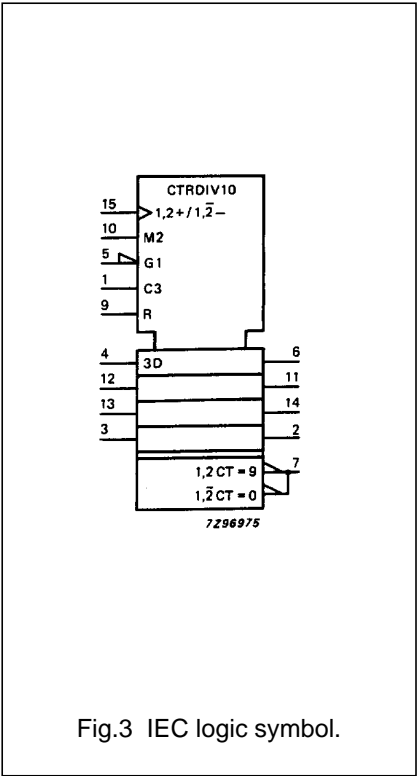
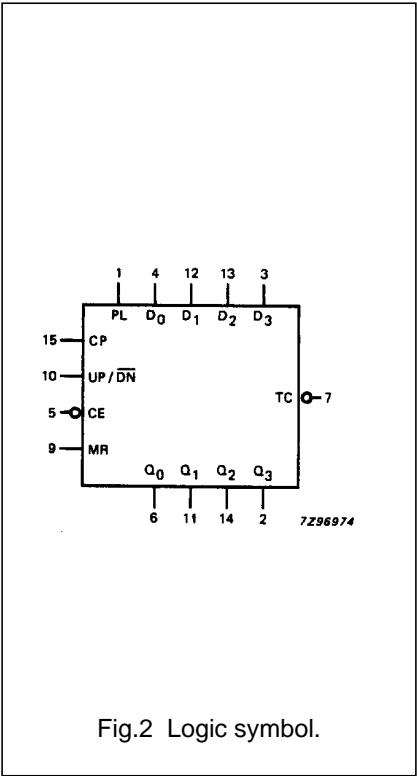
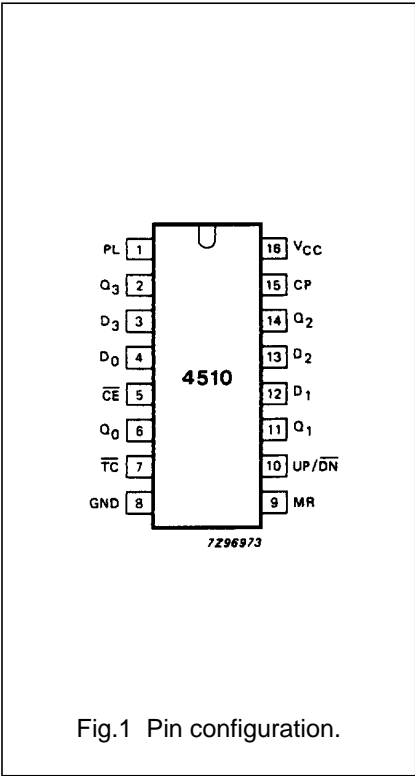


BCD up/down counter

74HC/HCT4510

PIN DESCRIPTION

PIN NO.	SYMBOL	NAME AND FUNCTION
1	PL	parallel load input (active HIGH)
4, 12, 13, 3	D <sub>0</sub> to D <sub>3</sub>	parallel inputs
5	$\overline{\text{CE}}$	count enable input (active LOW)
6, 11, 14, 2	Q <sub>0</sub> to Q <sub>3</sub>	parallel outputs
7	$\overline{\text{TC}}$	terminal count output (active LOW)
8	GND	ground (0 V)
9	MR	asynchronous master reset input (active HIGH)
10	UP/ $\overline{\text{DN}}$	up/down control input
15	CP	clock input (LOW-to-HIGH, edge-triggered)
16	V <sub>CC</sub>	positive supply voltage



BCD up/down counter

74HC/HCT4510

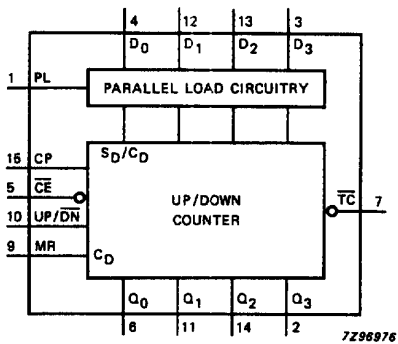


Fig.4 Functional diagram.

FUNCTION TABLE

MR	PL	UP/DN	CE	CP	MODE
L	H	X	X	X	parallel load
L	L	X	H	X	no change
L	L	L	L	↑	count down
L	L	H	L	↑	count up
H	X	X	X	X	reset

Notes

- 1. H = HIGH voltage level
- L = LOW voltage level
- X = don't care
- ↑ = LOW-to-HIGH clock transition

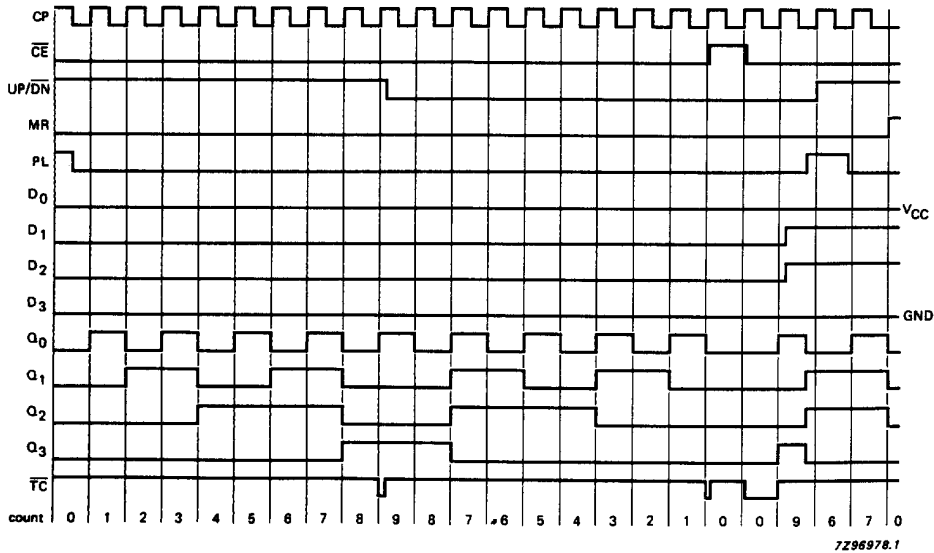


Fig.5 Timing diagram.