Abstract

The current work presents a proposal for a data acquisition base using the CID 300/9 device, an industrial motherboard developed at ICID Cuba. In the beginning a brief view on the necessity of using novelty techniques in the support of medical software is presented. The design guidelines in the optimization of the Linux based operating system are presented as well as the architecture for a Middleware variant for the target device running specific software projects that must execute in medical attention and monitorization environments. Ending the report, measurements and tests to the developed components in the boot up sequence as well as the Middleware layer are presented, thus validating the presented proposal.

References

- What is linux: An overview of the linux operating system | linux.com
Linux based Operating System Proposal for the Acquisition and Processing of Data in Embedded Devices

376-linux-is-everywhere-an-overview-of-the-linux-operating-system

**Index Terms**

Computer Science  
Embedded Systems

**Keywords**

Communication  embedded devices  Linux  medical equipment  micro-controllers