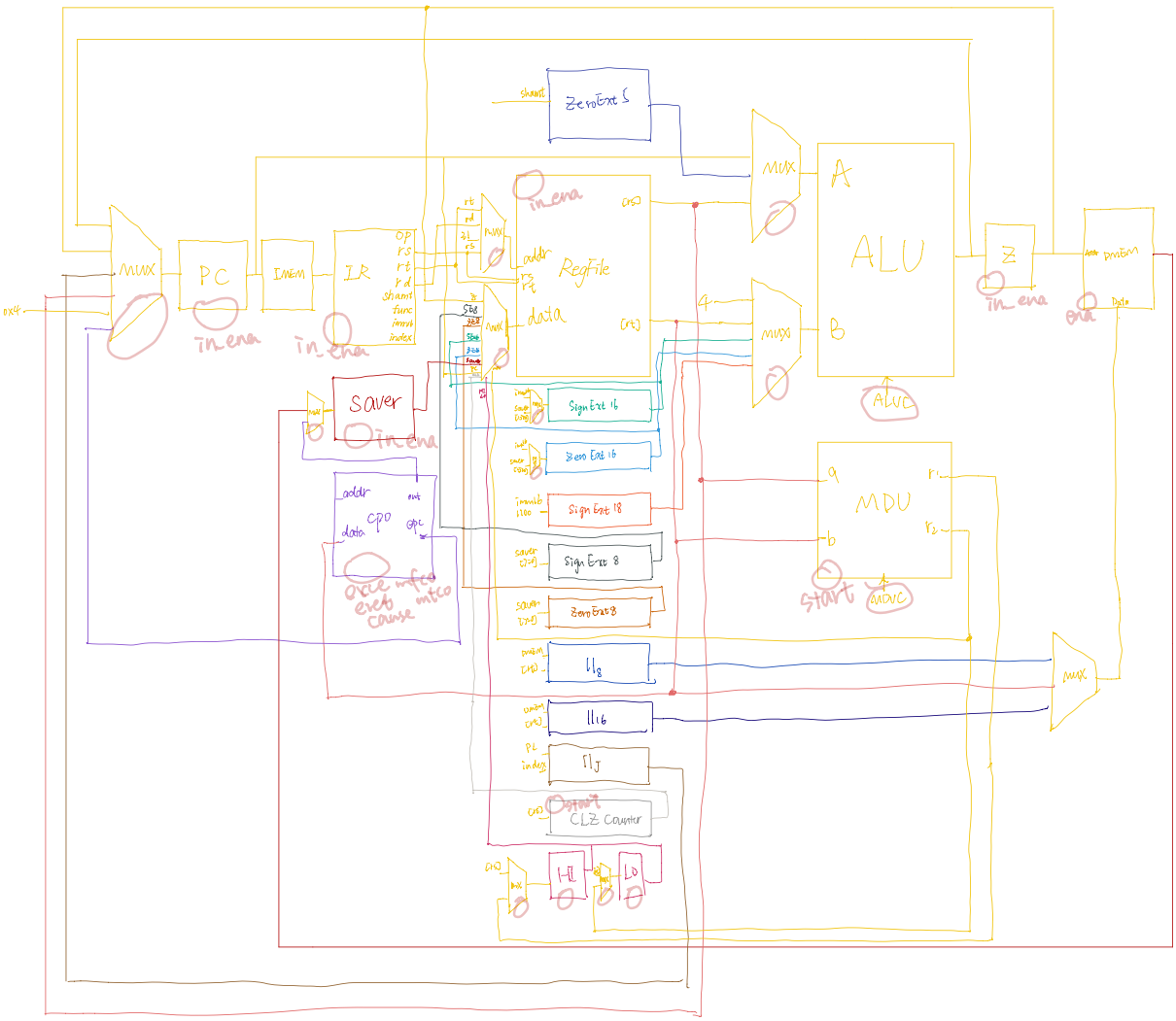
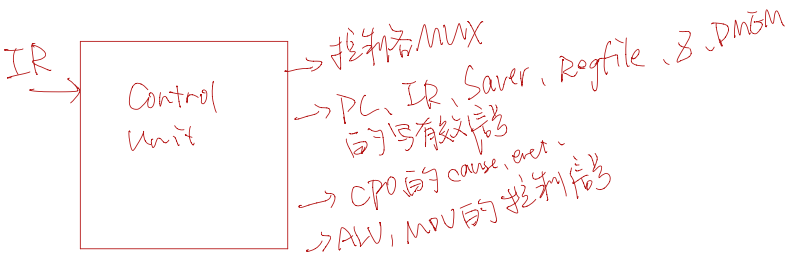

ZeroExt 5
MUX
A
ALU
B
ALUC
Z
in_ena
out
dmem
Data
PC
in_ena
IMEM
IR
in_ena
OP
rs
rt
rd
shamt
func
imm16
index
rt
rd
31
rs
MUX
addr
Regfile
data
in_ena
out
MUX
Saver
in_ena
addr
data
CP0
ent
epc
exce
eret
cause
intco
Sign Ext 16
Zero Ext 16
Sign Ext 18
Sign Ext 8
Zero Ext 8
MDU
a
b
r1
r2
start
MDUC
MUX
CLZ Counter
start
HI
LO
0x4


IR
Control Unit
→ 控制各MUX
→ PC、IR、Saver、Regfile、Z、DMEM 的写使能信号
→ CP0的cause、eret、
→ ALU、MDU的控制信号