

# Truth Table for DECODER

Ahish Deshpande

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### 1x2 DECODER

EN	S0	m1	m2
0	x	0	0
1	0	1	0
1	1	0	1

### 2x4 DECODER

EN	S1	S0	m1	m2	m3	m4
0	x	x	0	0	0	0
1	0	0	1	0	0	0
1	0	1	0	1	0	0
1	1	0	0	0	1	0
1	1	1	0	0	0	1

### 3x8 DECODER

EN	S2	S1	S0	m1	m2	m3	m4	m5	m6	m7	m8
0	x	x	x	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0	0	0	0
1	0	0	1	0	1	0	0	0	0	0	0
1	0	1	0	0	0	1	0	0	0	0	0
1	0	1	1	0	0	0	1	0	0	0	0
1	1	0	0	0	0	0	0	1	0	0	0
1	1	0	1	0	0	0	0	0	1	0	0
1	1	1	0	0	0	0	0	0	0	1	0
1	1	1	1	0	0	0	0	0	0	0	1