

# CPU16 Design

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## 1 Administrivia

### Announcements

Last assignment due in one week.

### Assignment

#### From Last Time

Multiplier design.

### Outline

1. Definition of instruction set.
2. Layout of instruction formats and consideration of design trade-offs.

### Coming Up

Continued CPU16 design.

## 2 Instruction Set Definition

Our starting point:

1. add, sub.
2. and, or, nor.
3. slt, beq
4. lw, sw
5. j

## 3 Instruction Format Definition

Starting from the standard three formats (R-, I-, and J-format), what alternatives do we have and what are the trade-offs?