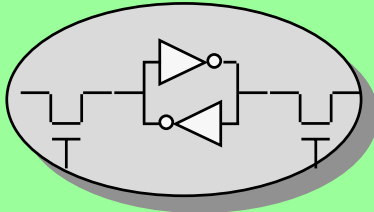


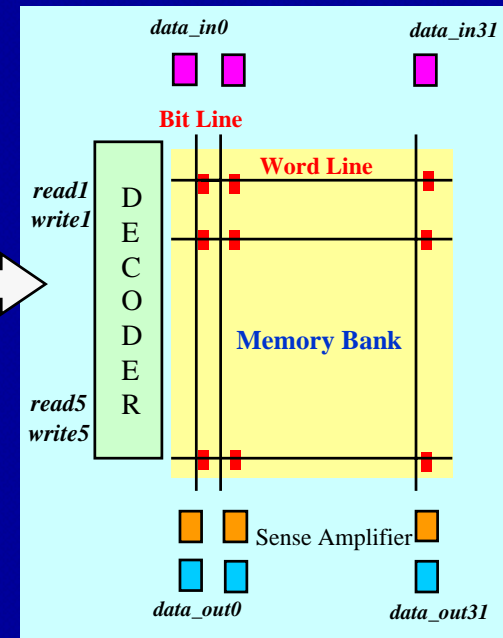
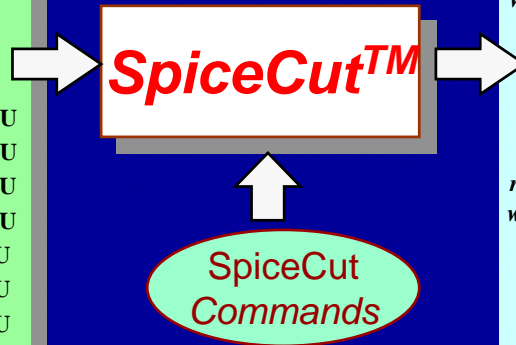
Recognize Memory Structure

Memory Cell



```
.subckt dual_cell 3 4 5 6 14 16
.alias word = 14
.alias bit = 5
.alias bitb = 4
.alias word2 = 16
.alias bit2 = 6
.alias bit2b = 3
M29 9 8 VDD 7 P L=.40U W=.60U
M30 VDD 9 8 7 P L=.40U W=.60U
M33 0 8 9 11 N L=.40U W=1.37U
M34 0 9 8 11 N L=.40U W=1.37U
M37 4 14 9 11 N L=.40U W=.85U
M38 5 14 8 11 N L=.40U W=.85U
M39 3 16 9 11 N L=.40U W=.85U
M40 6 16 8 11 N L=.40U W=.85U
.ENDS
```

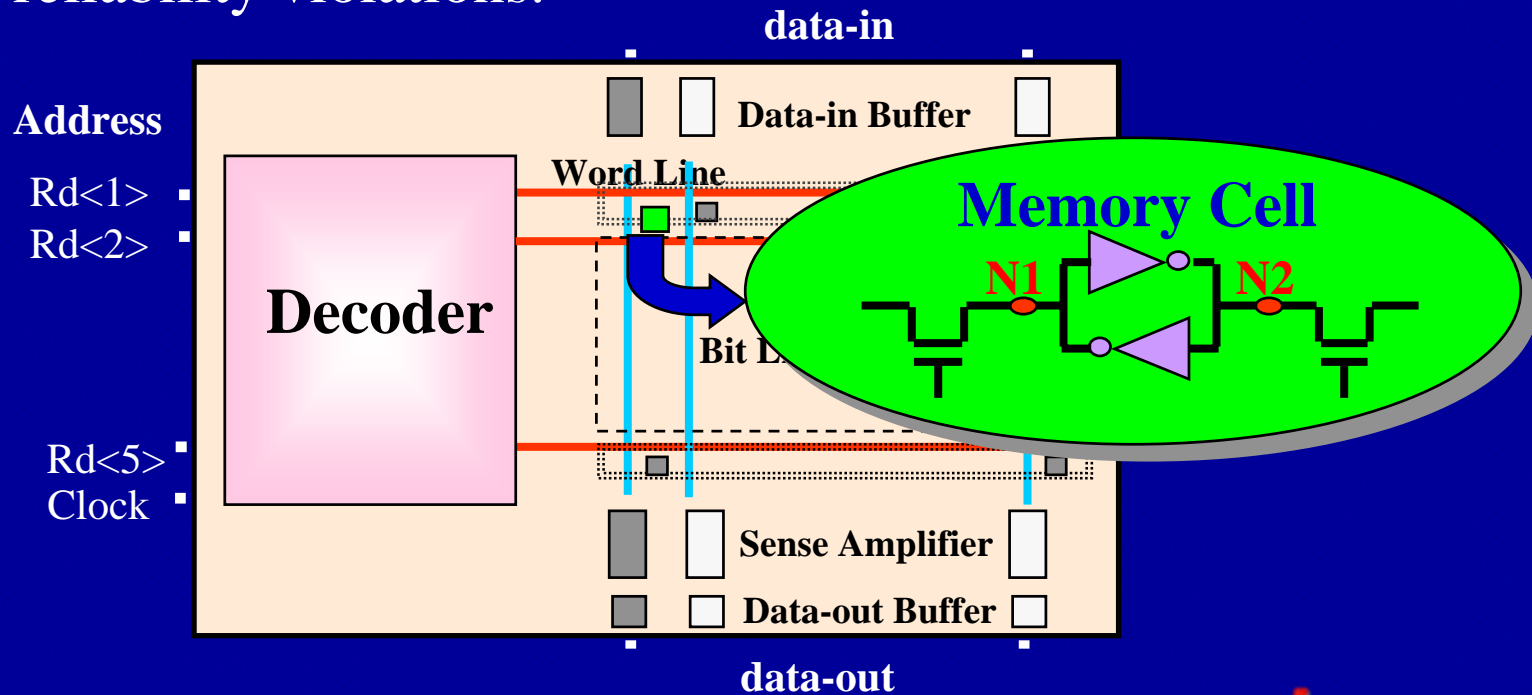
- ◆ Pattern matching with core cell
- ◆ Locate all **memory banks, words** and **bits**



'Inside Memory-Cell' Example

For Data-In Setup / Hold Time

Internal node **N1** / **N2** of memory cell can be automatically located for extracting critical-path circuits and checking reliability violations.



'Inside Memory' Example

For Address Setup / Hold Time

Latch output **N101** can be automatically located for extracting critical-path circuits and checking reliability violations.

