## **ABSTRACT**

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## Web Server System Simulator on Atmega 8535 Microcontroller Chip Basis

(xiv + 87 pages: 61 figures; 4 tables; 15 appendixes)

Computer network is a rapidly growing technology and one of its major developments is the internet. Internet consists of many components and one of those is web server, which stores web pages to be downloaded by internet users through web browser application.

This research is mainly about creating a microcontroller based web server simulator which responds to GET request from client. It can be accessed by client through LAN connection using RJ-45 cable with some security features, such as access list, client ID authorization and client activity log.

Testing had been done using 7 different web browser applications to see whether the server responds properly to client's request using only two methods of giving response, namely "OK" and "Page Not Found". Other tests had also been done using Hyper Terminal application to analyze security features embedded into this system. These tests resulted in 100% success for both responses from server and security features applied in the system.

References: 15 (2002 - 2008).