MemRead
ALUSrcA = 0
IRd = 0
IRWrite
ALUSrcB = 01
ALUOp = 00
PCWrite
PCSource = 00

0
Start

1

Instruction decode/
Register fetch

ALUSrcA = 0
ALUSrcB = 11
ALUOp = 00

Memory-reference FSM
(Figure 5.33)

Start

(ROp = 'LW') or (ROp = 'SW')

R-type FSM
(Figure 5.34)

(ROp = R-type)

Branch FSM
(Figure 5.35)

(ROp = 'BEQ')

Jump FSM
(Figure 5.36)

(ROp = 'J')