## **FSM For Write\_Logic**

## Insert=1&&!full/ insert=0/ data\_in=1 wptr=previous pointer value+1'b1 write\_addr=previous address data\_in=0 wptr=8'b0 value+1'b1 write\_addr=7'b0 write\_enabel=1'b1 write\_enabel=0 flush=1/ Insert=1&&!full/ full=0 data\_in=1 write\_enabel=0 wptr=previous pointer value+1'b1 write\_addr=previous address write\_addr=7'b0 value+1'b1 wptr=8'b0 write\_enabel=1'b1 S0 idle !reset=1/ wptr=8'b1/ full=0 write\_enabel=0 wptr=8'b0 write\_address=7'b0 wptr=8'b0 Insert=1&&!full/ data\_in=1 wptr=previous pointer value+1'b1 write\_addr=previous address value+1'b1 write\_enabel=1'b1 Insert=0||full data\_in=0 wptr= retains write\_pointer value at S0 write\_addr=retains write\_address value at write\_enabel=1'b0 **S1** Insert=0llfull

data\_in=0

write\_enabel=1'b0

write\_pointer= retains write\_pointer value at S0 write\_addr=retains write\_address value at