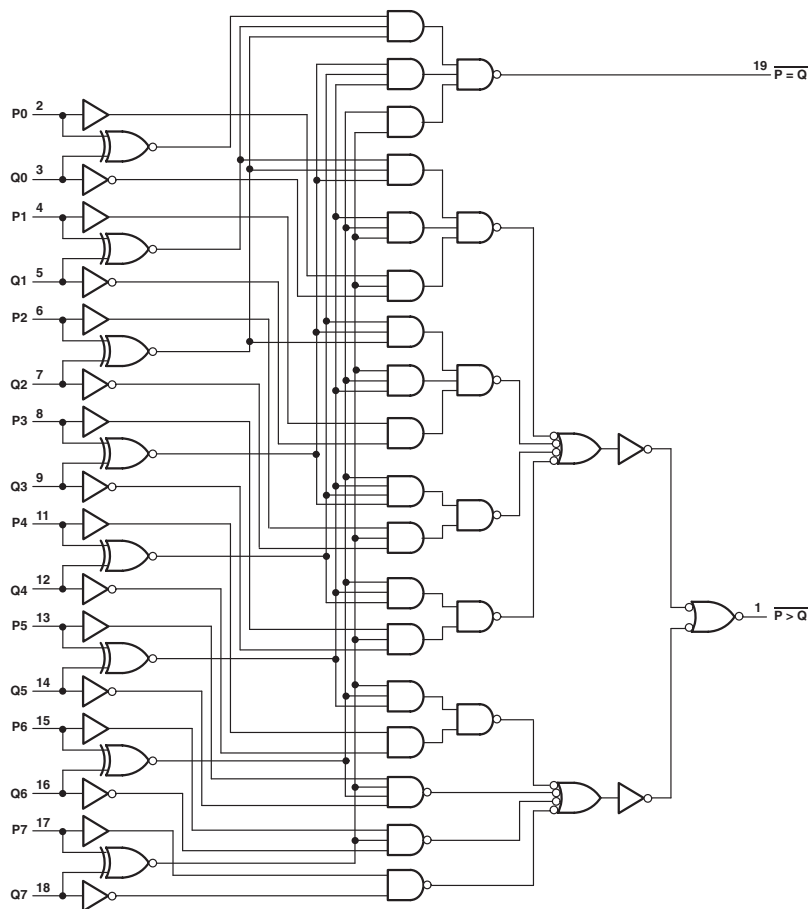


## 8-BIT MAGNITUDE COMPARATORS

- Totem-Pole Outputs
- Hysteresis at P and Q Inputs
- 20k $\Omega$  Pullup Resistors on the Q Inputs

Logic Diagram



# FUNCTION TABLE

DATA INPUT P, Q	OUTPUTS	
	$\overline{P=Q}$	$\overline{P>Q}$
$P=Q$	L	H
$P>Q$	H	L
$P<Q$	H	H

## ELECTRICAL CHARACTERISTICS AND RECOMMENDED OPERATING CONDITIONS

PARAMETER	MAX or MIN	LS	SN74 HC	UNIT
$I_{CC}$	MAX	70	0.11	mA
$I_{OH}$	MAX	-0.4	-4	mA
$I_{OL}$	MAX	24	4	mA

## SWITCHING CHARACTERISTICS

PARAMETER	INPUT	OUTPUT	MAX or MIN	LS	SN74 HC
$t_{PLH}$	P	$\overline{P=Q}$	MAX	25	69
$t_{PHL}$				25	69
$t_{PLH}$	Q	$\overline{P=Q}$	MAX	25	69
$t_{PHL}$				25	69
$t_{PLH}$	P	$\overline{P>Q}$	MAX	30	69
$t_{PHL}$				30	69
$t_{PLH}$	Q	$\overline{P>Q}$	MAX	30	69
$t_{PHL}$				30	69

UNIT: ns