

HW2

1. For a moving average filter with $N=16$ (averaging per 16 samples), the input sample is a 16-bit binary value in 2's complement form, and the output is also in 16-bit 2's complement binary form.
 - (a) List the specification of the filter with your design optimization goal. Remember to provide the evaluation progress and results.
 - (b) Give a simple estimation of the performance and complexity of the filter you designed.
2. Try to build an adder with two 64-bit signed integers with as lowest critical path delay as possible.