

ABSTRACT

TEMPERATURE CONTROL SYSTEM DESIGN BASED MICROCONTROLLER CHICKEN COOP

By

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Chicken broilers are animals whose growth is affected by the temperature of the chicken coop. The temperature of the chicken coop that does not fit can affect a decrease in productivity and causes of death in broiler chickens. Because that, need to be made an automation system that can regulate the temperature of the chicken coop. Automatic temperature control system design using microcontroller as the main controller, as the LM35 temperature sensor on the chicken coop and IC L293D as a DC motor driver . The microcontroller will command a DC motor to work, if the measured temperature above the limits set temperature and will command relay to lights up the lamp when the measured temperature is below the predetermined temperature limits.

The results showed that the equipment temperature settings automatically the chicken coop can work well to regulate the temperature of the chicken coop automatically between 24 °C until 32 °C temperature limits.

Keywords : automatic temperature control, chicken coop, microcontroller, temperature sensor.