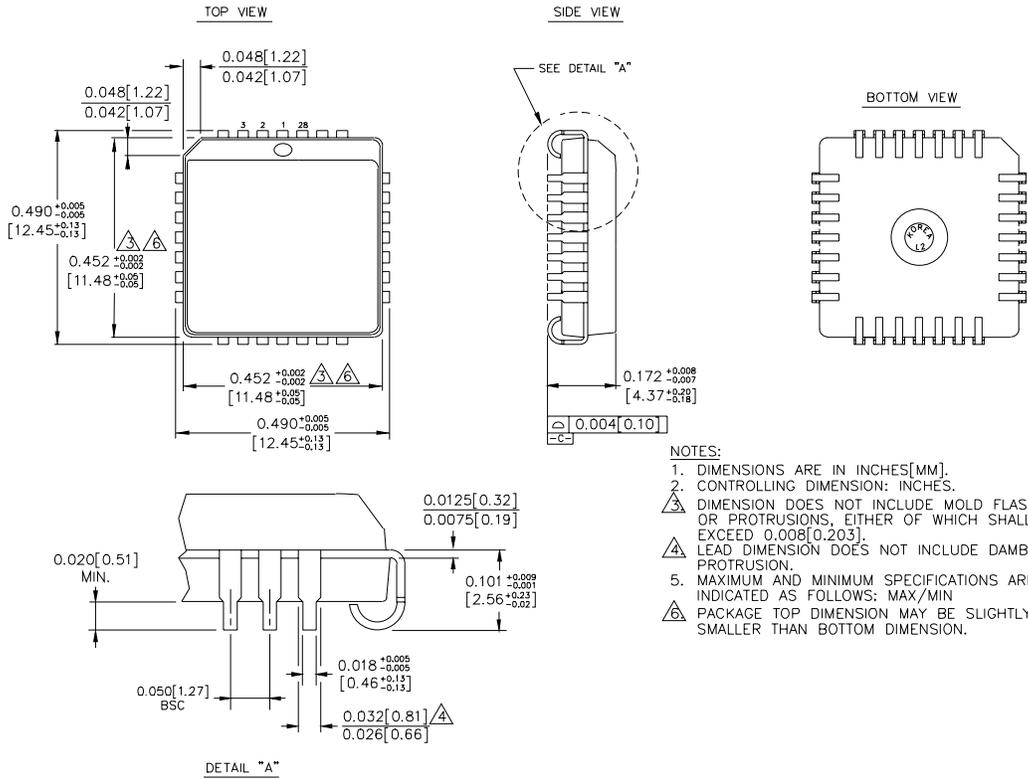
1. Within-device skew is defined as identical transitions on similar paths through a device.

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

Ordering Code	Package Type	Operating Range
SY10E122JI	J28-1	Industrial
SY10E122JITR	J28-1	Industrial
SY100E122JI	J28-1	Industrial
SY100E122JITR	J28-1	Industrial

28 LEAD PLCC (J28-1)



- NOTES:**
1. DIMENSIONS ARE IN INCHES[MM].
 2. CONTROLLING DIMENSION: INCHES.
 3. DIMENSION DOES NOT INCLUDE MOLD FLASH OR PROTRUSIONS, EITHER OF WHICH SHALL NOT EXCEED 0.008[0.203].
 4. LEAD DIMENSION DOES NOT INCLUDE DAMBAR PROTRUSION.
 5. MAXIMUM AND MINIMUM SPECIFICATIONS ARE INDICATED AS FOLLOWS: MAX/MIN
 6. PACKAGE TOP DIMENSION MAY BE SLIGHTLY SMALLER THAN BOTTOM DIMENSION.

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