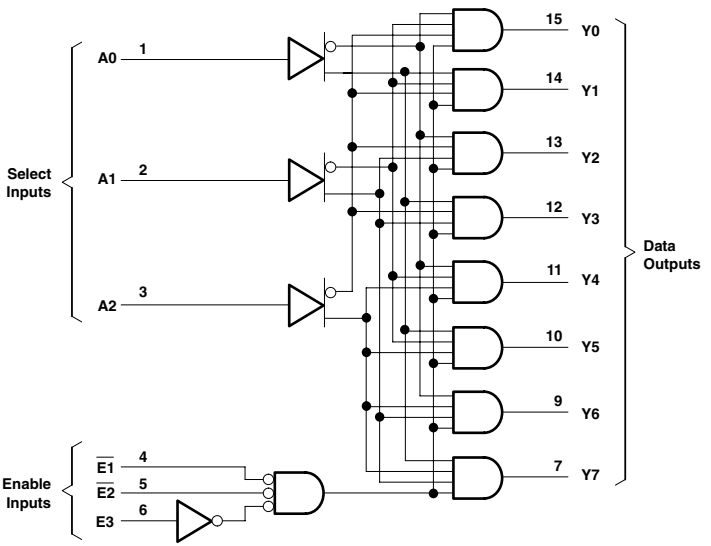
Logic Diagram (CD74AC/ACT)



: OBSOLETED or NOT RECOMMENDED NEW DESIGNS

FUNCTION TABLE

INPUTS						OUTPUTS							
ENABLE			ADDRESS										
E3	$\overline{E2}$	$\overline{E1}$	A2	A1	$\overline{A0}$	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	X	H	X	X	X	L	L	L	L	L	L	L	L
L	X	X	X	X	X	L	L	L	L	L	L	L	L
X	H	X	X	X	X	L	L	L	L	L	L	L	L
H	L	L	L	L	L	H	L	L	L	L	L	L	L
H	L	L	L	L	H	L	H	L	L	L	L	L	L
H	L	L	L	H	L	L	L	H	L	L	L	L	L
H	L	L	L	H	H	L	L	L	H	L	L	L	L
H	L	L	H	L	L	L	L	L	L	H	L	L	L
H	L	L	H	L	H	L	L	L	L	L	H	L	L
H	L	L	H	H	L	L	L	L	L	L	L	H	L
H	L	L	H	H	H	L	L	L	L	L	L	L	H

Note: H = High Voltage Level, L = Low Volltage Level, X = Don't Care

ELECTRICAL CHARACTERISTICS AND RECOMMENDED OPERATING CONDITIONS

PARAMETER	MAX or MIN	CD74 HC	CD74 HCT	CD74 AC	CD74 ACT	UNIT
I_{CC}	MAX	0.16	0.16	0.16	0.16	mA
I_{OH}	MAX	-4	-4	-24	-24	mA
I_{OL}	MAX	4	4	24	24	mA

SWITCHING CHARACTERISTICS

PARAMETER	INPUT	OUTPUT	MAX or MIN	CD74 HC	CD74 HCT	CD74 AC	CD74 ACT
t_{PLH}	Address	Y	MAX	45	53	15	15.6
t_{PHL}				45	53	15	15.6
t_{PLH}	$\overline{E1}$, $\overline{E2}$ ($\overline{G2A}$, $\overline{G2B}$)	Y	MAX	60	60	11.9	14.2
t_{PHL}				60	60	11.9	14.2
t_{PLH}	E3 (G1)	Y	MAX	60	60	16.6	13.6
t_{PHL}				60	60	16.6	13.6

UNIT:ns