Hi, everyone. My name is Zippo He.

A student from CAB202.

Today I will show my assignment demo to you guys.

My assignment project is called Temperature monitor.

It is a simple project based on C language which learned in CAB202. The goal of this project is to design a home-use thermometer. 瑟猫么特 It has these main functions:

The first function is that this temperature monitor can detect from -40 °c to +125 °c in Celsius 塞尔sayUs and show current temperatures both in Celsius 塞尔sayUs and

Fahrenheit 法润海特 in LCD screen.

The second function is that the system will refresh the current temperatures every 20 seconds automatically.

The third function is that if you click the button, the system will refresh the temperatures right now.

The last function is that When the temperatures get successfully, the LED will blink for three times and the serial monitor will receive the message “Read Temp successfully”.

Now I will show you the process of test these functions.

let’s start the simulation.

When we test the first function, we can see the lcd screen will show the temperature is 25 degrees. Also it shows the degree in the Fahrenheit, which is 77 degree.

Look at T1, the temperature range of TMP36 is from -40 °c to +125 °c. So, we need to change the setting temperature of T1 to -40 degree and 125 degree to see the limitation.

Move to -40 degree firstly, The screen show the right temperature. Great!

Move to 125 degree, click buttom, we will see the right answers.

By the way, the error range is around 1degree