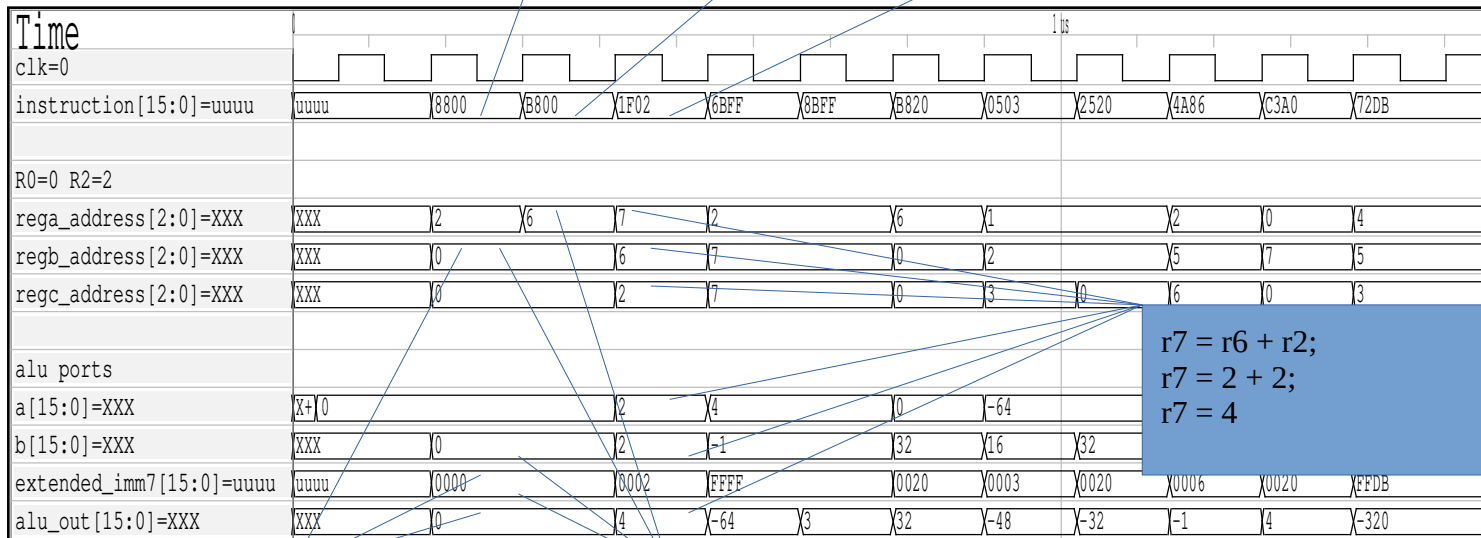


sw r2, r0, "0000000" lw r6, r0, "0000000" add r7,r6,r2



r7 = r6 + r2;
r7 = 2 + 2;
r7 = 4

mem[r0+"0000000"] = r2;
mem[0] = 2;

r6 = mem[r0+"0000000"];
r6 = mem[0];
r6 = 2;

```
instruction <= SW&R2&R0&"00000000";
wait for 120 ns;

instruction <= LW&R6&R0&"00000000";
wait for 120 ns;

instruction <= ADD&R7&R6&"0000"&R2;
wait for 120 ns;
```