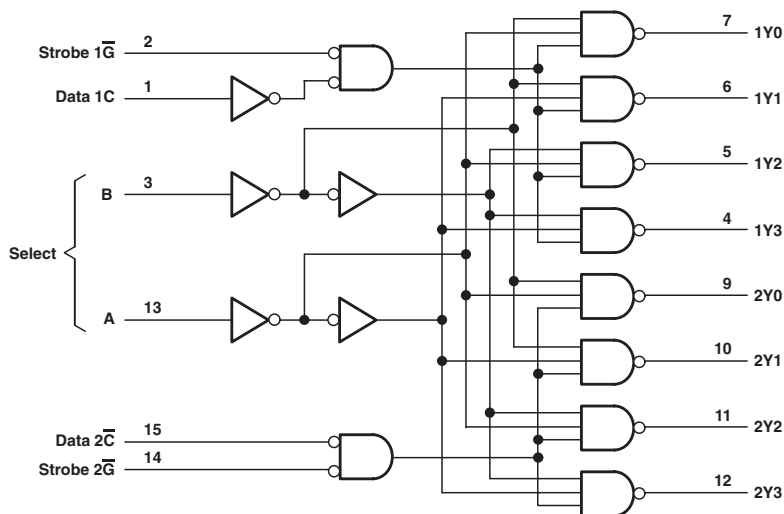


## DUAL 2-LINE TO 4-LINE DECODERS/DEMULTIPLEXERS WITH OPEN-COLLECTOR OUTPUTS

- Individual Strobes Simplify Cascading for Decoding or Demultiplexing Larger Words
- Outputs: Open-Collector

Logic Diagram



## FUNCTION TABLES

2-LINE TO 4-LINE DECODER OR  
1-LINE TO 4-LINE DEMULTIPLEXER

INPUTS				OUTPUTS			
SELECT		STROBE	DATA				
B	A	1G	1C	1Y0	1Y1	1Y2	1Y3
X	X	H	X	H	H	H	H
L	L	L	H	L	H	H	H
L	H	L	H	H	L	H	H
H	L	L	H	H	H	L	H
H	H	L	H	H	H	H	L
X	X	X	L	H	H	H	H

INPUTS				OUTPUTS			
SELECT		STROBE	DATA				
B	A	2G	2C	2Y0	2Y1	2Y2	2Y3
X	X	H	X	H	H	H	H
L	L	L	L	L	H	H	H
L	H	L	L	H	L	H	H
H	L	L	L	H	H	L	H
H	H	L	L	H	H	H	L
X	X	X	H	H	H	H	H

3-LINE TO 8-LINE DECODER OR  
1-LINE TO 8-LINE DEMULTIPLEXER

INPUTS				OUTPUTS							
SELECT			STROBE or DATA								
C†	B	A	G‡	2Y0	2Y1	2Y2	2Y3	1Y0	1Y1	1Y2	1Y3
X	X	X	H	H	H	H	H	H	H	H	H
L	L	L	L	L	H	H	H	H	H	H	H
L	L	H	L	H	L	H	H	H	H	H	H
L	H	L	L	H	H	L	H	H	H	H	H
L	H	H	L	H	H	H	L	H	H	H	H
H	L	L	L	H	H	H	H	L	H	H	H
H	L	H	L	H	H	H	H	H	L	H	H
H	H	L	L	H	H	H	H	H	H	L	H
H	H	H	L	H	H	H	H	H	H	L	L

† C = inputs 1C and 2C connected together

‡ G = inputs 1G and 2G connected together

## ELECTRICAL CHARACTERISTICS AND RECOMMENDED OPERATING CONDITIONS

PARAMETER	MAX or MIN	TTL	LS	ALS	UNIT
I <sub>CC</sub>	MAX	40	10	9	mA
I <sub>OL</sub>	MAX	16	8	8	mA
V <sub>OH</sub>	MAX	5.5	5.5	5.5	mA

## SWITCHING CHARACTERISTICS

PARAMETER	INPUT	OUTPUT	MAX or MIN	TTL	LS	ALS
t <sub>PLH</sub>	2C 1G or 2G	Y	MAX	23	40	38
t <sub>PHL</sub>				30	51	22
t <sub>PLH</sub>	A or B	Y	MAX	34	46	55
t <sub>PHL</sub>				34	51	25
t <sub>PLH</sub>	1C	Y	MAX	27	48	50
t <sub>PHL</sub>				33	48	23

UNIT: ns