

Quad 3-input OR/NOR Gate

Description

The CXB1500Q-Y is an ultra high speed monolithic ECL IC, which contains four 3-input OR/NOR gates.

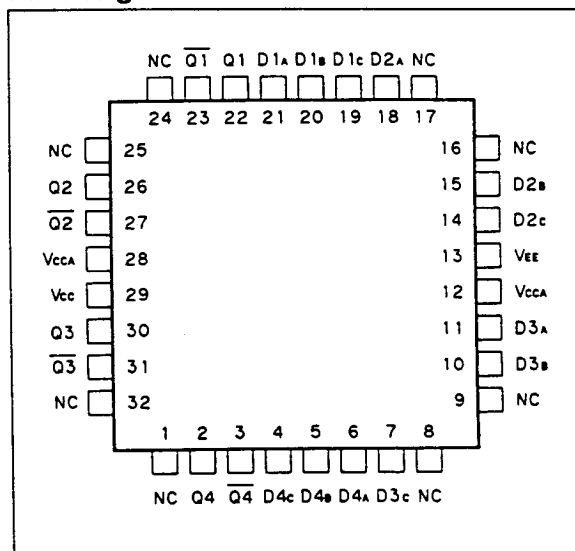
Features

- Typical AC characteristics $T_{pd}=460ps$
 $T_{TLH}=260ps$
 $T_{THL}=210ps$
- Internal pull down resistors on input pins to maintain logic LOW level with the pins left open
- ECL 100K compatible I/O levels
- Differential output

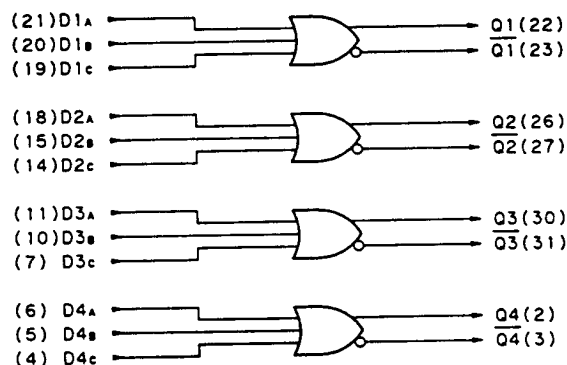
Pin Names

$D_{nA}-D_{nC}$	Data inputs
$Q_n, \overline{Q}_n$	Data outputs
V_{cc}	Circuit ground
V_{CCA}	Circuit ground for outputs
V_{EE}	Negative power supply

Pin Assignment



Logic Symbol



DC Characteristics

 $V_{EE} = -4.5 \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2.0V$, $T_c = 0^\circ C$ to $+85^\circ C$

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Power supply current	I_{EE}		-127	-93	-65	mA

AC Characteristics

 $V_{EE} = -4.5 \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2.0V$, $T_c = 0^\circ C$ to $+85^\circ C$, $R_T = 50\Omega$ to V_{TT}

Item	Symbol	Input	Output	Test Condition	Min.	Typ.	Max.	Unit
Propagation delay time	T_{PLH}	Dn	Qn		300	460	620	ps
	T_{PHL}				300	460	620	
Rise time	T_{TLH}			20% to 80%		260	370	
Fall time	T_{THL}					210	310	