82S42 | 4-BIT QUAD EXCLUSIVE-NOR

Signetics

A,F PACKAGES

DIGITAL 8000 SERIES SCHOTTKY TTL/MSI
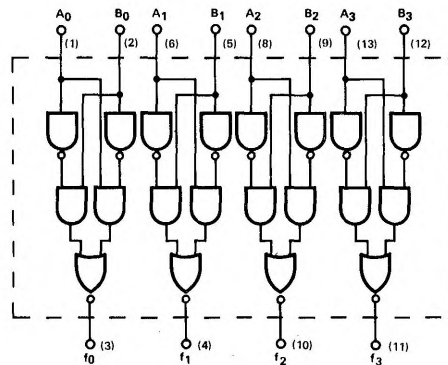
DESCRIPTION

The 82S42 contains four independent Exclusive-NOR gates which may be used to implement digital comparison functions. The 82S42 outputs are bare collector to facilitate implementation of multiple-bit comparisons; a 4-bit comparison is made by connecting the outputs of the four independent gates together.

FEATURES

- SCHOTTKY-CLAMPED TTL STRUCTURE
- PNP INPUTS
- OPEN COLLECTOR OUTPUTS

ELECTRICAL CHARACTERISTICS

Propagation Delay (Typ)	
A_n, B_n to f_n	9ns (82S42)
Input Load Current (Max)	
I_{In}"0"	800μA
I_{In}"1"	20μA
Output Current (Min)	
I_{out}"0"	30mA @ 0.5V (82S42)

LOGIC DIAGRAM

82S42 QUAD EXCLUSIVE-NOR

A	B	f
0	0	1
1	0	0
0	1	0
1	1	1

V_{CC} = (14)
GND = (7)
( ) = Denotes Pin Numbers