

CS 631-02 Processor Design Branches Mem

Lab 07 Q&A

Project 05

Tests

unit tests

prog tests

codegen tests

ntlang

Incremental Development

Major Processor Elements

Components

Data Path

Control Path

Remaining Instructions

- Data Processing Instructions
- Branches
- Data Memory

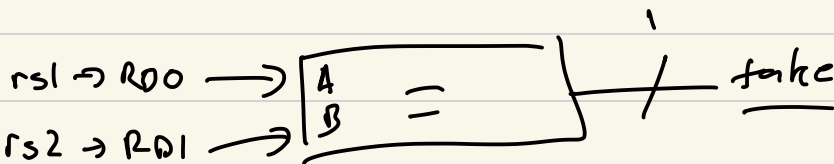
Branching

beq t_0, t_1, label

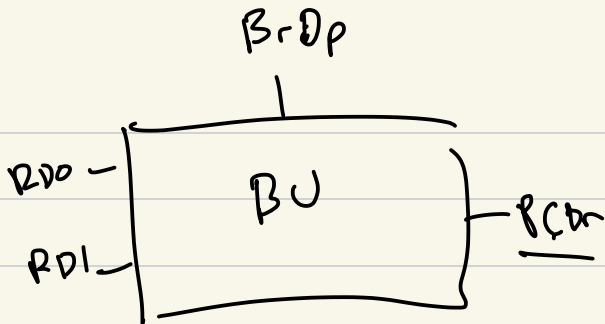
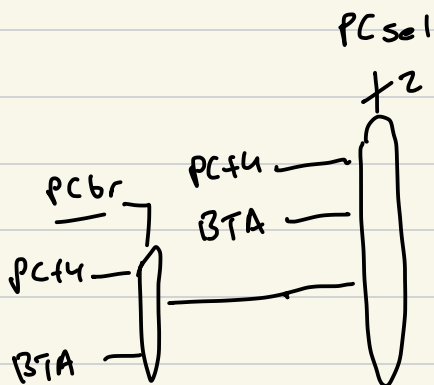
1) Compute the BTA (branch target addr)

$$\text{BTA} = \text{PC} + \text{imm} - b$$

2) Determine if we take the branch

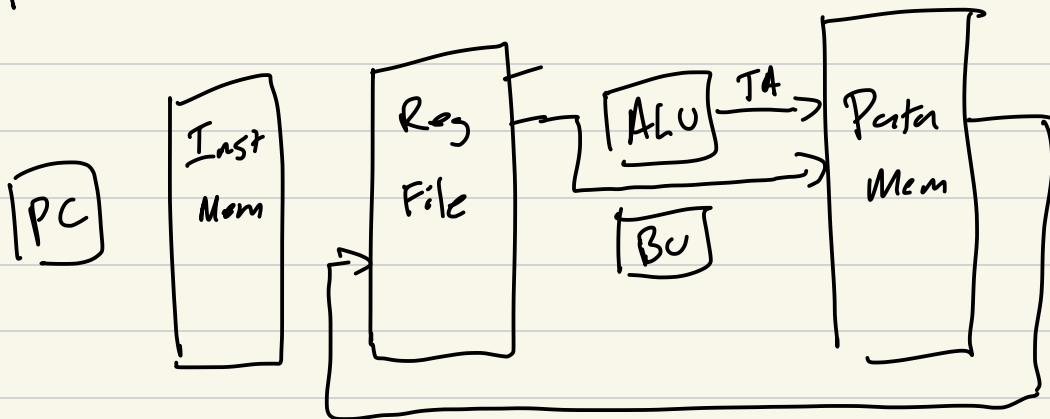


Option #1



Data Memory

RAM



lw to, 8(t+1)
TA

sw to, (t+1)

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