



Figure 1

0.1 Report: Pipeline and Offset

The program allocates a vector of 100K elements and performs the operation

$$A[i] = sA[i + \text{offset}], \quad (1)$$

where the offset can be $+1, 0, -1$. The idea is to compute the number of operations per second that the processor is able to perform in each of the three cases. In the first two cases, when the offset= $+1, 0$, we are employing a pipeline, while when the offset is -1 the pipeline is not anymore achieved and therefore the number of operations per second drop about 20%.