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.

The tool design process begins with making of block 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.

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*