TYPES SN54HC36, SN74HC36
QUADRUPLE 2-INPUT POSITIVE-NOR GATES

D2684, DECEMBER 1982—REVISED MARCH 1984

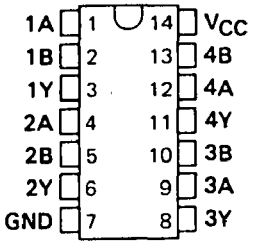
- **Package Options Include Both Plastic and Ceramic Chip Carriers in Addition to Plastic and Ceramic DIPs**
- **Dependable Texas Instruments Quality and Reliability**

description

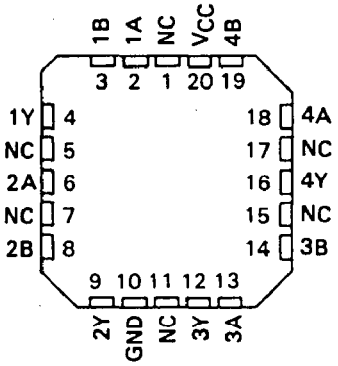
These devices contain four independent 2-input NOR gates. They perform the Boolean functions $Y = \overline{A+B}$ or $Y = \overline{A} \cdot \overline{B}$ in positive logic.

The SN54HC36 is characterized for operation over the full military temperature range of −55°C to 125°C. The SN74HC36 is characterized for operation from −40°C to 85°C.

SN54HC36 . . . J PACKAGE
SN74HC36 . . . J OR N PACKAGE
(TOP VIEW)

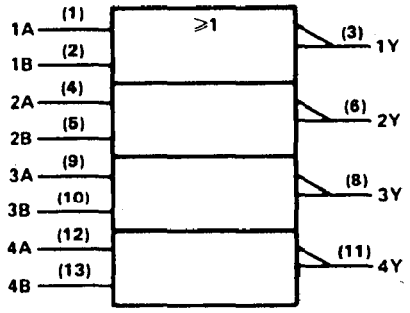


SN54HC36 . . . FH OR FK PACKAGE
SN74HC36 . . . FH OR FN PACKAGE
(TOP VIEW)



NC—No internal connection

logic symbol



Pin numbers shown are for J and N packages.

FUNCTION TABLE (each gate)

INPUTS		OUTPUT
A	B	Y
H	X	L
X	H	L
L	L	H

maximum ratings, recommended operating conditions, and electrical characteristics

See Table I, page 2-4.

switching characteristics over recommended operating free-air temperature range (unless otherwise noted), C_L = 50 pF (see Note 1)

PARAMETER	FROM (INPUT)	TO (OUTPUT)	V_{CC}	T_A = 25°C			SN54HC36		SN74HC36		UNIT
				MIN	TYP	MAX	MIN	MAX	MIN	MAX	
t_{pd}	A or B	Y	2 V		50	100		150		125	ns
			4.5 V		10	20		30		25	
			6 V		8	17		25		21	
t_t		Y	2 V		38	75		110		95	ns
			4.5 V		8	15		22		19	
			6 V		6	13		19		16	

C_{pd}	Power dissipation capacitance per gate	No load, T_A = 25°C	20 pF typ

NOTE 1: For load circuit and voltage waveforms, see page 1-14.