

TEMPERATURE CONTROLLED FAN FOR HOME APPLICATION

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DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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ABSTRACT

Over the last decade, advances in digital electronics have made computer smaller, cheaper and faster. Throughout this revolution as well, mobile computing environment such as PDA has been created and undoubtedly other advances in technology like smart home also play an important role towards better life in the future. This project is about how we can control the fan based on temperature sensor regardless of traditional thermostat. It is also part of smart home application where the fan will gradually increase the speed if the temperature in the environment is increasing. Besides that, the component that made up the temperature sensor is known as thermistor. A sensor is a type of transducer. In a broader sense, a transducer is sometimes defined as any device that converts energy from one form to another. There are two types of thermistor depend on the sign of k . Firstly is positive temperature coefficient (PTC). PTC thermistor works by increasing the resistance with increasing temperature. Secondly is negative temperature coefficient (NTC). NTC thermistor works by decreasing the resistance with increasing temperature. This project will focus on NTC type of thermistor. Experiment can be followed to evaluate whether this circuit can save energy through the use of temperature sensor and thus promote efficiency. Finally, after some experiments have done, the result of the experimentation and finding can be concluded.