

CSIE 2344: Discussion (Unit 16)

1 Iterative Circuit

The output Z of an iterative circuit is to be 1 and only if at least one of the X inputs is 1, and no group of two or more consecutive 1 inputs occurs. Examples: 00101000100 gives an output $Z = 1$; 00101100000 gives an output $Z = 0$.

1. Draw a Moore state graph for a typical cell.
2. Derive the equations for the typical cell and for the output circuit.
3. Show how a sequential circuit can be constructed using the typical cell and the output circuit.