https://www.figma.com/file/HhDjGMgt5wnYJcV10LSz1l/pipeline-x-games-mode?node-id=0%3A1

link to view design ^^^

Hazard Detection

Forwarding Unit

Instruction Memory

Address

Register File

Control Word Combinational Logic (gen form)

Memory Cache/Pmem/ etc

MUX

PC

IR

Register File

ALU Reg

RS2 Reg

Rd Reg

Compare

IF/ID

ID/EX

EX/MEM

MEM/WB

EX

MEM

W/B

IR

Rd Reg

imm

PC

C P

Data from WB

MEM/WB RegisterRd

EX/MEM RegisterRd

IR[11:7] rd

Immediate Value Gen

4