Instruction
Read register 1
Read register 2
Write register
Write data
Read data 1
Read data 2
ALUSrc
ALU operation
Zero
ALU result
MemRead
MemWrite
RegWrite
MemtoReg
16
32
Sign extend
16
32
Address
Read data
Data memory
Write data
Write memory
RegWrite
MemWrite
MemtoReg
Instruction