

CPU_ZeroFill_21363904



The timing diagram for the Zero Fill is shown above. All numbers are in Binary notation.

The **red lines** denote when the input data changes, and the **blue lines** show when the corresponding output appears 5ns later. The first input value is all 0s, which is extended from 5 to 32 bits in the output. The second input value is all 1s, which is extended from 5 to 32 bits by padding out the input with 27 0s on the left of the most significant bit. These values demonstrate that whatever number is input will be extended to 32 bits by adding 27 0s to the left of the MSB.