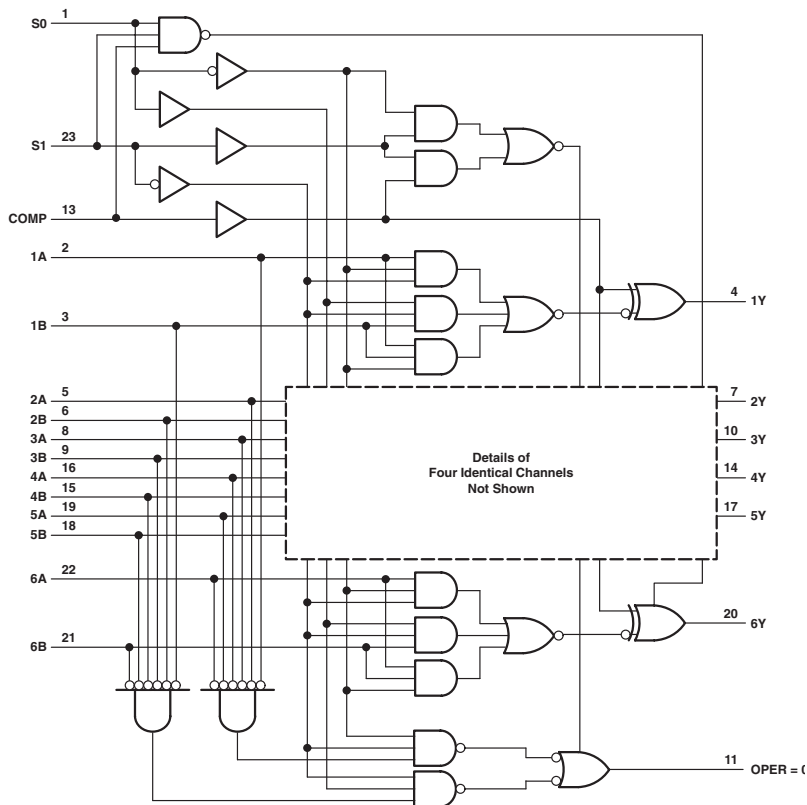# 857

HEX 2-TO-1 UNIVERSAL MULTIPLEXERS WITH 3-STATE OUTPUTS

- Select True or Complementary Data
- Perform AND/NAND (Masking) of A or B Operand
- Cascadable to Expand Number of Operands
- Detect Zeros on A or B Operands
- 3-State Outputs Interface Directly with System Bus

Logic Diagram

: **OBSOLETED or NOT RECOMMENDED NEW DESIGNS**

FUNCTION TABLE

INPUTS			OUTPUTS	
COMP	S1	S0	Y	OPER = 0
L	L	L	A	H = all A inputs L
L	L	H	B	H = all B inputs L
L	H	L	A•B	Z
L	H	H	L	L
H	L	L	$\overline{A}$	H = all A inputs L
H	L	H	$\overline{B}$	H = all B inputs L
H	H	L	$\overline{A•B}$	Z
H	H	H	Z	Z

ELECTRICAL CHARACTERISTICS AND RECOMMENDED OPERATING CONDITIONS

PARAMETER		MAX or MIN	ALS	AS	UNIT
I_{CCZ}		MAX	36	135	mA
I_{CCL}		MAX	33	175	mA
I_{OH}	Y	MAX	-2.6	-15	mA
	OPER = 0	MAX	-2.6	-2	mA
I_{OL}	Y	MAX	24	48	mA
	OPER = 0	MAX	24	20	mA

TIMING REQUIREMENTS AND SWITCHING CHARACTERISTICS

PARAMETER	INPUT	OUTPUT	MAX or MIN	ALS	AS
t_{pd}	A or B (COMP = "H")	Y inverting	MAX	14	12
t_{pd}	A or B (COMP = "L")	Y non-inverting	MAX	14	10
t_{pd}	S0 or S1	Y	MAX	33	13
t_{pd}	COMP	Y	MAX	18	13
t_{pd}	A or B	OPER = 0	MAX	37	14
t_{pd}	S0 to S1	OPER = 0	MAX	23	18
t_{en}	S0 to S1	Y	MAX	35	12
t_{dis}				23	11
t_{en}	COMP	Y	MAX	24	12
t_{dis}				21	9
t_{en}	S0	OPER = 0	MAX	20	12
t_{dis}				27	9
t_{en}	S1	OPER = 0	MAX	25	12
t_{dis}				19	9
t_{en}	COMP	OPER = 0	MAX	25	13
t_{dis}				20	9

UNIT: ns