

# ZPUino Soft Processor - Papilio One - Vanilla - v1.0

Author: Alvaro Lopes  
alvie.com/zpuino

**When used with Papilio One 250K**  
Used Resources for P1 250K:  
10 of 12 Block RAM (BRAM)  
70% of available Slices  
2 of 4 DCM (clock)  
Free Resources for P1 250K:  
2 Block RAM (BRAM)  
30% of Slices  
2 DCM (clock)

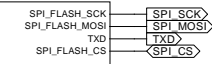
12KB of Program Code Space  
(code runs out of BRAM)

System Clock runs at 96Mhz

Visit [Papilio.cc](http://Papilio.cc) for Documentation

**When used with Papilio One 500K**  
Used Resources for P1 500K:  
18 of 20 Block RAM (BRAM)  
37% of available Slices  
2 of 4 DCM (clock)  
Free Resources for P1 500K:  
2 Block RAM (BRAM)  
63% of Slices  
2 DCM (clock)

27KB of Program Code Space  
(code runs out of BRAM)

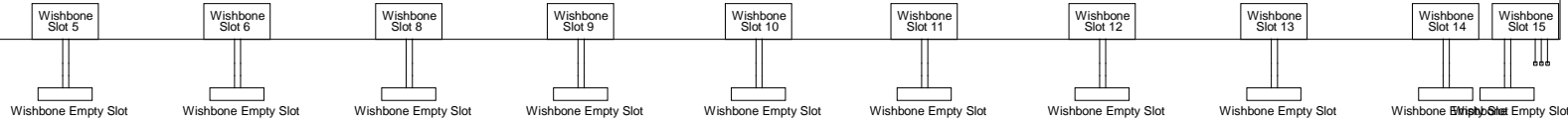


## GPIO Pins

gpio\_bus\_in(97:0)  
gpio\_bus\_out(147:0)

## Clocks

clk\_96Mhz  
clk\_1Mhz  
clk\_osc\_32Mhz



## Papilio Default Pinout

gpio\_bus\_in(97:0)  
gpio\_bus\_out(147:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

## GPIO Wing

wt\_miso(7:0)  
wt\_mosi(7:0)

WING\_AL0  
WING\_AL1  
WING\_AL2  
WING\_AL3  
WING\_AL4  
WING\_AL5  
WING\_AL6  
WING\_AL7

WING\_AH0  
WING\_AH1  
WING\_AH2  
WING\_AH3  
WING\_AH4  
WING\_AH5  
WING\_AH6  
WING\_AH7

WING\_BL0  
WING\_BL1  
WING\_BL2  
WING\_BL3  
WING\_BL4  
WING\_BL5  
WING\_BL6  
WING\_BL7

WING\_BH0  
WING\_BH1  
WING\_BH2  
WING\_BH3  
WING\_BH4  
WING\_BH5  
WING\_BH6  
WING\_BH7

WING\_CL0  
WING\_CL1  
WING\_CL2  
WING\_CL3  
WING\_CL4  
WING\_CL5  
WING\_CL6  
WING\_CL7

WING\_CH0  
WING\_CH1  
WING\_CH2  
WING\_CH3  
WING\_CH4  
WING\_CH5  
WING\_CH6  
WING\_CH7