

Matthew Aragaw
Final project Proposal - Temperature Regulated Fan

Overview:

I will create a cooling system that will use UART to receive commands from a terminal and/or HC-05 bluetooth module to turn a fan on and off, and use a temperature sensor to regulate the speed at which the fan operates based on the temperature of the room.

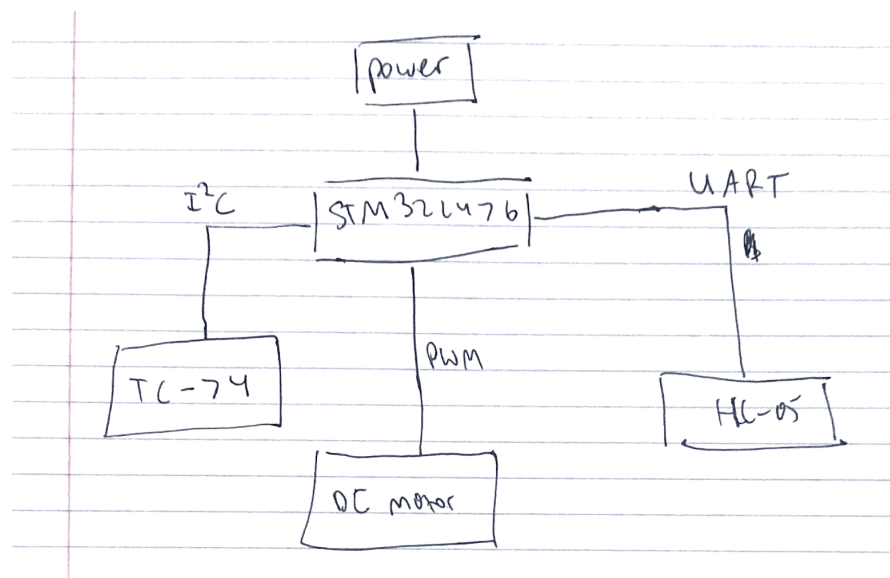
Peripherals:

HC-05 Bluetooth module
TC-74 Temperature sensor
DC Generic Motor

Serial Interface Protocols:

UART for HC-05 Bluetooth module
I2C for TC-74 Temperature Sensor
PWM for DC Generic motor

Block Diagram:



Software Structure:

Using UART, to send the system commands I will be using the Termite Terminal and the HC-05 Bluetooth module. I will then power on the fan to a certain voltage that will be determined by the reading of the TC-74 Temperature sensor, using PWM to control the voltage being delivered to the fan, thereby controlling the speed of the fan, and I2C to communicate with the temperature sensor.

Site:

<https://sites.google.com/view/ece153b-matthewaragaw/home>