Temperature Sensing PC Cooling Prototype

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Problem Definition

- **Statement – Consistent exposure of extreme temperatures to the interior of a computer will shorten the life-span of the components in the system.**
- **Scope –** Build a prototype system to test sensitivity of temperature change on system.
- **Schedule –**
  - 3/18/13 – Have project demo and data-sheet finalized

Solution Specifications

- PC fans of assorted sizes
- Thermistors
- 1 kΩ Resistors
- Voltage Supply
- Heat source
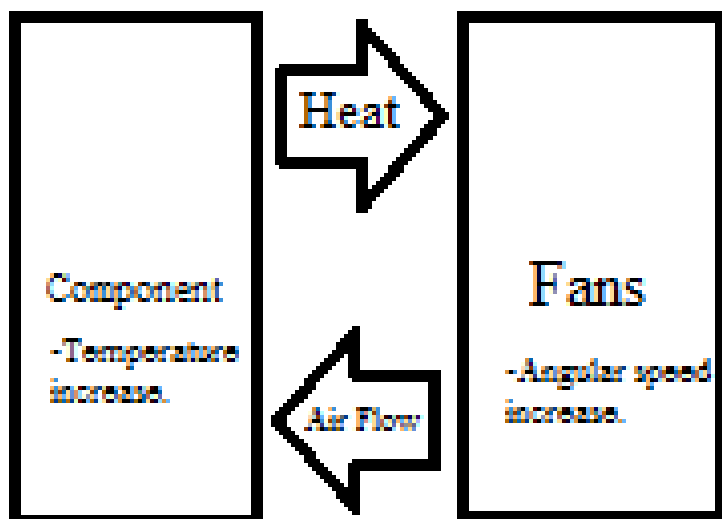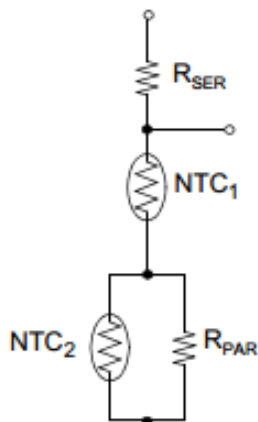
Competitive Analysis

- This system would be a cheap and effective alternative to desktop cooling solutions.
- The more popular systems require manual adjustments to increase fan speed.

Potential Applications

- The major application for this design will be for computer desktops.
- This design can also be adjusted to comply with any type of system that requires some type of cooling to prevent hardware damage.

Future Improvement Ideas

- Design a system using thermal sensors to give more accurate readings.
- Possibly develop a new prototype that is able to directly sense the temperature of specific components. Essentially, each component is designated its own cooling source.
- Find a way to implement this system into the hard-wiring of the standard ATX motherboard via the 2-pin connection.

Engineering & Computer Science Departments