ABSTRACT

Technological developments make society continues to look for various

applications that can help their work in accordance with their field. One of them is

in the field of food. Chicken, or other types of poultry is one of the most frequent

source of food used as food for most people. Therefore made a tool that can be

used to assist the process of hatching eggs.

tool design making of block process begins with

microcontroller. Microcontroller used is ATMega32. ATMega32 is a series of 8-

bit CMOS microcontroller made by Atmel, based on RISC architecture (Reduced

Instruction Set Computer). Beside design block of microcontroller, this tool also

uses a temperature sensor for temperature readings inside the appliance. And the

selected temperature sensor is LM35. LM35 on duty in changing the temperature

of the electrical quantities in the form of voltage. Designing the next is designing

a block heater, blower, DC motors and AC motors as the devices that exist in an

egg incubator equipment.

The

Finally the results of temperature readings made by the LM35 temperature

sensor is displayed on the LCD via the microcontroller processing

ATMega32. After that, the execution was carried out in accordance with a given

program on the microcontroller. If the temperature in the tool is still less than

expected then the heater always lit and if the temperature is more than expected

heater will turn off and blower will turn on so that the temperature required for

hatching eggs effort can be well preserved.

Keywords: Microcontroller ATMega32, LM35, LCD