Title of Article: Fan Speed Control of Processor Based on Environmental Temperature.

Author(s): Adewale A. A., Dike Ike, Adelakun A. A.


Abstract: Temperature is a physical property that is an essential part of life and Maintaining control of it is of paramount importance to man. Temperature is measured with various types of measuring instruments. But beyond the need to measure temperature, it must also be controlled and monitored. In an industrial setting with heavy equipment that need a round the clock cooling system so as to perform optimally without breakdown, it is important to have a mechanism that monitors the temperature situation, one that can detect the slightest threat to the condition of the systems as regards temperature change. Also temperature control can be used in personal computers to prevent overheating of the processor. This work involves sensing the temperature level of an environment and if a temperature out of range is detected, the fan speed increases to maximum. When the temperature drops below a threshold again, the fans are turned back off. The circuit is designed using a temperature sensor that is a thermistor. The temperature transducer is used to sense the temperature of the environment at that point in time and an indication shown on an LED.