

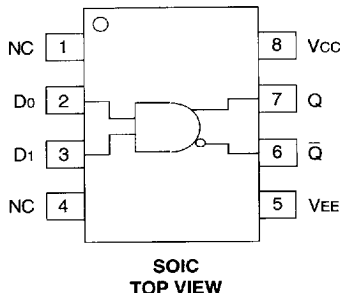
FEATURES

- 240ps propagation delay
- High bandwidth output transitions
- Internal 75K Ω input pull-down resistors
- ESD protection of 200V

DESCRIPTION

The SY10/100EL04 are 2-input AND/NAND gates. These devices are functionally equivalent to the E104 devices, with higher performance capabilities. With propagation delays and output transition times significantly faster than the E104, the EL04 is ideally suited for those applications which require the ultimate in AC performance.

PIN CONFIGURATION/BLOCK DIAGRAM



PIN NAMES

Pin	Function
Do, D1	Data Inputs
Q	Data Outputs

PRODUCT ORDERING CODE

Ordering Code	Package Type	Operating Range
SY10EL04ZC	Z8-1	Commercial
SY10EL04ZCTR	Z8-1	Commercial
SY100EL04ZC	Z8-1	Commercial
SY100EL04ZCTR	Z8-1	Commercial

DC ELECTRICAL CHARACTERISTICS

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

Symbol	Parameter	-40°C			0°C			+25°C			+85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
IEE	Power Supply Current 10EL 100EL	—	14	17	11	14	17	11	14	17	11	14	17	mA
VEE	Power Supply Voltage 10EL 100EL	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	-4.75 -4.20	-5.2 -4.5	-5.5 -5.5	V
I _{IH}	Input HIGH Current D ₀ D ₁	— —	— —	250 150	— —	— —	250 150	— —	— —	250 150	— —	— —	250 150	μ A

AC ELECTRICAL CHARACTERISTICS

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

Symbol	Parameter	-40°C			0°C			+25°C			+85°C			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
t _{PLH} t _{PHL}	Propagation Delay to Output D	70	235	410	120	235	360	130	240	370	155	265	395	ps
t _r t _f	Output Rise/Fall Times Q (20% to 80%)	100	225	350	100	225	350	100	225	350	100	225	350	ps