DATAPATH

Time

ALUCtrl[3:0] =00
ALUSrc =x
EX_MEM[31:0] =0
MEM_WB[31:0] =0
MemToReg =0
PCSrc =0
PC[31:0] =00
RegWrite =0
WriteBackData[31:0] =0
Zero=0
alu_op1[31:0] =XX
alu_op2[31:0] =XX
alu_result[31:0] =XX
clk=0
currentPC[31:0] =00
dAddress[31:0] =0
dReadData[31:0] =XX
dWriteData[31:0] =XX
imm[31:0] =xx
imm_B[31:0] =xx
imm_I_L[31:0] =xx
imm_S[31:0] =xx
instr[31:0] =xx
loadPC=x
readData1[31:0] =xx
readData2[31:0] =xx
readReg1[4:0] =XX
readReg2[4:0] =XX
rst=1
writeReg[4:0] =XX