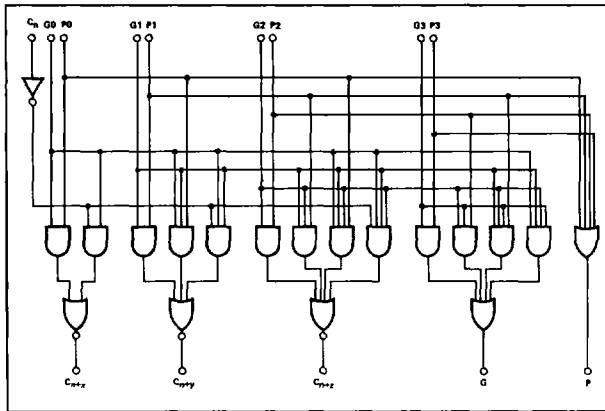
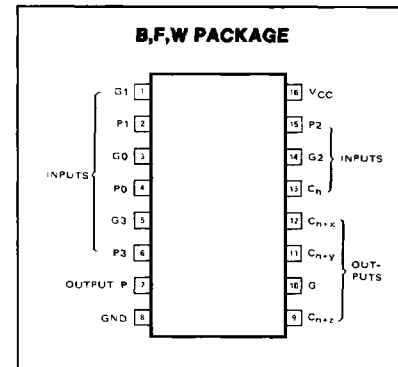


LOGIC DIAGRAM



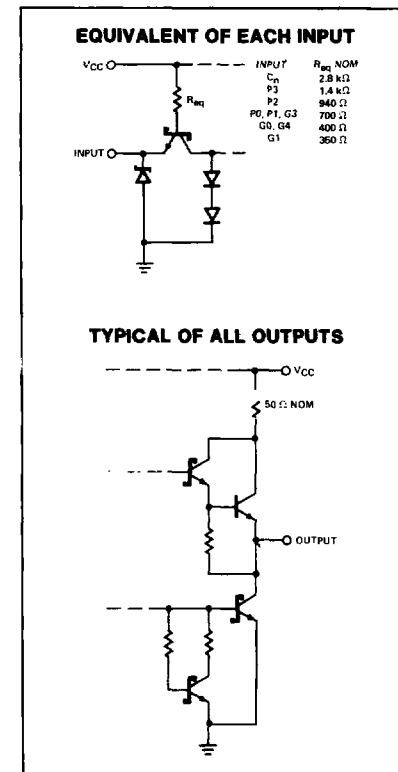
PIN CONFIGURATION



PIN DESIGNATIONS

DESIGNATION	PIN NOS.	FUNCTION
G0, G1, G2, G3	3, 1, 14, 5	Active-Low Carry Generate Inputs
P0, P1, P2, P3	4, 2, 15, 6	Active-Low Carry Propagate Inputs
C _n	13	Carry Input
C _{n+x} , C _{n+y} , C _{n+z}	12, 11, 9	Carry Outputs
G	10	Active-Low Carry Generate Output
P	7	Active-Low Carry Propagate Output
V _{CC}	16	Supply Voltage
GND	8	Ground

INPUT/OUTPUT SCHEMATICS



SWITCHING CHARACTERISTICS V_{CC} = 5V, T_A = 25°C

TEST CONDITIONS			54/74			54/74S			UNIT
			C _L = 15pF R _L = 400Ω			C _L = 15pF R _L = 280Ω			
PARAMETER	FROM INPUT	TO OUTPUT	MIN	TYP	MAX	MIN	TYP	MAX	
Propagation delay time				11	17				ns
t _{PLH} Low-to-high									
t _{PHL} High-to-low				15	22				
t _{PLH} Low-to-high	G0,G1,G2, G3,P0,P1, P2, P3	C _{n+x} , C _{n+y} , C _{n+z}				4.5	7	4.5	7
t _{PHL} High-to-low									
t _{PLH} Low-to-high	G0,G1,G2, G3,P1,P2, P3	G				5	7.5	7	10.5
t _{PHL} High-to-low									
t _{PLH} Low-to-high	P0,P1,P2 P3	P				4.5	6.5		
t _{PHL} High-to-low						6.5	10		
t _{PLH} Low-to-high	C _n	C _{n+x} , C _{n+y} , C _{n+z}				6.5	10		
t _{PHL} High-to-low						7	10.5		

Load circuit and typical waveforms are shown at the front of section.

LOGIC

SPEED/PACKAGE RELIABILITY

54	F,W	74	B
54S	F,W	74S	B