2-to-4 Decoder with Enable, 3-to-8 Decoder.

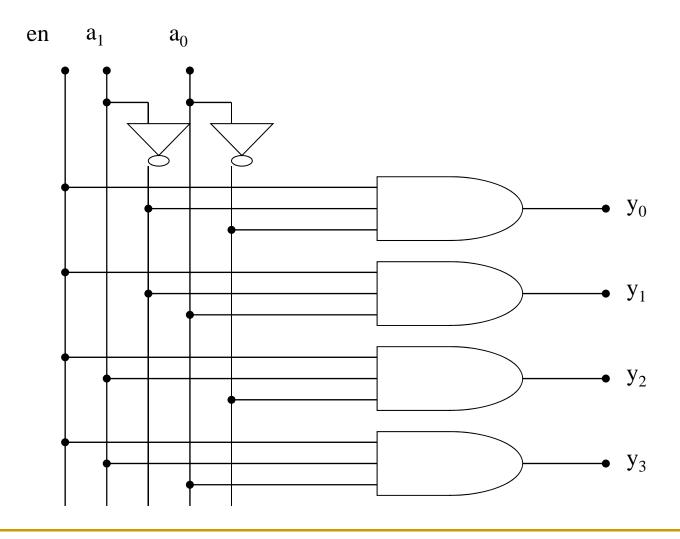
CVLSI

601系統晶片實驗室

2:4 Decoder with Enable

Truth Table	en	\mathbf{a}_1	a_0	y_3	y_2	\mathbf{y}_1	y_0
↓ Enable	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

2:4 Decoder with Enable



3:8 Decoder

Truth Table

	a_2	\mathbf{a}_1	a_0	y ₇	y ₆	y ₅	y_4	y_3	y_2	\mathbf{y}_1	y_0
• _	0	0	0	0	0	0	0	0	0	0	1
_	0	0	1	0	0	0	0	0	0	1	0
	0	1	0	0	0	0	0	0	1	0	0
	0	1	1	0	0	0	0	1	0	0	0
	1	0	0	0	0	0	1	0	0	0	0
	1	0	1	0	0	1	0	0	0	0	0
	1	1	0	0	1	0	0	0	0	0	0
	1	1	1	1	0	0	0	0	0	0	0

3:8 Decoder

