



# Report on the Simulation of PPI CHIP

First of all, we will start naming the ports name in the Verilog code as follows:

PORTA : Aout

PORTB : Bout

PORTC : Cout

PORTD : PD

Chip select : CS

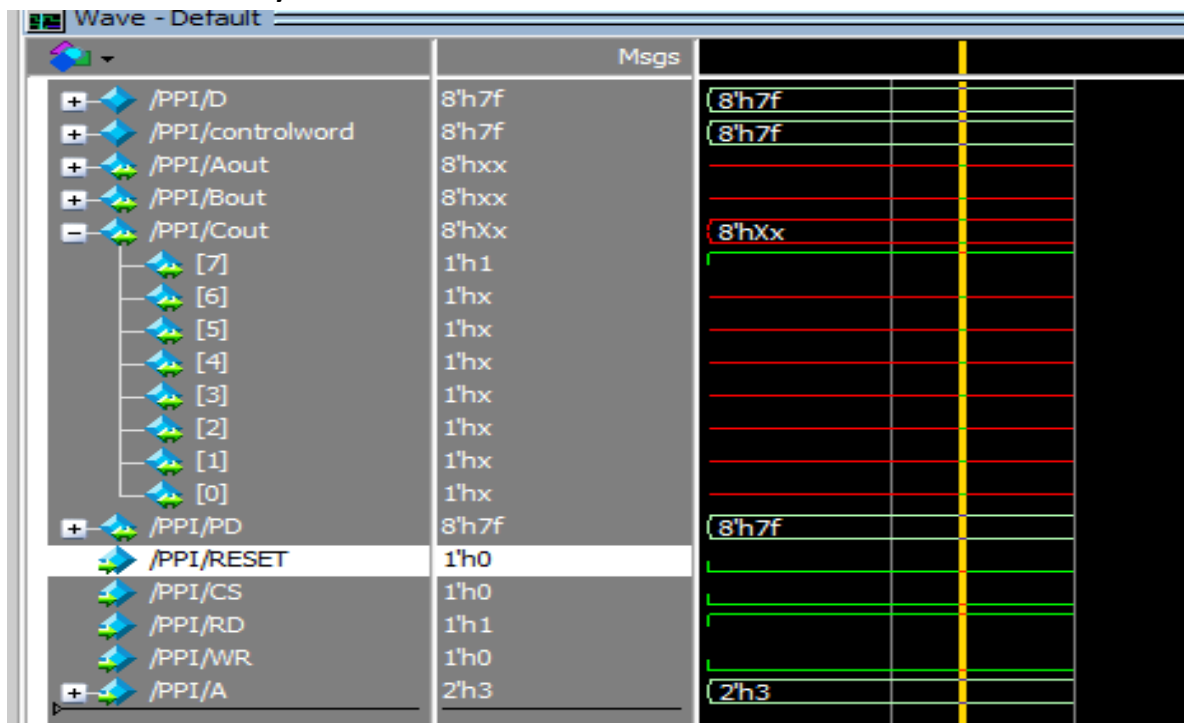
reset : RESET

write : WR

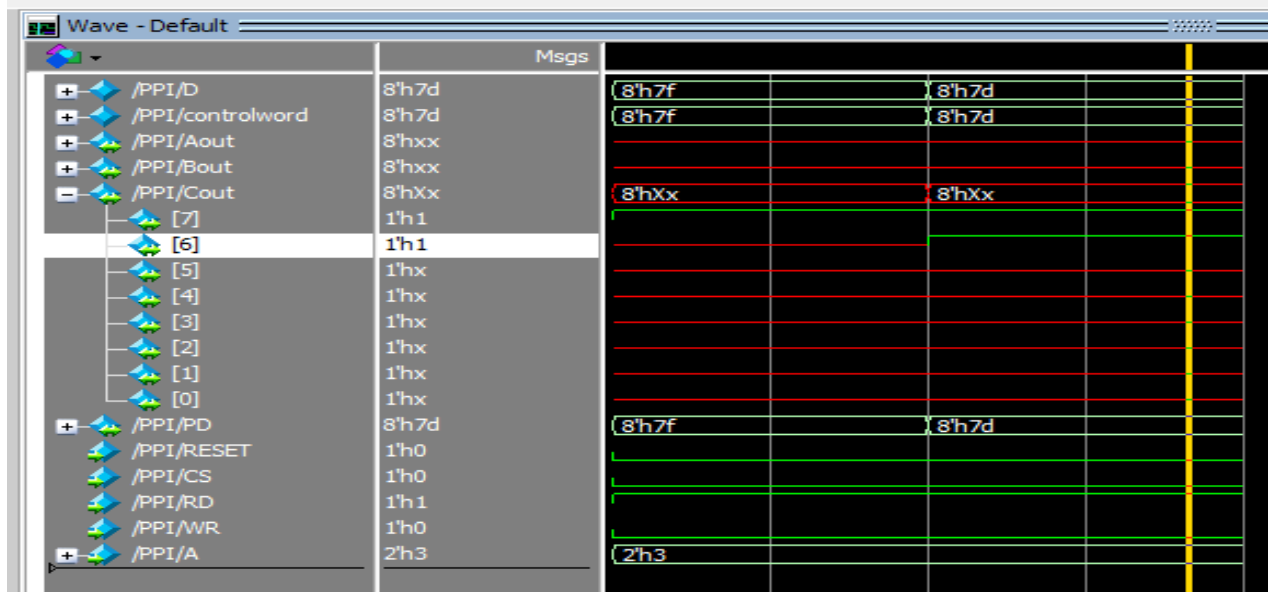
read : RD

A0 &A1 :A

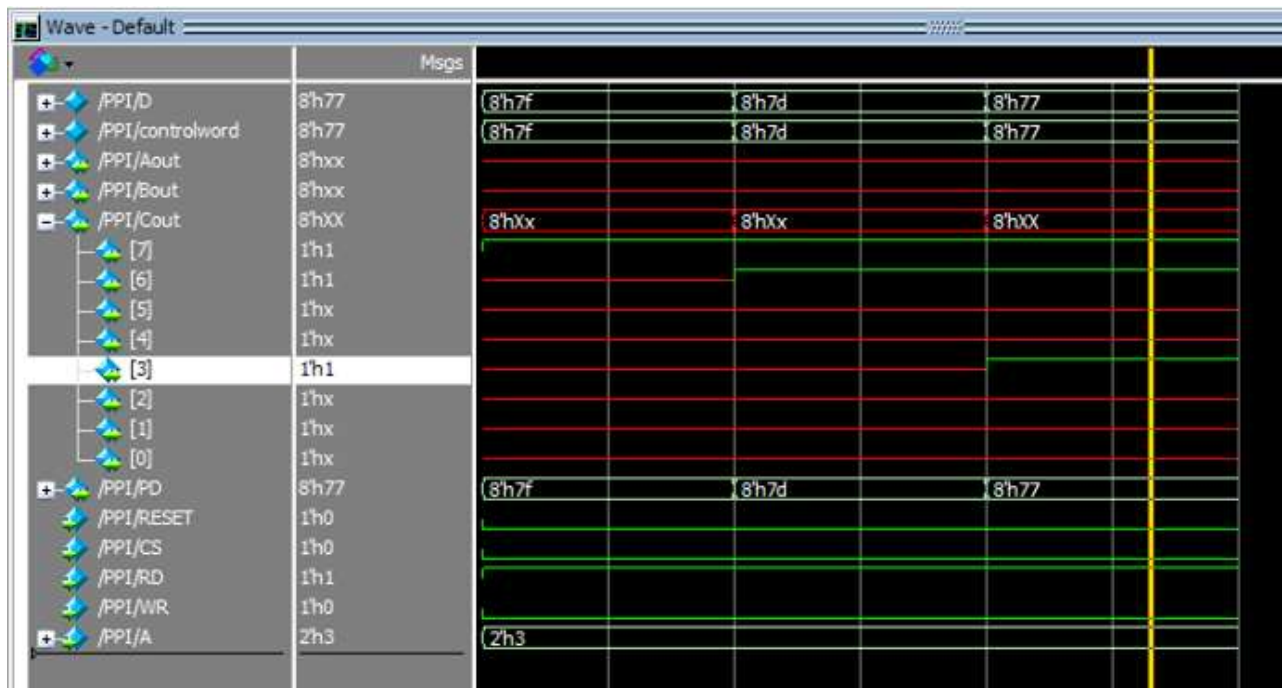
we will start simulating the BSR mode using the Wave form for more accuracy



as in picture we make the PIN 8<sup>th</sup> in the PORT C to be one (set)

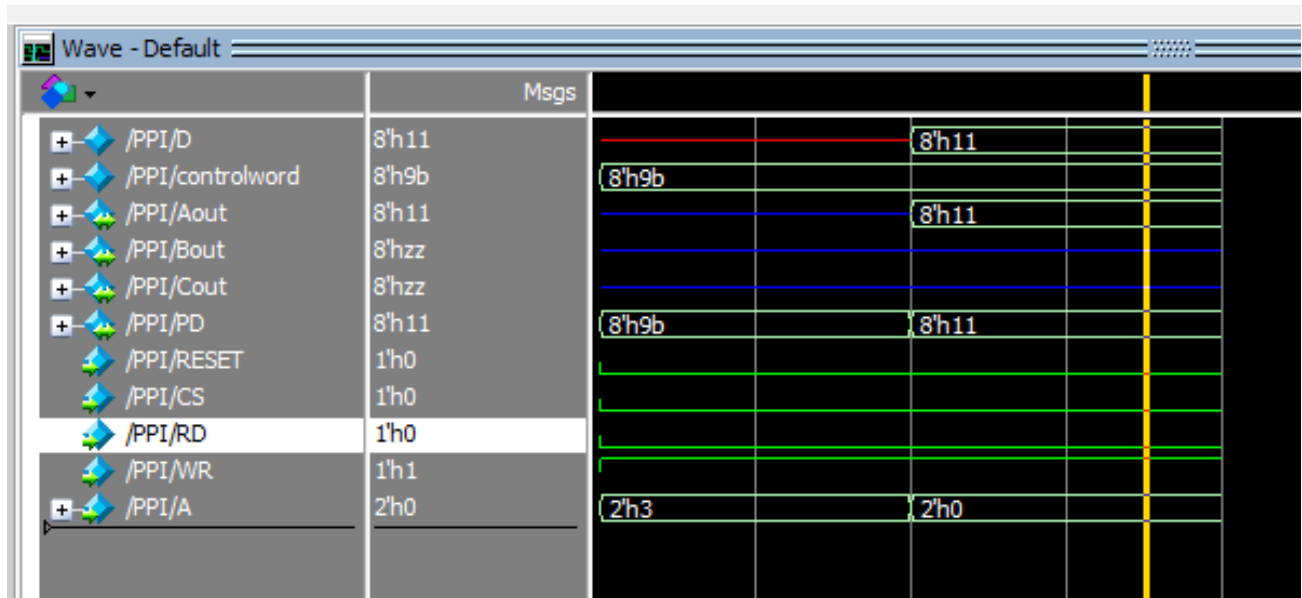


Here we set the 7<sup>th</sup> pin in PORTC to be 1

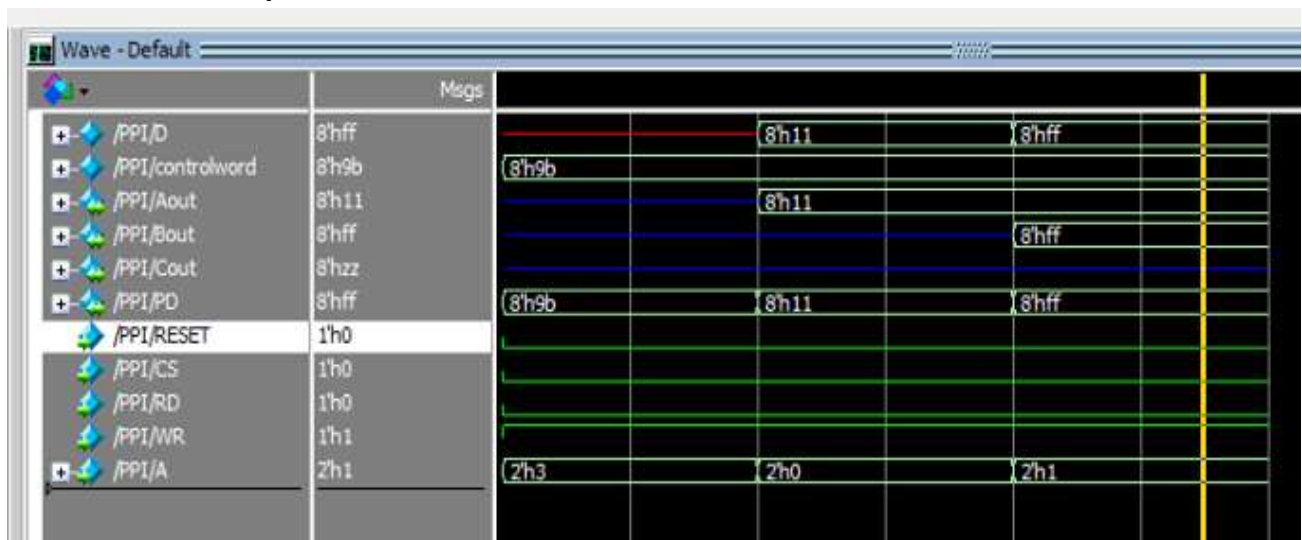


So as here, we set the 4<sup>th</sup> pin .

Now we will start the I/O mode  
we will start with the with the output mode



firstly we put the Value in the PORTD and made the RD = 1 and WR = 0 , then we notice that the PORTA got the value in the PORTD, surely after selection of PORTA with A0 & A1 = 0

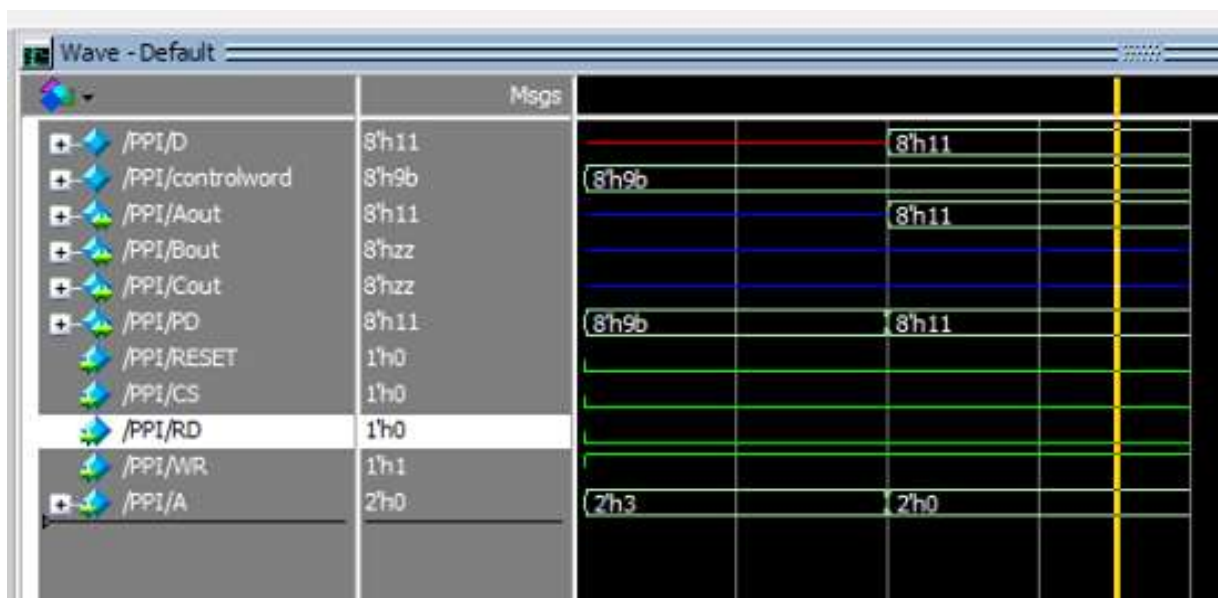


Here we put the Value in the PORTD and made the RD = 1 and WR = 0 , then we notice that the PORTB got the value in the PORTD, surely after selection of PORTB with A0 & A1 = 01

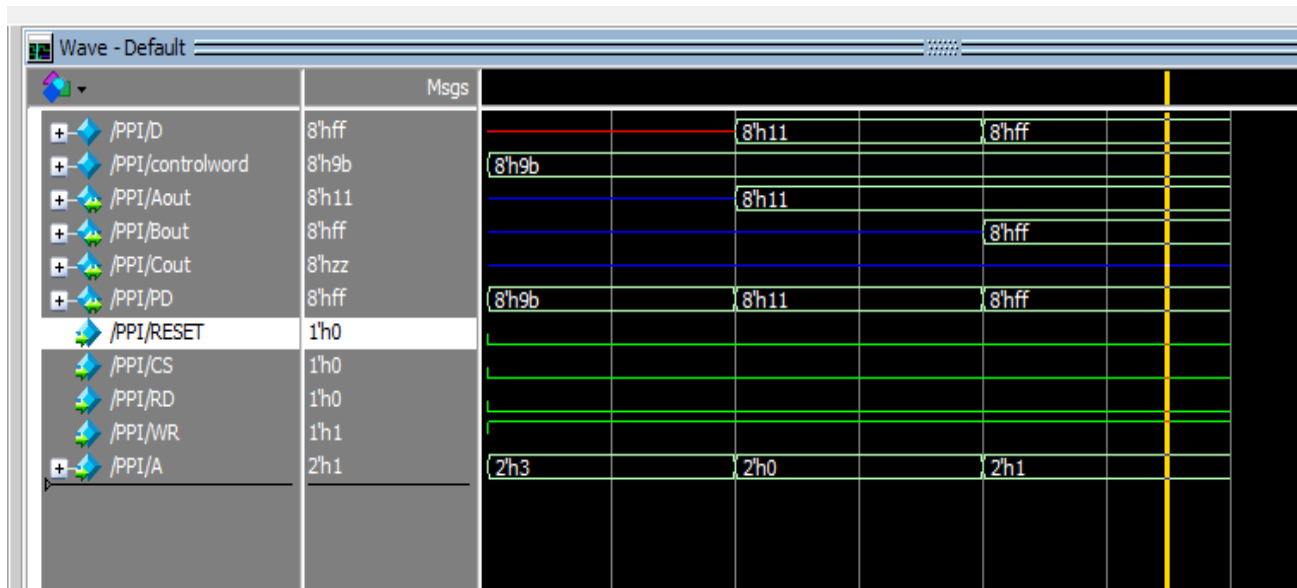


Finally we put the Value in the PORTD and made the RD = 1 and WR = 0 , then we notice that the PORTC got the value in the PORTD, surely after selection of PORTC with A0 & A1 = 11.

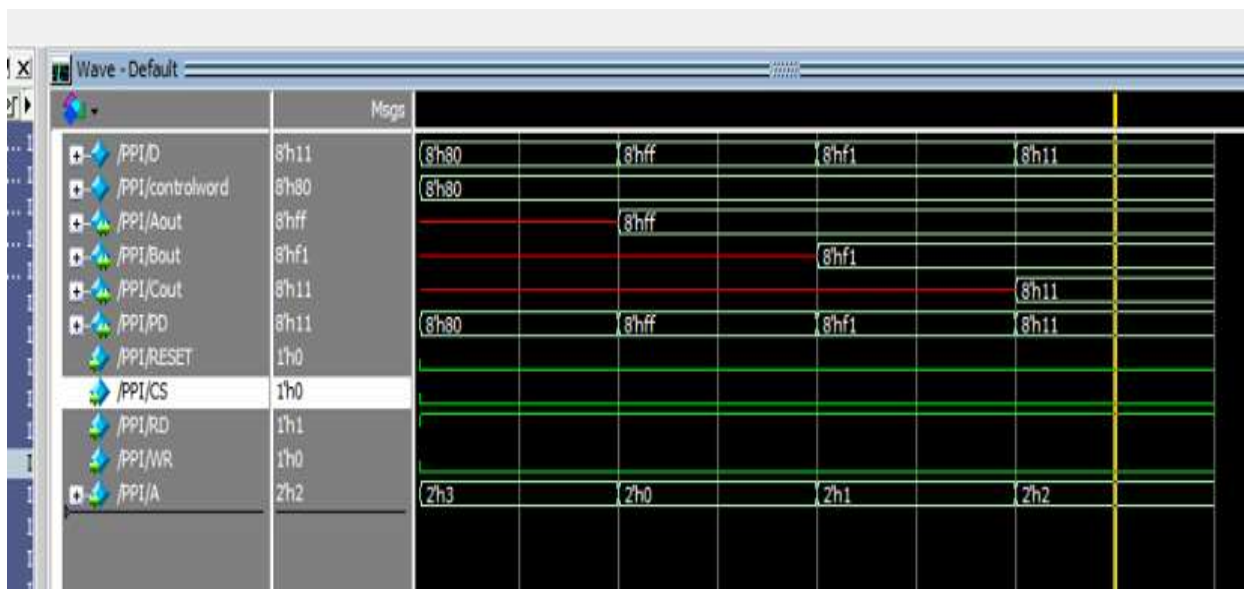
Now we will start the input mode .



Here we assign the value to PORTA to pass to PORTD , Firstly we pass the control word by PORTD and A0 & A1 = 11 then select PORTA to select from



Here we assign the value to PORTB to pass to PORTD , Firstly we pass the control word by PORTD and A0 & A1 = 11 then select PORTB to select from by make A0 A1 = 01



Here we assign the value to PORTC to pass to PORTD , Firstly we pass the control word by PORTD and A0 & A1 = 11 then select PORTC to select from by make A0 A1 = 10

Finally we made the Synthesis and got the schematic like follows

