Abstract

The spread of embedded systems is growing in very rapidly. Embedded systems are usually suffering from limited resources in terms of processing power, power consumption, memory and storage. These limitations represent a challenge for embedded system developers. In this paper, a lightweight application framework for embedded systems is presented. The application framework provides the developer with powerful components instead of building them from scratch. Using the proposed framework should increase the productivity and flexibility. It should also minimize the effort and time. The proposed framework includes power management, memory management, event driven mechanism, timer management and TCP/IP compact stack.

References

- S. Jakobsson, E. Dahlberg, Development of a TCP/IP Stack in real time embedded system, in, Umea University, Department of Computing Science, Sweden., 2007.

Index Terms

Computer Science
Embedded Systems
Keywords
Embedded systems  Application Framework  Software engineering  Web enabled embedded systems
SysML