

Control Inst.  $\rightarrow$  Jump-branch; forth; yet; grayer.

inst      syn      cond      branch      link as  
balr2      balr \$rs, \$rd      if status[2] = 1      PC  $\leftarrow$  RT[rs]      RT[rd]  $\leftarrow$  PC+4

it checks  
the status zero flag  $\rightarrow$  branch and link

arithmetic result of  
previous instruction

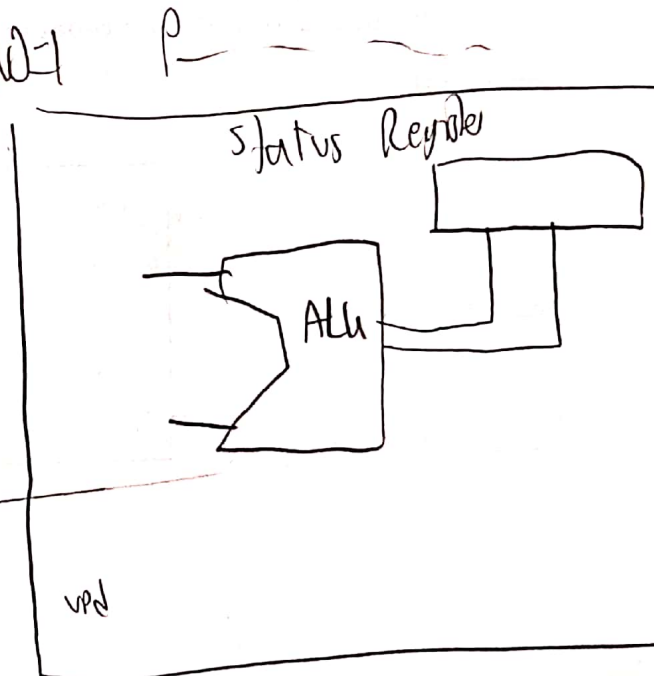
We are using rs to update PC if cond. true. [if zero flag = 1]

balrn      balrn \$rs, \$rd      if status[2] = 1      P

branch and link

register register

if it's 2 rs to PC.



balz

branch and link zero  $\rightarrow$  we don't have any register content, we have target  
in jump we don't have any condition. If one of previous inst. resulted  
zero branch.  $\rightarrow$  jump unconditional' dir.

bgez  $\rightarrow$  branch greater or equal to 0

Branch address  $\rightarrow$  beq ile any condition val  $\rightarrow$  if RT[rs]  $\geq$  0

bgez iainde t olmabngi cain link xpilma2.

jmr → jump memory or, we get arithmetic result of ar

jalr → no condition → update PC with rs  
store PC+4 in rd register. } jump and link register

irs → fetch single content. Memory content will set in PC.  
single register as an address

jial → jump and link

↳ L → stands for saving our return address to R[31]

sllv → use different register for shift amount

Need to write truth table for i/b control unit  
more branch & jump signals

j, madd → jump memory add

kod 78-85 crasi 3 mux var. → bu artinlip azaltildilar.

~~Data memory. 47-52 jump byte~~

121-124 → reads in  
126 → debug

