

The bandwidth for the largest array size is,

Bandwidth = (size of array)* 4 / time in seconds GB/sec

$$= (2^{25}) * 4 / 0.07$$

$$= 1.9 \text{ GB/sec}$$

Where 4 is for 4 bytes (long). Since we are using only 2 cores, we do not saturate the bandwidth and the theoretical maximum bandwidth is about 68 GB/sec.

The latency is the time it takes to send data of length 1 (4bytes) and it was 0.11 ms. Here, we do not send multiple data to calculate latency as it will create conjugation in queue, and we will get reduced time compared to the true latency.