

The main objective of the presented work is to assess performance of Raspberry Pi micro-computer and its applicability as a work node of a computational cluster. The thesis contains implementation of set of tests that evaluate the CPU performance as well as the throughput of operation memory, persistent storage (SD card), and Ethernet network adapter. The results of comparison of empirical results obtained from Raspberry Pi and representatives of regular computers provided basis for recommendation, whether a construction of Raspberry Pi cluster is feasible. Furthermore, the results allowed us to make an estimation of economical and performance aspects of the solution.