***Stage #2***

Instruction[pc]=[opcode,reg,reg,reg,imm]

DataMemory[addr]=[read data, write data]

Signals C-R-Sw-Disp[clock,reset,switch0,display]

\* Recall data memory addr = ALU output

Instr[ x]=[000,000,0000,000,000] DataMem[ x]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ x]=[000,000,0000,000,000] DataMem[ x]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ x]=[000,000,0000,000,000] DataMem[ x]=[ 0, x] C-R-Sw-Dsp[0,1,1,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[1,1,1,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 2]=[ 0, 2] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 10]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 1]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 1]=[ 0, 1] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 15]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 0]=[110,000,0011,111,010] DataMem[ 3]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 2]=[000,111,0000,111,100] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 4]=[101,111,1110,000,010] DataMem[ 3]=[ 0, 3] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 6]=[110,000,0101,100,100] DataMem[ 5]=[ 0, x] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Instr[ 8]=[110,111,1111,010,010] DataMem[ 2]=[ 0, 0] C-R-Sw-Dsp[0,0,0,xxxxxxx]

Instr[ 10]=[101,111,1101,000,111] DataMem[ 0]=[ 0, 0] C-R-Sw-Dsp[1,0,0,xxxxxxx]

Exiting Veriwell at time 104

***Stage #3***

Instruction[pc]=[opcode,reg,reg,reg,funct]

DataMemory[addr]=[read data, write data]

Signals C-R-Sw-Disp[clock,reset,switch0,display]

\* Recall data memory addr = ALU output

Instr[ x]=[000,000,0000,000,000] DataMem[xxxx]=[ 0, x] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ x]=[000,000,0000,000,000] DataMem[xxxx]=[ 0, x] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ x]=[000,000,0000,000,000] DataMem[xxxx]=[ 0, x] C-R-Sw0-Dsp[0,1,1,xxxxxxx]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,1,1,xxxxxxx]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[1,0,1,xxxxxxx]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[0,0,1,xxxxxxx]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0001]=[ 0, 1] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 8]=[110,011,0000,111,100] DataMem[0030]=[ 0,65520] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 10]=[101,000,0010,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0, 48] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 1, x] C-R-Sw0-Dsp[1,0,1,0110000]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[0,0,0,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,0110000]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,0110000]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,0110000]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,0110000]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[1,0,0,0110000]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[0,0,0,0110000]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 4]=[111,000,0001,101,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 16]=[101,111,1000,000,111] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 0]=[110,111,0000,111,011] DataMem[fff0]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 2]=[011,000,0000,011,101] DataMem[fff0]=[ 0, x] C-R-Sw0-Dsp[1,0,0,1111110]

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Instr[ 6]=[101,000,0011,000,101] DataMem[0000]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

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Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[1,0,0,1111110]

Instr[ 12]=[110,111,1110,111,100] DataMem[fffe]=[ 0, 0] C-R-Sw0-Dsp[0,0,0,1111110]

Instr[ 14]=[100,000,1010,011,100] DataMem[fffa]=[ 0,65534] C-R-Sw0-Dsp[1,0,0,1111110]

Exiting Veriwell at time 104