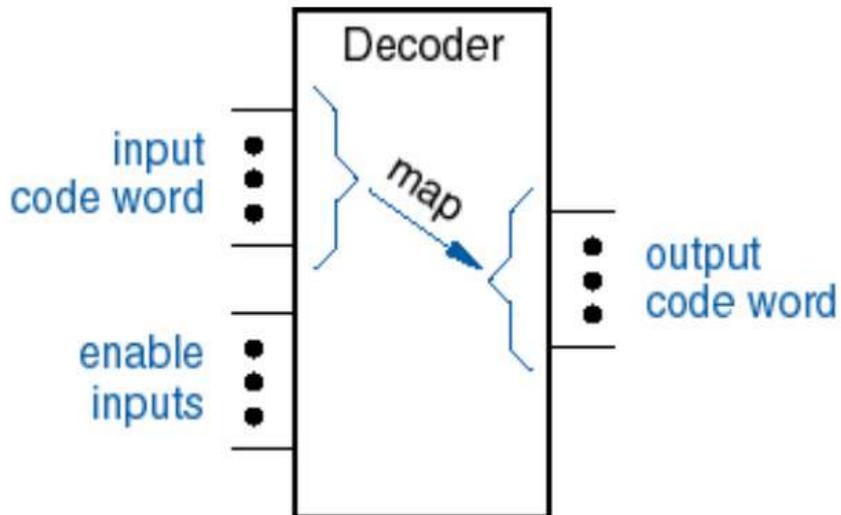


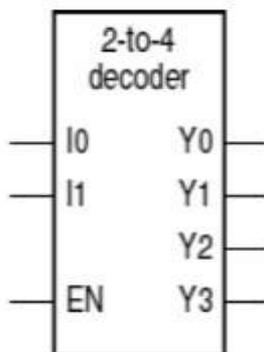
Decoders

General decoder structure



Typically n inputs, 2^n outputs – 2-to-4, 3-to-8, 4-to-16, etc.

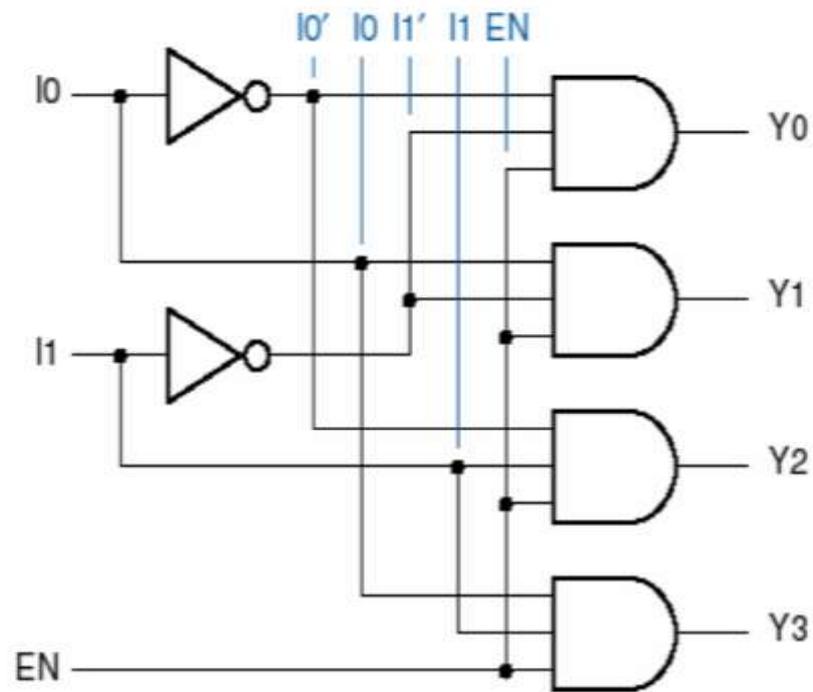
Binary 2-to-4 decoder



<i>Inputs</i>			<i>Outputs</i>			
EN	I1	I0	Y3	Y2	Y1	Y0
0	x	x	0	0	0	0
1	0	0	0	0	0	1
1	0	1	0	0	1	0
1	1	0	0	1	0	0
1	1	1	1	0	0	0

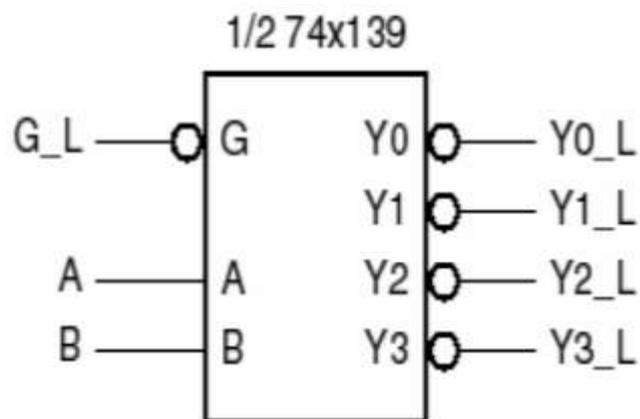
Note "x" (don't care) notation.

2-to-4-decoder logic diagram



Activate W

Decoder Symbol



Activate W