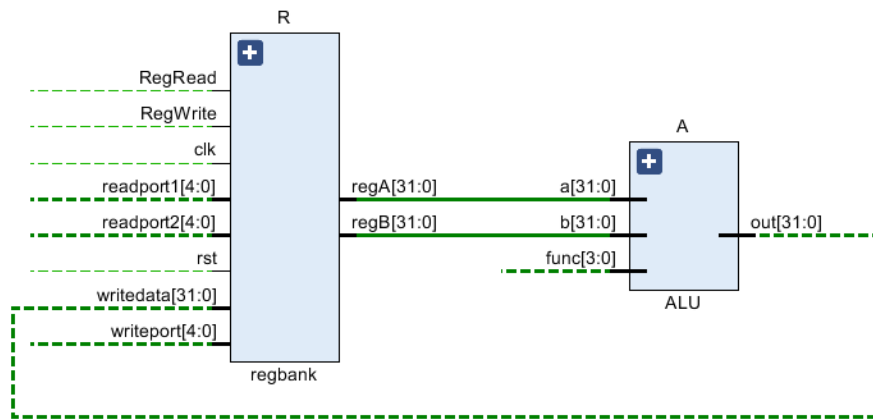


Assignment 7 Part 3 Documentation



clk: Global clock

rst: Reset pin to reset all registers to 0

CONTROL SIGNALS

RegRead: To enable reading from registers specified

RegWrite: To enable writing into register specified

func[3:0]: To specify ALU operation

REGBANK (Has 16 32-bit registers, 1 sp and 2 output registers)

readport1 / readport2 [4:0]: Address of registers to read from

writeport [4:0]: Address of register to write to

writedata [31:0]: Data to be written into register

regA / regB [31:0]: Output registers

ALU

a [31:0]: First operand of ALU

b [31:0]: Second operand of ALU

out [31:0]: Output of ALU

zero, sign, over: Set according to output of ALU