Task scheduling in operating system area is well known problem on traditional system architectures (NUMA, SMP). However, it does not perform well on emerging many-core architectures, especially on Intel Xeon Phi. We have collected all publicly available information about the Xeon Phi’s architecture. After that we have benchmarked the Xeon Phi to find missing information about its architecture. We were especially curious in architecture of cores and memory controllers. These parts are most important while designing scheduler. Based on the measured results we have proposed improvements to scheduling algorithm in the Bobox - experimental streaming system.