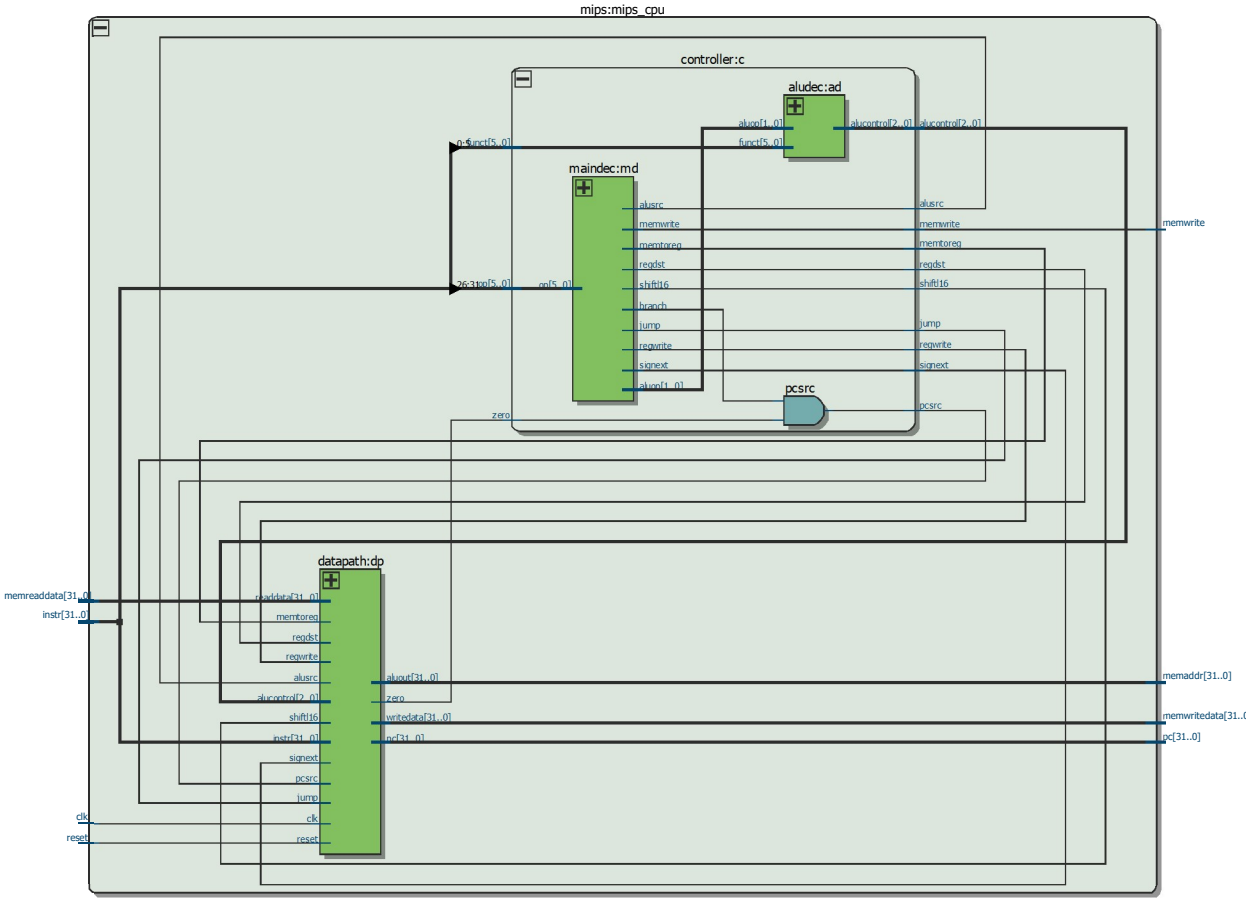
mips:mips_cpu
controller:c
aludec:ad
aluop[1..0]
funct[5..0]
alucontrol[2..0]
maindec:md
alusrc
memwrite
memtoreg
regdst
shift16
branch
jump
regwrite
signext
aluop[1..0]
op[5..0]
pcsrc
zero
memwrite
datapath:dp
memreaddata[31..0]
instr[31..0]
memtoreg
regdst
regwrite
alusrc
alucontrol[2..0]
shift16
instr[31..0]
signext
pcsrc
jump
clk
reset
aluout[31..0]
zero
writedata[31..0]
pc[31..0]
memaddr[31..0]
memwritedata[31..0]
pc[31..0]
clk
reset