ABSTRACT

REALIZATION TEMPERATURE SENSOR OF LM35DZ AS VELOCITY FLUID FLOW SENSOR BASED ON MICROCONTROLLER ATMEGA32 USING STORAGE DATA MEDIA OF *MICRO SECURE DIGITAL* (*MICRO* SD)

By

Darti Nopilawati

This research has used eight temperature sensors of LM35DZ type and the heater. It has been controlled with a constant temperature at 52.3^{o}C. The output of this research was the temperature, the temperature difference, the Analog Digital to Converter (ADC)*, response the difference of ADC, response voltage, and voltage difference. The temperature difference has been more high, and velocity flows of fluid has been more slow depend on position of faucet angel. The heat propagation fluid flow is more high than the velocity fluid flows, so it will give the more high temperature difference. The response of temperature difference is inversely to the faucet angle. This research was controled by Atmega32, and media the data was storaged with Micro Secure Digital* (*Micro* SD)*.*

Keywords: ATMega32, fluid flow, LM35DZ, micro SD, temperature.