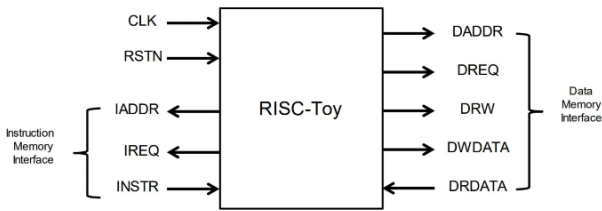


Top module



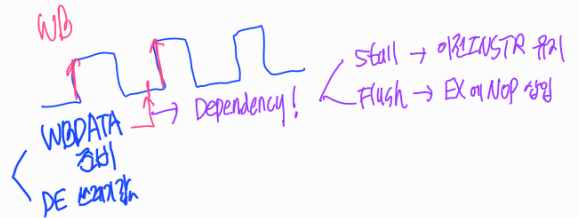
① 프로세서의 Stage 수? 7

② Forwarding ← DM/IM은 동기식 Read/Write
RF은 동기식 Write, 비동기 Read

J FF D E M W
movi FF D E M W
movi FF D E M W

PC = 4(4-1)

PCSRC = 0
PCWRITE = 1
PCFLUSH = 1
DEFLUSH = 1



Typ1. No stall

FF D E M W
FF D E M W

Typ2. No stall

FF D E M W
FF D E M W
FF D E M W

Typ3. No stall

FF D E M W
FF D E M W
FF D E M W
FF D E M W

Typ4. 1stall

add R0, R0, R1 FF D E M W
add R1, R0, R2 FF D E M W
add R2, R0, R3 FF D E M W
add R3, R0, R4 FF D E M W
add R4, R0, R5 FF D E M W

Load Use 1, 2 stall

LD R5,
ADDI R6, R5, 10
ADDI R7, R5, 15

FF D E M W
FF D * * E M W
FF * * D E M W
F * * F * D E M W
* * F * D E M W

Load Use stall W/D stall