R2

addr

im

sa

M\_Rd

E\_Rd

PC

PC

PC

E\_Func

Func

W\_Reg2reg

W\_Wreg

We

E\_OP

rd

rt

rs

Z

E\_Wreg

E\_Reg2reg

M\_Wreg

Condep

STALL

Wreg

Reg2reg

Wmen

Aluc

Aluqa

Aluqb

FwdA

FwdB

Op

Rt

Rs

Func

Op

Jal

Jal

Jal

Regrt

Jal

Se

C

D

0

1

0

1

31

4

Sa

I\_A

J\_A

We

Addr

DATAMEM

Dout

Din

I

R2

R1

REGFILE

INSTMEM

D

Wr

Rb

Ra

<<

R

Rd

Rd

0

1

ALU

X

Y

0

1

0

1

2

3

0

1

2

3

Rd

+

<<

e

0

1

1

0

0

1

2

3

Inst

Addr

PC

+

PC

IR