

# Elementos de Lógica Digital II

## Aula 4 – Introduction to Moore FSM

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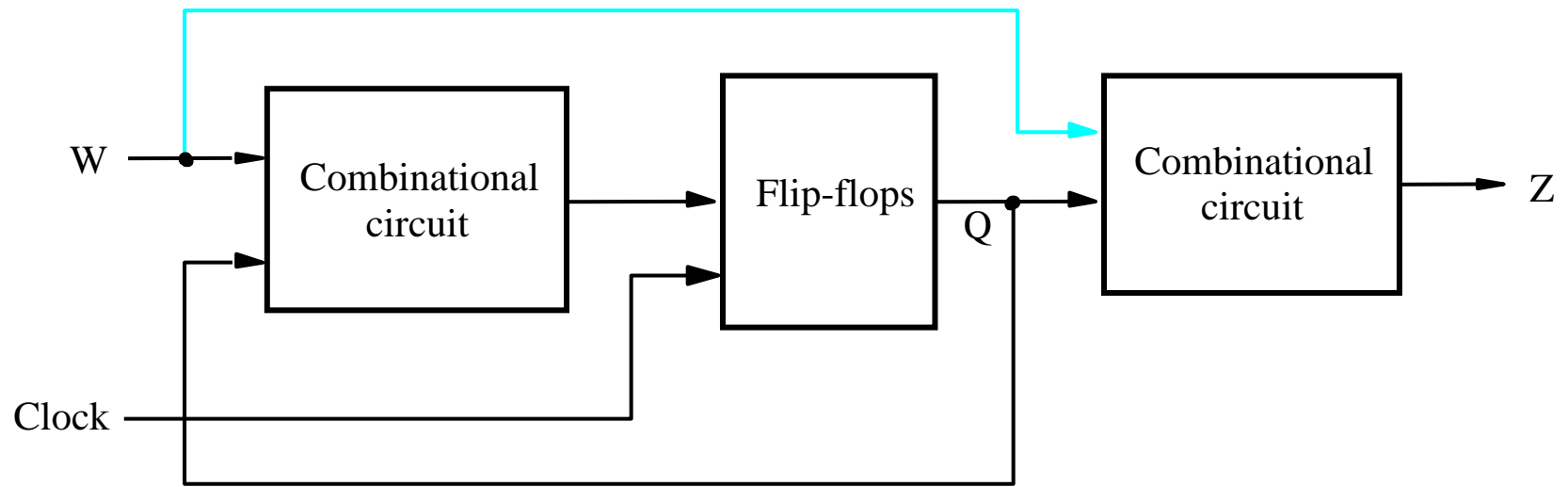


Figure 8.1. The general form of a sequential circuit.

Clockcycle:	$t_0$	$t_1$	$t_2$	$t_3$	$t_4$	$t_5$	$t_6$	$t_7$	$t_8$	$t_9$	$t_{10}$
$w$ :	0	1	0	1	1	0	1	1	1	0	1
$z$ :	0	0	0	0	0	1	0	0	1	1	0

Figure 8.2. Sequences of input and output signals.

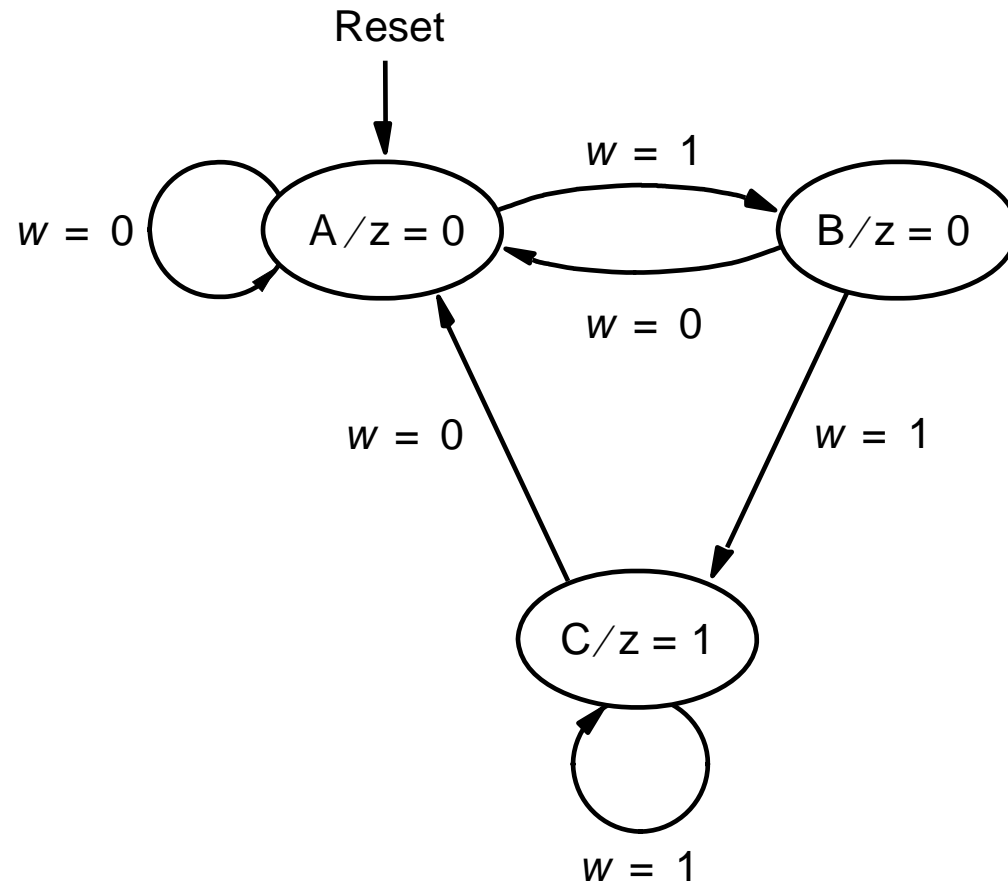


Figure 8.3. State diagram of a simple sequential circuit.

Present state	Next state		Output $z$
	$w = 0$	$w = 1$	
A	A	B	0
B	A	C	0
C	A	C	1

Figure 8.4. State table for the sequential circuit in Figure 8.3.

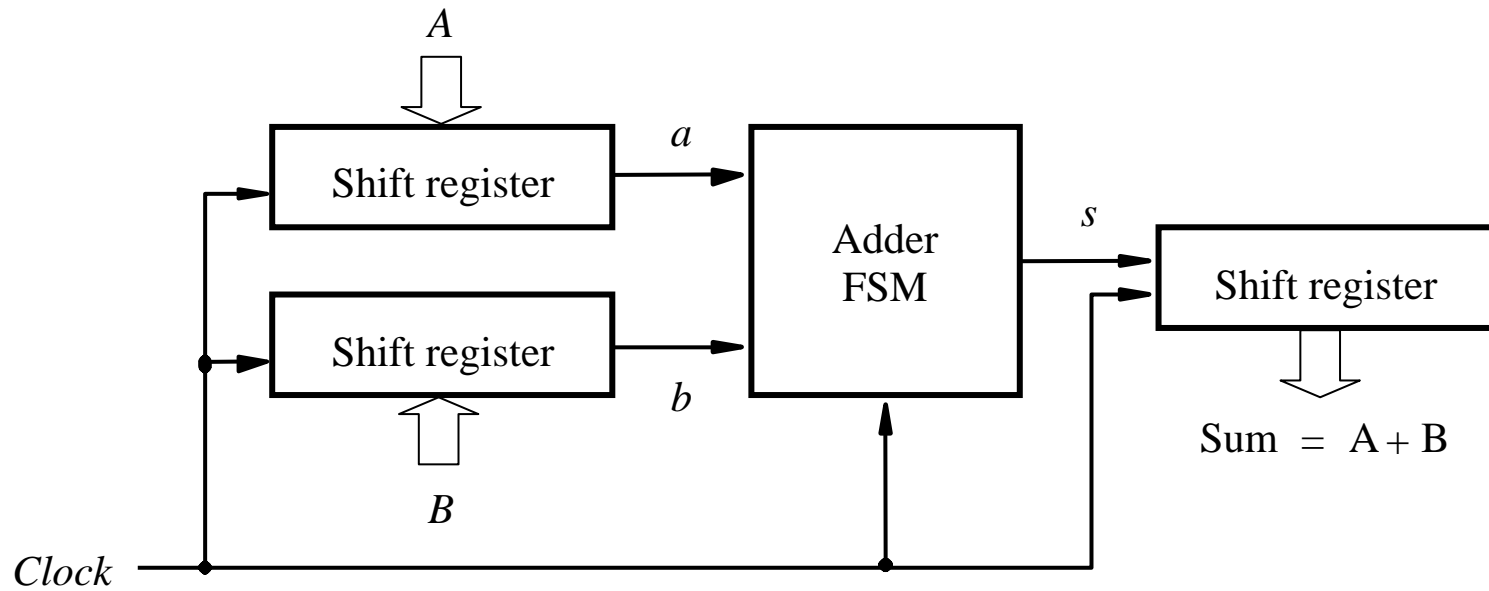


Figure 8.39. Block diagram for the serial adder.

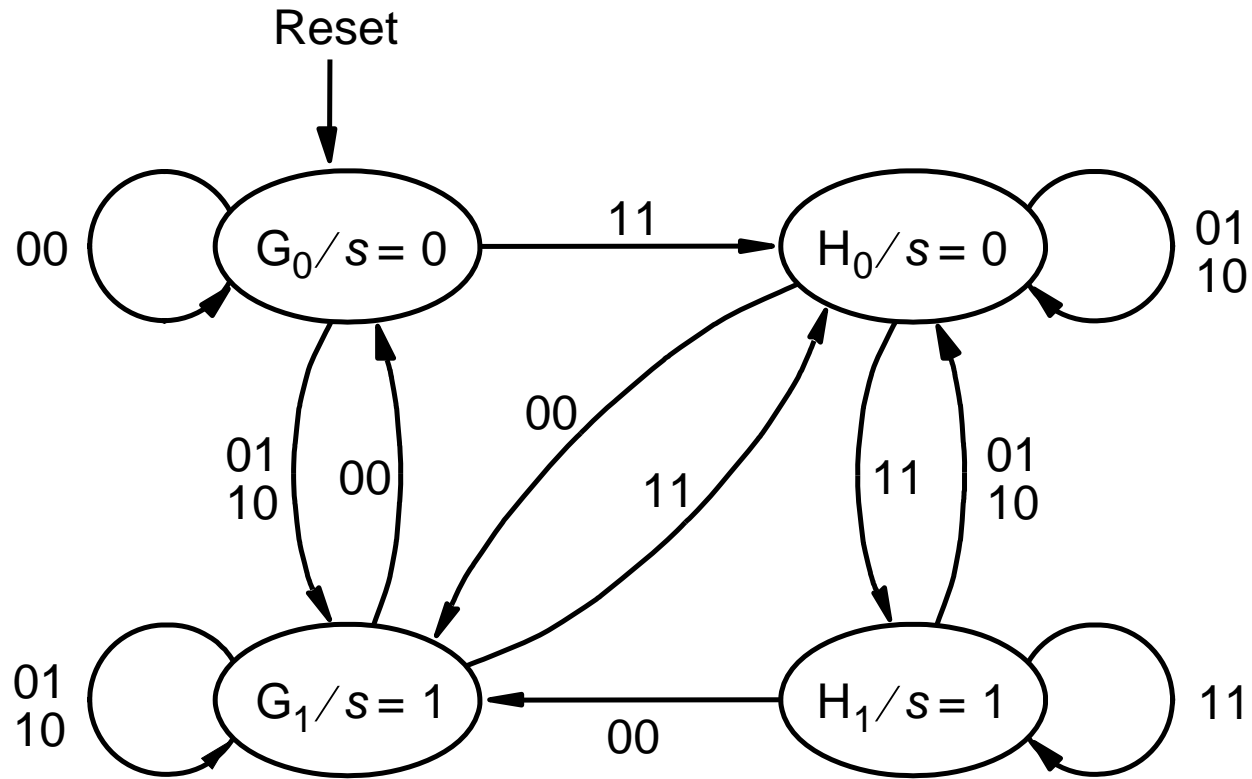


Figure 8.44. State diagram for the Moore-type serial adder FSM.