Example for embedded system – computer temperature overheat protection and controlling system:

It is a dedicated system to continuously monitor a computer compartment and operate a fan to protect computer from overheat and help the health and age of the computer. It has a dedicated computer compartment temperature sensor to continuously sends temperature signal to a microcontroller. The microcontroller converts the sensor analog signal to digital readout temperature signal and compares it with a predetermined high and low temperature threshold values. If the sensor input temperature value is greater than the higher threshold value the microcontroller sends output control signal to set a current driver hardware circuit on and hence to operate a fan which helps to cool down the temperature inside the computer compartment. When the input temperature reaches lower than the lower threshold value the microcontroller sends output control signal to shut down the fan and hence maintain the compartment temperature within predetermined temperature range for the best computer performance.