

## 9. Fonts are not clear on LCD

## 1. Problem phenomenon

During the experiment, it was found that some of the fonts displayed on the display screen were very dim, and some were almost white, so it was difficult to see the font.

## 2. The cause of the problem

In fact, it is caused by the contrast of the screen. Due to the individual differences of the products shipped from the factory, some products need to adjust contrast ratio before they can be displayed normally.

## 3. Solution

Open the code to initialize the LCD function. The last parameter is to set the contrast ratio. Modifying the contrast ratio appropriately can solve the problem.

```
// lcd contrast
//may be need modify to fit your screen! normal: 30- 90 ,default is:45 !!!maybe modify this value!
int contrast = 60;

// init and clear lcd
    LCDInit(_sclk, _din, _dc, _cs, _rst, contrast);
    LCDclear();
```

Contrast ratio is stored in the contrast variable, we can directly modify the value of the variable, the range of contrast is 30-90.

Then, re-compile the project and run the program to see the effect.