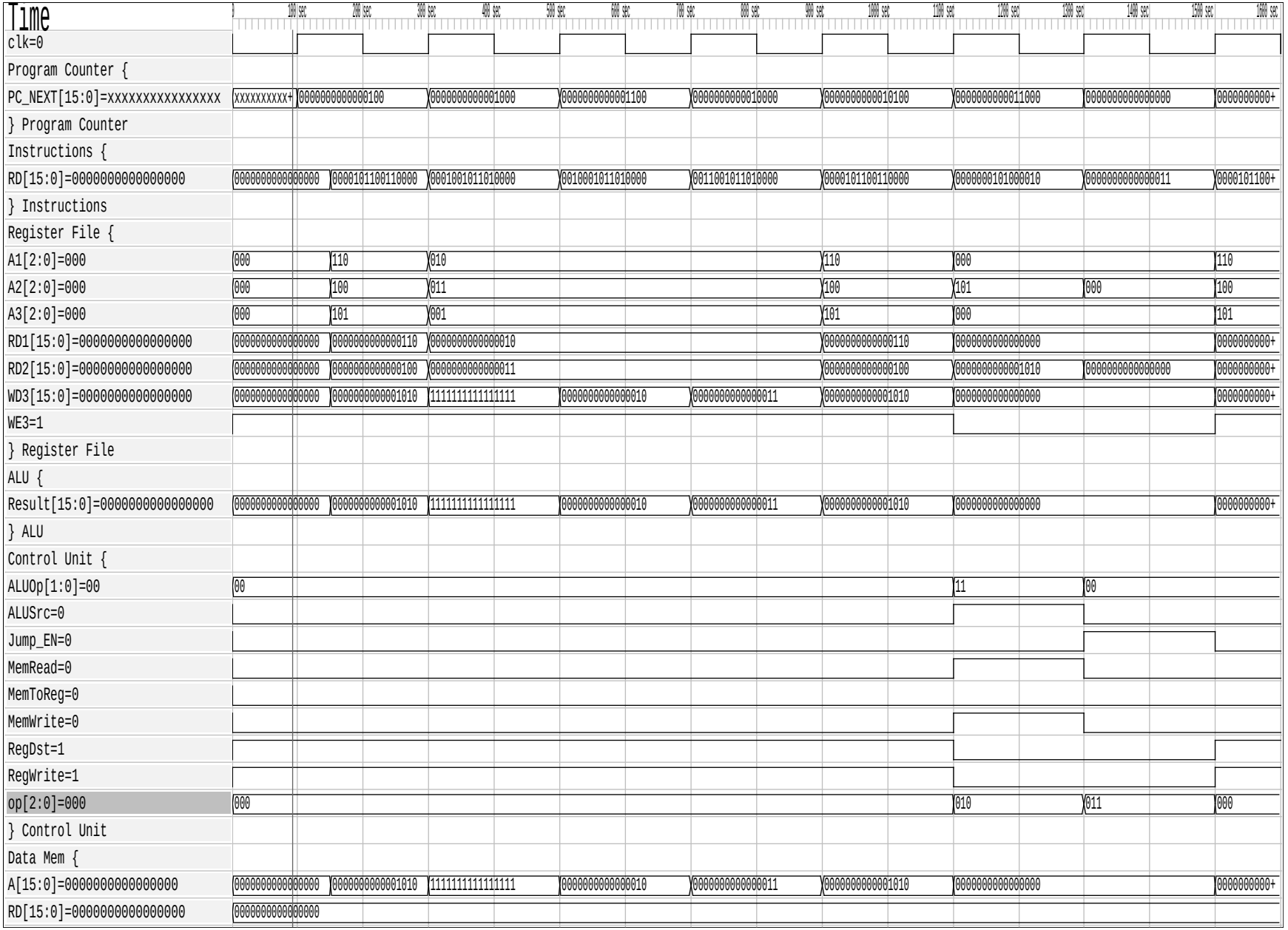
Time
100 sec
200 sec
300 sec
400 sec
500 sec
600 sec
700 sec
800 sec
900 sec
1000 sec
1100 sec
1200 sec
1300 sec
1400 sec
1500 sec
1600 sec
clk=0
Program Counter {
PC_NEXT[15:0]=xxxxxxxxxxxxxxxx
xxxxxxxxxx+
0000000000000100
0000000000001000
0000000000001100
0000000000010000
0000000000010100
0000000000011000
0000000000000000
0000000000+
} Program Counter
Instructions {
RD[15:0]=0000000000000000
0000000000000000
0000101100110000
0001001011010000
0010001011010000
0011001011010000
0000101100110000
0000000101000010
0000000000000011
0000101100+
} Instructions
Register File {
A1[2:0]=000
000
110
010
110
000
110
A2[2:0]=000
000
100
011
100
101
000
100
A3[2:0]=000
000
101
001
101
000
101
RD1[15:0]=0000000000000000
0000000000000000
0000000000000110
0000000000000010
0000000000000110
0000000000000000
0000000000+
RD2[15:0]=0000000000000000
0000000000000000
0000000000000100
0000000000000011
0000000000000100
0000000000001010
0000000000000000
0000000000+
WD3[15:0]=0000000000000000
0000000000000000
0000000000001010
1111111111111111
0000000000000010
0000000000000011
0000000000001010
0000000000000000
0000000000+
WE3=1
} Register File
ALU {
Result[15:0]=0000000000000000
0000000000000000
0000000000001010
1111111111111111
0000000000000010
0000000000000011
0000000000001010
0000000000000000
0000000000+
} ALU
Control Unit {
ALUOp[1:0]=00
00
11
00
ALUSrc=0
Jump_EN=0
MemRead=0
MemToReg=0
MemWrite=0
RegDst=1
RegWrite=1
op[2:0]=000
000
010
011
000
} Control Unit
Data Mem {
A[15:0]=0000000000000000
0000000000000000
0000000000001010
1111111111111111
0000000000000010
0000000000000011
0000000000001010
0000000000000000
0000000000+
RD[15:0]=0000000000000000
0000000000000000