addiu logic instruction:

The **addiu** instruction does a anddition of two 32-bit . At run time the 16-bit immediate operand is sigen extended to make it a 32-bit operand.

the following is a machine code description for addiu:

`addiu \$rt, \$rs, immed`

implementation:

this design is based on the fact that addiu is identical to addi with deffrent overflow behavior

opcode	control
000101	10010000000000000000

schmatic

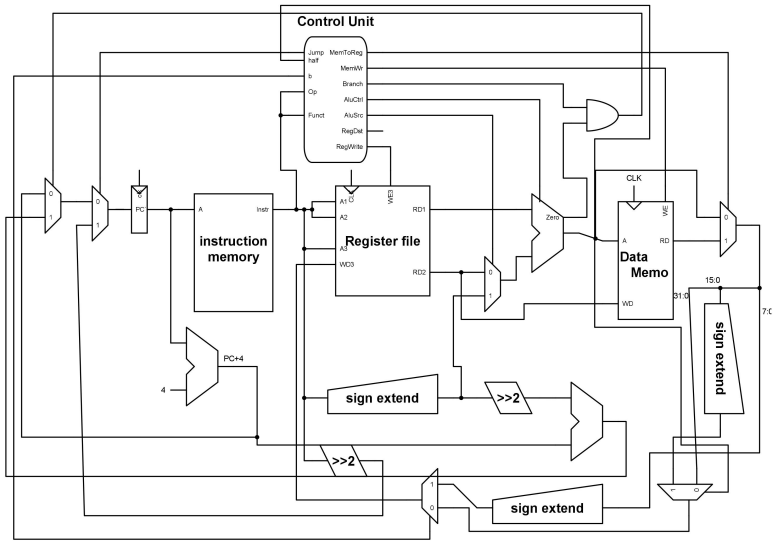

Figure 1: alt text