Add

Shift left 2

IF/ID

EX/MEM

MEM/WR

Address

Instruction memory

Read register 1

Read register 2

Write register

Write data

Zero

ALU result

Add

Mux

Write

Data memory

Read data

Read data 1

Read data 2

Read register 1

Read register 2

Write register

Write data

16

Sign extension

12

97108/ Patterson

Figure 06.12