605.611 - Foundations of Computer Architecture

Assignment 08 - Pipelining

Sabbir Ahmed

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1. Identify the size and bits values for each of the pipe line registers `IF/ID`, `ID/EX`, `EX/MEM`, `MEM/WB`. You should use slides 66 and 75 combined for this. Be sure to include the control bits in the registers. So for the `IF/ID` register, you would say "size is 64 bits, contains Instruction (32) and PC(32)".

Pipeline Register	Size (bits)	Values
`IF/ID`	64	Instruction (32) PC (32)
`ID/EX`	128	`rs` and `rt` from `IF/ID` (64) Sign-extended immediate (32) PC (32)
`EX/MEM`	97	ALU result (33) ALU zero (1) `rt` (32) PC (32)
`MEM/WB`	64	Read data (32) ALU result from `EX/MEM` (32)