

8-INPUT DIGITAL MULTIPLEXER

82S31 82S32

ADVANCED INFORMATION

DIGITAL 8000 SERIES SCHOTTKY TTL/MSI

DESCRIPTION

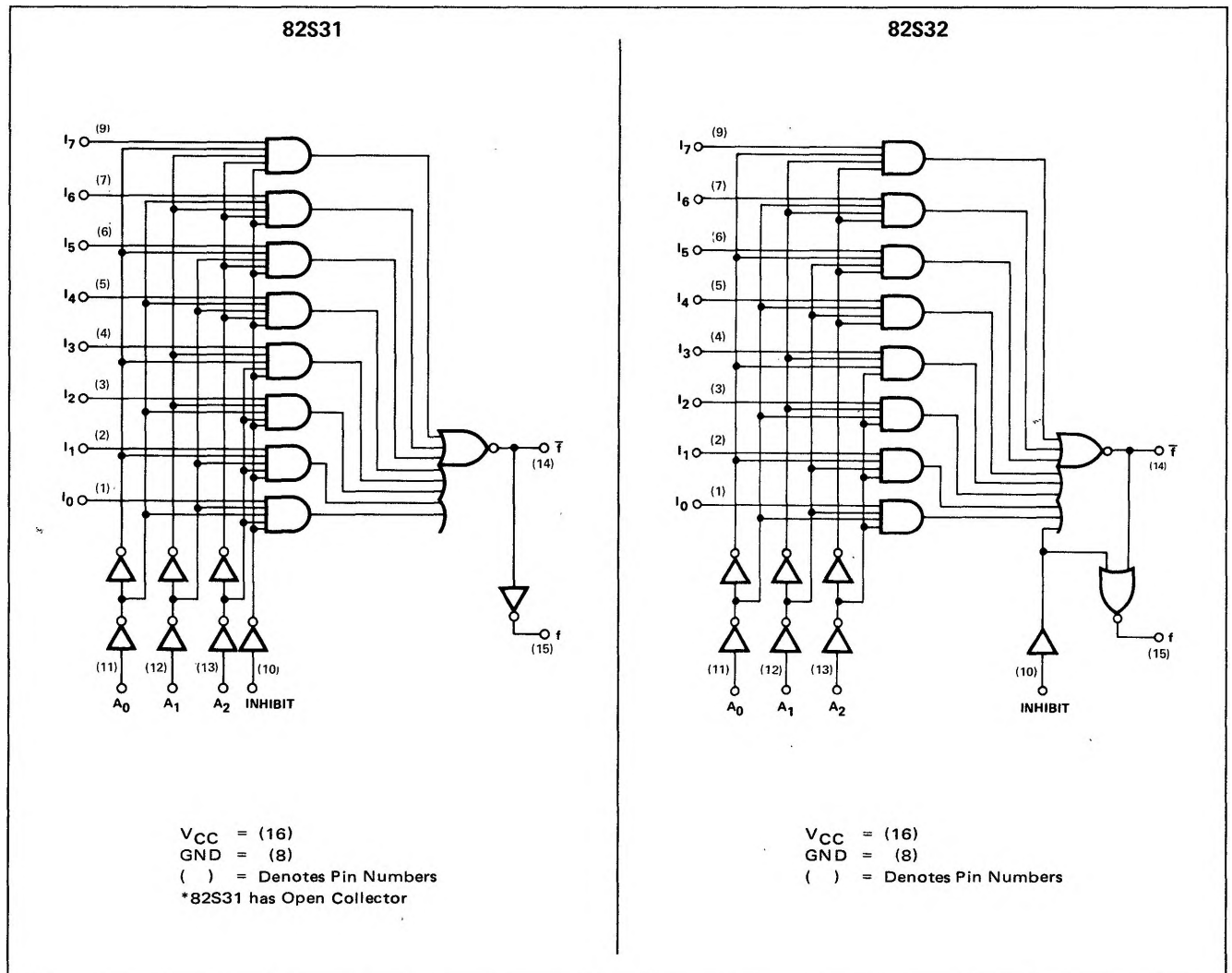
The 8-Input Digital Multiplexer is the logical equivalent of a single-pole, 8 position switch whose position is specified by a 3-bit input address.

The 82S31 is a variation of the 82S30 that provides open collector output \bar{f} for expansion of input terms. The 82S32 is similar to the 82S30 except in the effect of the INHIBIT input on the \bar{f} output. With the INHIBIT low, the selected input appears at the f output and, in complement, on the \bar{f} output. With the INHIBIT input high, both the f and the \bar{f} output are unconditionally low.

FEATURES

- SCHOTTKY-CLAMPED TTL STRUCTURE
- PNP INPUTS
- OPEN COLLECTOR OUTPUT (82S31)
- DIRECT OUTPUT INHIBIT (82S32)

LOGIC DIAGRAMS



ELECTRICAL CHARACTERISTICS

Propagation Delay (Typ)

	82S32	82S31
A_n to \bar{f}	12ns	14ns
I_n to \bar{f}	7ns	9ns

Input Load Current (Max)

$I_{In}''0''$		400 μ A
$I_{In}''1''$		10 μ A

Output Current

$I_{out}''0''$	20mA @ 0.5V
$I_{out}''1''$	1mA @ 2.7V (82S30/32)