# One Hot Design (2A)

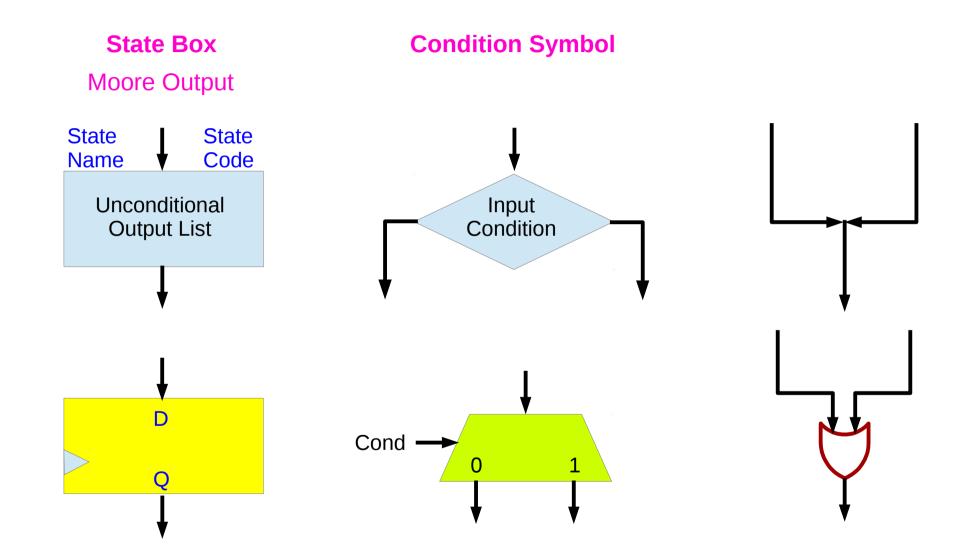
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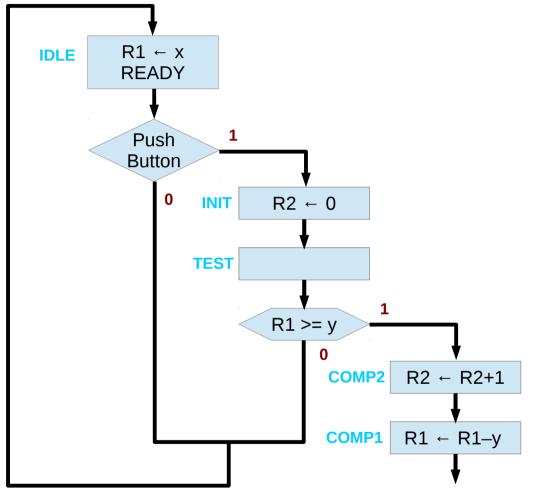
# Moore ASM and One Hot Components



### Examples

int x = 10, y = 3;int R1 = x; int  $R^2 = 0$ ; while  $(R1 \ge y)$  { R1 = R1 - y;R2 = R2 + 1;R1 = x % yR2 = x / y

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One Hot (2A)

## Examples

int 
$$x = 10, y = 3;$$
  
int  $R1 = x;$   
int  $R2 = 0;$   
while  $(R1 >= y) \{$   
 $R1 = R1 - y;$   
 $R2 = R2 + 1;$   
}  
R1 = x % y  
 $R2 = x / y$ 

One Hot (2A)

D

D O

Power On Device

DQ

D Q

COMP2

COMP1

0

#### References

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- [4] M. G. Arnold, "Verilog Digital Computer Design : Algorithms into Hardware", 1999
- [5] F.P. Prosser, D.E. Winkel, "The Art of Digital Design : An Intro to Top-Down Design", 2<sup>nd</sup> ed, 1986